2008

Work Based Learning - Graduating Through The Workplace

Margaret Linehan
Cork Institute of Technology

Funder: Higher Education Authority

education in employment

WORK-BASED LEARNING

Graduating Through The Workplace

Dr Margaret Linehan

WORK-BASED LEARNING

Graduating Through The Workplace

Dr Margaret Linehan

www.eine.ie

education in employment

Publication Information

Published by CIT Press, Bishopstown, Cork, Ireland.
Design by Raven Design
Printed by City Print

ISBN 978-0-9545736-8-3

Acknowledgements

The empirical research conducted for this report is based on contributions from individual working group members (listed in Appendix F) from each of the partner institutions in this project. The contribution, collecting and collating of data by other members of staff in each of the partner institutes is also greatly appreciated.

In particular, thank you to Tim Horgan, Cork Institute of Technology, for the statistical analysis of the data collected on work-based learning courses, and for creating the associated graphs.

Thanks to Elaine Cahill, University College Cork, for conducting research on the extant literature on Individual Learning Plans.

Thanks to Sharon Burke, Cork Institute of Technology, for advice and research on Individual Learning Plans and for the analysis of the pilot study of these plans.

Thanks to Audrey Jennings, Dublin Institute of Technology, for sourcing existing literature on work-based learning partnerships, and for analysing these partnerships in third-level colleges who are part of this project.

Thanks to the Human Resource Managers and Training Managers in various organisations for their valuable advice regarding work-based learning partnerships and individual learning plans, and for piloting the learning plans with their employees.

This report would not have been possible without funding received under the Strategic Innovation Fund Cycle 1 from the Higher Education Authority under the National Development Plan 2006-2013.

Foreword

The *Education in Employment* project funded through the HEA's Strategic Innovation Fund represents a significant development for Cork Institute of Technology and its partner institutions. The project itself was a natural progression for CIT; building on its leadership in career-focused education and delivering on the lifelong learning agenda that is fundamental to economic and social progress.

One of the most significant challenges undertaken by the project consortium was that of reviewing the current position with regard to work-based learning and partnerships with individual workplaces. This interim report serves a significant need in providing a well-researched framework as a backdrop for the presentation of the findings of the survey of current practice within the eight partner institutions. These findings set out the challenges to be met in addressing the needs of the lifelong learner. These challenges and the recommendations and conclusions presented here will, I believe, provide a significant impetus for change and real engagement with the work-based learner.

The working group includes members from 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 and University College Cork, in addition to Cork Institute of Technology, and I would like to acknowledge the sharing of resources and experiences which contributed to this publication.

It is important to point out that this is not the group's final report. It is intended to act as a catalyst for further focused action by the project group and this explains its timing. The remaining outcomes of this project strand will include significant efforts around learning partnership, appropriate and focused staff development, the development of learning plans, and systems for the integration of good practice into work-based learning partnerships.

I would like on my own behalf and on behalf of the overall project steering group to thank the main author and all of the contributors for this important piece of work and to acknowledge the chair of the group on the publication of this document.

Michael Delaney,
Head of Development,
Cork Institute of Technology

Executive Summary

Higher education is currently undergoing rapid, unprecedented, and accelerating change. Employers and individuals are demanding an increase in the diversity of curricular choice and mix, reflecting increasingly rapid changes in the workplace and in society generally. Much of the rate of change has been driven by exponential advances in information and communications technology over recent decades.

Until recent years, the emphasis in state-funded third-level education was almost entirely towards "for-employment" rather than "in-employment" education and training. In-employment training has, for the most part, been largely disconnected from the formal education qualifications system. The newer emphasis on upskilling of persons already in the labour force poses new and significant challenges. This is particularly true for those at the lower skills level who find it difficult to access education and training opportunities.

Learning for Life (2000), Ireland's first White Paper on Adult Education, confirmed that skill shortages continue to threaten Ireland's economic prospects, a view endorsed by all stakeholders, who also agreed on the priority status of 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. Within the context of lifelong learning, learning required by the workplace and which takes place at work and through work has a predominant role in determining the content and direction of learning. As work environments increasingly move to knowledge-based environments, with their increasingly dynamic and changing contexts, ongoing upskilling of employees is required. Work-based training and education is ideally suited to serve this need. Rapidly changing contexts now require training and education curricula that are fluid, dynamic, and continually responsive to volatile workplace environments and to societal change. Third-level institutions need to continually engage with the crucible of changing work environments, where newly created contexts continually demand educators to respond quickly to new and ever-changing circumstances.

In 2006, the Government introduced a Strategic Innovation Fund through which €510m is allocated for spending, between 2006 and 2013, in higher education institutions for projects 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 potential for higher education systems. Through the range of initiatives it supports, the Strategic Innovation Fund (SIF) is providing new impetus to the development of system-wide quality. 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 *Education in Employment* project is one of the initiatives funded under the first cycle of the Strategic Innovation Fund. The Education in Employment 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, Dundalk Institute of Technology, Letterkenny Institute of Technology, Sligo Institute of Technology, University College, Cork, and National University of Ireland Galway. Education in Employment focuses on the learning needs of those already *in* the workforce, and includes lifelong learning as a central aim by placing significant emphasis on continuous professional development and upskilling in the workforce.

This interim report is based on the activities in year one of the Work-based Learning strand, one of four linked sub-strands in the Education in Employment project. Members of the Work-based Learning group will continue to collaborate for the two remaining years of the project, building on their progress to date. Three main outcomes were proposed for year one of this project strand: (i) an audit of courses which contain elements of work-based learning, and which are currently offered, by partner institutions, to persons *in employment*; (ii) the design and piloting of individual learning plans for learners *in* the workplace; and (iii) the establishment and evaluation of work-based learning partnerships. These three outcomes have successfully been achieved and provide the basis for this report.

In order to contextualise work-based learning for this report, an extensive review of the extant literature on work-based learning was conducted. These literature findings are summarised and presented in Chapter 2. One of the key messages arising from the literature search was succinctly stated by Connor (2005) who suggests that defining work-based learning is recognised as highly problematic. For the purpose of this report, however, work-based learning is considered to be learning at a higher education level, and which largely takes place at and through work, not only to meet individual learning and development aspirations but also to serve the performance objectives of an organisation (usually the employer). This suggests that work-based learning depends on three interrelated components: (i) the individual; (ii) the organisation; and (iii) the academic institution.

Acknowledging the importance of the individual, of the organisation, and of the academic institution, and recognising knowledge created outside of academia to meet the skills needs of employers, an investigation of courses which contain elements of work-based learning was carried out in academic partner institutions to

ascertain the current provision of work-based courses for those *in employment*. The findings from this research illustrate that work-based learning is already challenging the current structures of third-level academic institutions, requiring them to be flexible (i) in terms of mode of delivery, (ii) in the context of the accreditation of prior experiential learning, and (iii) in the accreditation of in-company training or work-based projects. It is also clear from the findings that, for the successful operation of work-based learning programmes, there is scope for developing further employer engagement with higher education institutes in the design, development implementation, and delivery of such programmes. 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. This should better assist the student to achieve both academic knowledge and higher level skills to meet the needs of employers. From the current findings, a further challenge emerging for third-level institutes emphasises the need to take on a more flexible approach to delivery, by utilising a mixed mode or blended approach to learning. Blended Learning combines multiple approaches to learning, including virtual and physical resources. This would typically integrate e-learning and distance learning with more conventional face-to-face sessions and some traditional or more rigid approaches to education. The blended learning approach enables the student to have greater control over when and where the learning takes place, and is particularly suited to those learners *in employment*, as it allows the learning to be built around other work and lifestyle commitments.

Cognisant of the requirement for individual learning, which underpins all work-based learning, the current project developed Individual Learning Plan (ILP) forms and piloted them with learners *in employment.* Individual learning plans should enable learners to be proactive in their individual learning and development. The first pilot test of the newly devised individual learning plans took place during the academic year 2007/08. Based on the constructive feedback received from learners, a revised paper-based version of the ILP form will be tested during the academic year 2008/09. This, in turn, will enable the development of an electronic version of the form, which will be distributed to 1,000 learners before the end of the project. During the development and design of the ILP form, it became clear that the workplace is not a standard environment for all learners. Workplaces in different fields have different working cultures, and learners in the workplace are from different age groups, different educational and professional backgrounds, and in different positions in organisations. While the workplace creates learning possibilities, what is most central to individual learning is how the individual participates and interacts with possibilities in their workplace. It is important, therefore, to acknowledge workplaces as sites for learning, and the unique learning needs of each *individual* has to be emphasised and considered by education providers.

During year one of the current project, work-based learning partnerships were examined within each of the participating education institutions. Many of the developments reported here on these partnership are at the early stages of their implementation. As collaboration between education providers and employer organisations is now recognised as fundamentally important to enhancing learning in both environments, it is envisaged that these partnerships should continue to grow and evolve. The experience of developing work-based partnerships for this project illustrated to those involved how such partnerships are based on mutual trust and recognition; requiring a significant investment of time, energy, enthusiasm, information exchange, and goodwill from all stakeholders.

Finally, work-based learning is becoming increasingly important (i) for organisations needing professional development to create dynamic, flexible workforces, and (ii) to higher education institutions, recognising the workplace as a legitimate and fundamental site of learning. Work-based learning programmes will take time to develop, and third-level institutes need to address the issue of participation, which is greater is some areas of education than in others. An attitudinal and cultural shift must be engaged with to overcome the traditional reliance on classroom-based programmes in order to successfully develop new work-based learning programmes.

Contents

Contents

1 Introduction

1.0 Background

The development of a world-class base of skills has become the key driver of economic growth in the developed world. It is widely recognised that it is only through enhancing people's skills that future competitive advantage will emerge. Ireland's early recognition of this factor has been one of the outstanding contributors to the economic growth it has enjoyed since the early 1990s. Markets, however, are becoming much more open; competition is more international and intense; technology is enabling global trading and new business models; the value chain in enterprise is increasingly disaggregated with activities distributed to their most economic or strategic location. Organisations need to identify the precise areas where they have, or can build, distinctive strengths that will enable them to compete effectively. In the past, Ireland benefited significantly from the international expansion of markets for trade, capital and labour. Today, with the rapid opening up of markets in Eastern Europe and Asia (especially China and India), globalisation presents both opportunities and threats. The primary source of continuing skilled labour supply is, and will continue to be, achieved through the training, development, and learning of individuals. In effect, from an employers' perspective, the focus is on workforce (or professional) development – the upskilling and reskilling of an organisation's employees at a higher level. 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.

Changing employment patterns in the organisation of work have impacted on the demand for higher-level skills. Employees are expected to be more flexible, have a broader range of skills and be better able to manage their own career and development. Graduate level skills and qualifications are seen as increasingly important in the changing workplace. Knowledge creation and the deployment of new knowledge in the workplace have given rise to the workplace itself being recognised as a site of learning and knowledge production. Brennan (2005) suggests that, if higher education is to continue to make a contribution to the knowledge economy, collaborative activities based in and around the workplace should be considered.

According to Murphy (2007), contemporary drivers of structural and political change in higher education in Ireland, and in Europe generally, are identified as two-fold. First, the need to maintain and enhance economic progress through generation of new knowledge through research and the application of that new knowledge in the world of work. Second, the need to facilitate social stability and democratic cohesion. Higher education institutes, therefore, are expected to be responsive to the needs of the economy and of the labour market, while

at the same time affording citizens their right to appropriate levels of education to sustain economies in stable societies. The growing interest in the interface between traditional higher education and the world of work at European Union and national levels is evident as an increasing number of research projects, incentives and initiatives now have a labour market focus. Additionally, support for workforce development is seen as one means by non-traditional students, who are beyond the age when individuals are likely to participate in the traditional route from school to accessing third-level education. Research suggests that over 70% of learning comes from experiences, either planned or unplanned, thus emphasising the need to 'learn from real work' (Nixon *et al.,* 2006). Such learning is also seen as a means by which the economy can respond more rapidly to changing skill needs, when compared to 'campus-based learning'. Until relatively recently, however, the value of experience-based learning in higher education has been recognised only in very specific contexts, for example, in practice placements on professional awards. This recognition of the importance of practice experience in such awards is also usually accompanied by a tendency to treat practice assessment differently, in that it has often been assessed on a pass/fail basis, which means that it is unable to contribute to the classification of the academic award (Walsh, 2008).

The Irish labour force is projected to grow to about 2.4 million by 2020. Approximately 1.4 million of the current workforce will still be in the labour force by 2020. An additional 640,000 young people will come into the labour force from the formal education systems. The remaining additional 310,000 will be made up of immigration and increased participation by the existing population. 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, it requires enhancing the skills of the resident population, increasing participation in the workforce, increasing third-level participation, and continuing to attract highly-skilled migrants (Forfás, 2007a). The upskilling of 500,000 persons already in the labour force is a significant challenge. This is particularly true of those at the lower skills levels, i.e., those with qualifications below Level 5, who find it difficult to access training and education opportunities, in some instances receive little support from their employers and many of whom have low levels of literacy. Employees also may experience practical barriers in attending courses or may lack the confidence or knowledge to seek appropriate training. Equally, employers and employees sometimes do not recognise the value of training. Additionally, employers may find it difficult to release employees to attend training.

The existing arrangement of programmes, schemes and grant aid 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 initiatives need to be taken which will foster a culture of lifelong learning. The government currently funds full-time education, up to third level, and training primarily aimed at the low-skilled cohort. Until recently the emphasis in state-funded third-level education has been almost entirely towards "*for-employment*" rather than "*in-employment*" education and training. *In-employment* training has, for the most part, been largely disconnected from the education/qualifications system. Only about half the number of Irish adults undertake any recognised form of learning activity in each year (including formal, informal and non-formal education and training). Comparisons of education/training of adults show that Ireland lags behind many countries and, in

particular, is considerably behind the Lisbon learning target that 12.5% of adults should be engaged in learning. Currently, the Irish rate is 7.4%. Thus, there is a need for approximately 50% increase in formal adult learning to achieve the Lisbon target. Lifelong learning is essential for the development of 'human capital', which in turn is inextricably linked to personal, social and economic development.

Organisations and enterprises which want to develop their knowledge base and to engage with higher education institutions, however, face a confusing array of schemes and an inconsistency of approaches. There is a need for the education sector to proactively facilitate and simplify the engagement process. 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 sector. The need for workplace innovation and the transformation of the concept of work from the static use of previously acquired skills into a dynamic of continuous learning is accepted as essential for the Ireland of the future.

The "knowledge worker" and "organisational learning" have become important concepts in popular business culture. Knowledge has long been correlated with power. The Information Age has made information, and the knowledge of how to use it, more powerful than ever, but in the same instant it has reduced the "shelf-life" of information. While knowledge provides a competitive advantage, it is now more broadly distributed. Knowledge is an asset, but it is not usually accounted for on the bottom line, as it can leave an organisation and suddenly emerge at a competitors' organisation. According to Appelbaum and Gallagher (2000) the market value of many organisations is now several times its book value. The difference between the two is found in an organisation's employees. Their individual skills, know-how, information systems, designs, supplier relationships and client contacts add value and generate wealth. Boud and Solomon (2001: 3) argue that work-based learning is ideally placed for developing these skills, as it is "one of the very few innovations related to the teaching and learning aspects of post-secondary education that is attempting to engage seriously with the economic, social and educational demands of our era". Current policy developments in Europe have also stimulated wider interest in experience-based learning, as it has been recognised to be an important element of lifelong learning. As Pouget and Osborne (2004: 46) note, "One of the outcomes of the consultation launched by the *Memorandum of Lifelong Learning across Europe* has been to highlight the importance of 'valuing after learning' be it informal, non-formal or informal settings". Similarly, The European University Lifelong Learning Network argues that the recognition of experiential learning is an opportunity to meet the needs of individuals, employers and institutions (Conradi *et al.,* 2006). According to Harris and Chisholm (2008), early twenty-first century society is increasingly concerned with the delivery of learning which can be measured and awarded credit, therefore it is valid to develop an off-campus learning model which facilitates quality assurance, valid assessment, and the award of credit where this is desired by the individual or organisation involved.

1.1 Strategic Innovation Fund Aims and Objectives

The Strategic Innovation Fund (SIF) is awarded 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 in 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. While the sector is acknowledged as an engine for economic development, higher education institutions need to rise to the challenges of increasing their relevance through promoting access and participation by those already in the workforce. The Strategic Innovation Fund is an important element in the investment and reform of higher education institutions that will enable them to meet the challenges presented by the changing social and economic realities while building on their existing strengths. In this way, the projects funded through the Strategic Innovation Fund will help the partner institutions towards realising their full potential while also improving the learning experience for a diverse range of learners at all levels. A feature of the initial evaluation of the proposals and an important criterion for reporting is the sustainability of the projects. This focus will ensure that reforms are embedded within structures and practices and will outlive the project funding cycle.

In developing a project proposal for the Strategic Innovation Fund Cycle 1 deadline, Cork Institute of Technology (CIT) was clear that the submission should build on existing leadership and strengths and align with CIT's strategic plan and those of its partners. The resulting 'Education in Employment' project is focused on the learning needs of those already in the workforce through four distinct but linked strands. The initiative is a Cork Institute of Technology-led consortium comprising Athlone Institute of Technology, Dublin Institute of Technology, Dundalk Institute of Technology, Letterkenny Institute of Technology, Sligo Institute of Technology, National University of Ireland Galway, and University College Cork. The work-based learning group is one of four strands of the Education in Employment project. The members of this working group are proposing a model of education development, delivery, support and assessment which is based on a number of underlying principles, namely:

- 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 itself can constitute a rich learning environment thus 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 main aims and objectives of the work-based learning working group are:

- To provide those in the workplace, wishing to attain a third-level qualification, the opportunity to avail of the National Framework of Qualifications (NFQ), and to do so in a flexible cost-effective manner;
- The establishment of collaborative workplace–education partnerships to identify workforce upskilling needs and to develop education/learning programmes to meet these needs;
- The development of flexible delivery and support for learners in employment using a 'blended approach' integrating face-to-face delivery in institutions and in the workplace, e-learning, mentoring and coaching;
- The integration of work-based credit-earning learning into programmes, defined by learning agreements – jointly supervised and assessed by workplace and academic staff.

Overall, it is apparent that virtually all sectors of industry are becoming more knowledge-intensive. This involves a change in the types of skills required, with a rise in the importance of generic skills, including: the ability of individuals to work more autonomously; self-managing; working as part of flexible teams; adapting to change; solving complex problems; thinking creatively; and, engaging with innovation as a continuous process. The work-based learning group proposes developing these skills in the workplace in conjunction with a third-level education provider. Successful interaction between the education sector and workplaces is essential for developing innovative practices in work-based learning.

1.2 Methodology

This report is divided into six distinct chapters. The first chapter serves as a general introduction and provides a background to the report. Chapter 1 also outlines the aims and objectives of the report, and briefly highlights the aims and objectives of the Strategic Innovation Fund.

Chapter 2 introduces the concept of work-based learning and explores definitions of work-based learning from the relevant literature reviewed. The impact that the learning society and lifelong learning has on work-based learning is highlighted. The chapter also investigates what people learn at work and, more importantly, how they learn at work.

Chapter 3 presents the findings of empirical research that was conducted in each of the partner institutes in relation to courses which include elements of work-related learning. The members of the working group devised a questionnaire which included fourteen questions in relation to the current suite of courses currently offered. The findings from the audit of these courses that are relevant to people in the workplace provide the first outcome that the working group was required to deliver, as set out in the original Strategic Innovation Fund proposal.

Chapter 4 introduces the concept of individual learning plans. A summary of the relevant literature reviewed in relation to individual plans is presented in order to contextualise the importance of these plans. A further requirement of the working group, as set out in the original Strategic Innovation Fund proposal, was to develop individual learning plan forms and to pilot these ILP forms with employees working in diverse industries

throughout the country. Each third-level institution had different levels of involvement with the industries they selected for piloting individual learning plans. Each third-level institution partaking in this strand piloted a sample of ten individual learning plans in their organisation(s) of choice. The findings in relation to the development of these plans are also presented and the feedback from the pilot study is evaluated and analysed. Individual learning plan forms are the second outcome of the original proposal. It is envisaged that at the end of the three-year project, one thousand individual learning plan forms will have been completed.

Chapter 5 presents theoretical and empirical data on work-based learning partnerships. A third outcome for the first year of this project was to develop a working partnership with a local industry. Members of the working group developed a questionnaire and a partnership continuum to explore these education–industry partnerships. Some third-level institutes already had well-established partnerships, whereas some other institutes formed new partnerships to fulfil this requirement. An evaluation of these education–industry partnerships is presented. The questionnaire is in Appendix B.

Chapter 6 outlines some of the challenges for work-based learning. The chapter also presents some recommendations regarding work-based learning for third-level education institutes and industrial organisations. A conclusion to the report is also presented.

2 Work-based Learning

2.0 Introduction to Work-Based Learning

Work-based learning is not a new type of activity. It has a long history associated, for example, with various types of apprenticeships. It is also not new within higher education, in so far as areas such as medicine, education, and social work have included work-based learning as central elements in their programmes for many years. Higher education has always been associated with preparation for work, particularly in relation to entry to the professions. Once entry was achieved, being a member of a profession was regarded as a 'job for life'. Employment patterns, however, in most industrial societies have undergone considerable upheaval over the last fifteen to twenty years. Traditional career patterns are breaking down and full-time permanent employment is no longer the predominant pattern. In a number of enterprises, full-time employment has been replaced by 'non-standard' work, particularly part-time, casual and contract work. Of particular relevance to the present context, is the rise in 'portfolio' or contract workers who must undertake the responsibility for managing their own careers and skills development in order to become, or remain, employable. Upskilling and lifelong learning have become the new 'buzz' words associated with the move away from the 'job for life' and the need for individuals to develop new skills and to update existing skills throughout their working lives.

Interest in work-based learning has expanded since the beginning of the 1990s, and currently research in this area is wide-ranging and interdisciplinary. One of the reasons for this expansion is the unprecedented rapid change in society and working life that has taken place during the past few decades (Tynjala, 2007). The rapid development of information and communications technology, the growing production of knowledge in the economy, increasing internationalisation and globalisation, as well as changes in occupational structures and in the content and organisation of work have all challenged not only education institutions but also work organisations to engage with new ways of ensuring that the workforce can successfully meet these challenges. Thus, continuous learning has become important both for individuals in the learning society and for organisations competing in international markets.

Research by Eraut (2004a) on the outcomes of education, particularly at the tertiary level, reported the existence of a gap between the knowledge needed at work and the knowledge and skills produced through formal education. Eraut classifies the types of knowledge which vocational and professional education programmes claim to provide as follows: (i) theoretical knowledge, (ii) methodological knowledge, (iii) practical skills and techniques, (iv) generic skills, and (v) general knowledge about the occupation in question. He states that although most of these types of knowledge are described as transferable, there is little evidence on the extent to which methodological knowledge, generic skills, and general knowledge about an occupation are acquired by students, and about the chances of theoretical knowledge and practical skills being subsequently transferred into the workplace. Recent studies conducted by Stenstrom (2006) and Tynjala *et al.* (2006) confirmed Eraut's concerns. Two separate studies in Britain on university and polytechnic graduates with 2-10 years work experience produced similar findings: both university and polytechnics graduates found their education for working-life skills inadequate, as the majority of them stated that they had learned the necessary skills at work, and not during their formal education.

Work-based learning is playing an increasingly important part in the development of lifelong learning and affording company employees worldwide in all fields of work the opportunity to begin, update, or improve their higher education qualification by obtaining credits for negotiated learning completed flexibly in the workplace. It is also increasingly advocated in policy literature as an important form of provision which will establish new relationships between higher education and the world of work (Gallacher and Reeve, 2002). This can be seen as part of a wider set of changes in the economy, society and the role of higher education.

Work-based learning has also been identified as a means of responding to the needs of employers, particularly those in small to medium-sized enterprises (SMEs). It is suggested that the pressure to compete in increasingly global contexts means that employers need their workers to engage in continuous skills development, to improve productivity and to enable organisations to meet the challenges posed by countries such as China and India (Brennan, 2005). A further consequence is that responsibility for career-management and skills development is seen to reside more and more with individuals rather than with organisations; workers are now expected to be more flexible, to have a wider range of skills, and to be able to take on responsibilities previously undertaken by managers and supervisors. In this context, technical skills alone are not considered to be sufficient, as cognitive skills, together with an array of generic skills and dispositions, come to be regarded as the essential ingredients of successful performance in the workplace.
The central feature of investing in the workforce is that it provides multiple benefits:

- for *employees*, by raising employability and earnings;
- for *businesses,* by raising productivity and profitability;
- for *economies*, by raising competitiveness and growth.

In effect, investment in human capital, of which training of the existing workforce is a major component, is at the centre of a dynamic economy. A key aspect of work-based learning is the direct involvement of employers. Employer involvement can range from hosting a period of work experience to delivery of training entirely in the workplace. Employer-led training is increasingly considered an important source of skills development as employers are the end-users of the skills created (McIntosh, 1999).

Work-based learning, however, is much more than the familiar *experiential* learning that consists of adding a layer of experience to conceptual knowledge. In work-based learning, theory may be acquired in conjunction with practice. Theory-building, for example, may be viewed as a practice because those in practice are fully capable of producing theory (Vaill, 1997). The theory produced by the practitioner may be more a practical, commonsense theory, but a theory nonetheless. Practitioners build theory as they consciously reflect on challenges of their practice; engage in problem posing, data gathering, action, evaluation, and reflection; and then share the knowledge produced with others in practice.

2.1 The Learning Society, Lifelong Learning, and Work-based Learning

The concept of a learning society has emerged as a key idea in a number of influential policy documents which have appeared from the mid 1990s onwards. The European Commission White Paper on Education and Training (1995), for example, was entitled *Teaching and Learning: Towards the Learning Society*. This document argues that, in response to the fundamental process of change or 'upheaval' in European society, tomorrow's society should be one 'which invests in knowledge'. A number of factors are recommended to achieve this, including bringing the school and business sectors closer together. It is made clear that this refers to 'the world of learning in the widest sense, stretching from primary to higher education' (European Commission, 1995: 36). In this context it is recognised that much learning does and should take place in the workplace, and the importance of establishing workplaces as centres of learning is emphasised. In 2001, the European Commission offered the following definition of lifelong learning as: 'all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment related perspective' (European Commission, 2001: 9).

The interest in providing learning opportunities at work has also been strengthened among employers by the growing emphasis on the learning organisation (Pedler *et al.,* 1991). Embedded in this idea is not just that additional learning opportunities will be provided for employees, but that a continuing process of learning for employees will be at the heart of achieving organisational success and at enabling the organisation to achieve its goals. Organisations, therefore, become much more interested in creating the conditions within which this learning can take place. This will be done partly through in-house provision, but also through appropriate partnerships with other organisations which can support this learning.

The Irish *Lifelong Learning Index 2007* reveals that lifelong learning continues to play a major part in the personal and professional lives of the Irish public. The 2,278 respondents to an online survey illustrated that 75% have taken an adult education course, with 87% intending to enrol in training or adult education during the next twelve months. Learning new skills continues to be the most popular reason for enrolling in adult education. The survey also reveals that certification of courses is 'hugely important' to those choosing evening classes, reflecting the growth of the National Framework of Qualifications. 59% of respondents suggest that it is a 'significant factor' in choosing a class, and for 25% of respondents it was the most important aspect of completing an evening course.

Garavan *et al.* (2003: 3-4) view learning as a process rather than simply an outcome. They suggest that learning is now likely to embrace the following ideas:

- Learning is not just about knowledge. It is also about skills, insights, beliefs, values, attitudes, habits, feelings, wisdom, shared understandings, and self-awareness;
- Learning outcomes can be incremental (building gradually on what has already been learned) or transformational (changing ways of being, thinking, feeling and action);
- Transformational learning, for some learners and for some organisations, may be a struggle, may take time, and may involve conflicts over aims and outcomes;

- By its very nature, learning is essentially individual, but it can also be collectively generated in teams and organisations;
- There is no one right way to learn for everybody and for every situation;
- Questioning, listening, challenging, and enquiring are crucially important to effective learning;
- The learning process occurs inside the person, but making the outcomes explicit, and sharing them with others, adds value to the learning;
- When the learning process is self-managed, it becomes more effective.

The articulation of clear learning objectives is considered to be a central feature of any type of learning. Learning objectives have the potential to provide learners with an understanding of what is trying to be accomplished.

The developments associated with the idea of the learning society, lifelong learning, and the learning organisation have encouraged change within higher education in a number of ways. First, there is greater pressure on the higher education institute to work more closely with employers in contributing to the processes of economic change and development. Second, higher education institutes are expected to be increasingly flexible in their modes of delivery in meeting the lifelong learning agenda. Third, the role of an increasingly wide range of organisations and agencies in meeting learning needs has been emphasised.

Proponents of work-based learning claim that it should be associated with an academic qualification or, minimally, an industry-recognised credential. The education institution needs to be assured that any programme meets rigorous academic standards, whereas the employer needs assurance that the programme has prepared its employees to contribute to the field in question with the highest attainable quality standards. An academic qualification will typically require an assessment that through diverse means – testing, supervisory evaluation, individual portfolio, learning contract – can identify the necessary learning outcomes, the level at which these outcomes are being achieved, the criteria for achieving the outcomes, and evidence of their achievement. In work-based learning, in particular, the volume of learning activity needs to be established to support the accreditation. Although the ultimate award of credit rests with the academic institution, other parties, such as the employing organisation, programme deliverers, and associated consultants and facilitators, have their respective interests to sustain. Brodie and Irving (2007) through their work at the University of Chester suggest that, given the interdisciplinary nature of work-based learning, assessment should focus on three components. The components are learning ('how to learn' and make the most of learning opportunities); critical reflection (reflecting on learning, applying models and theories to aid understanding); and capability (what the student is able to do). Capability is believed to be the most important component, yet it is potentially the most problematic to assess. Equity and quality-assurance issues militate against the involvement of employers in the assessment of learning, even though they could (and, in some instances, do) contribute. Where employers are engaged in the assessment process their role tends to be in mentoring students on the technical aspects of work-based projects and providing feedback on the performance (or 'capability') of the student to the academic staff.

2.2 What is Work-based Learning?

Work-based learning is situated within the context of the paradigm shift from an 'industrial society' to a 'knowledge society' (Rohlin *et al.,* 1998). While the term knowledge economy is used in a variety of ways, at its core are the ideas that future economic performance will be closely based on the skill and innovation level of the labour force, underpinned by effective research, and research and development capacity (Fisher, 2001).

Work-based learning is a subset of workplace learning. It refers specifically to the achievement of 'planned learning outcomes' derived from the experience of performing a work role or function. Work-based learning is part of a cluster of concepts including 'lifelong learning', 'employability' and 'flexibility. One of the main differences between learning in the formal educational system and learning at work is that the former is based on formal, intentionally planned educational activities, while the latter is mostly informal in nature (Eraut, 2004b). Informal work-based learning is unplanned and implicit, often collaborative and highly contextualised, and the learning outcomes unpredictable, whereas institutional learning and organised on-the-job training is often formal, planned, largely explicit, focused on individual learning, and the outcomes are often predictable (Hager, 1998). The different attributes of work-based learning and institutional learning can be seen as weaknesses and as strengths. Formal education is intended to produce general skills that can be applied and transferred to a variety of situations. In order to be a true expert, however, in working life one has to develop situation-specific forms of competence, and this is possible only in authentic situations. On the other hand, situation-specific learning by itself may be very limiting. Something learned in one situation might not easily be transferred to another type of situation. Despite the differences between institutional and work-based learning, there are similarities as well. The workplace may also function as a context for formal employee training. Large companies, in particular, put a lot of effort into corporate training. In recent years, the role of universities and institutes of technology are often important for corporate training programmes.

Recent research by Raelin (2008) suggests that there are three critical elements in the work-based learning process:

(i) learning is acquired in the midst of action and dedicated to the task at hand;
(ii) knowledge creation and utilisation are collective activities wherein learning becomes everyone's job;
(iii) learners demonstrate a learning-to-learn aptitude, which frees them to question underlying assumptions of practice.

Work-based learning, therefore, differs from conventional education in that it involves conscious reflection on actual experience. Walsh (2008) suggests that reflection on practice offers an advantage of providing a way in which learners can be supported in structuring their workplace experience to identify their learning from that experience. One thing, however, is clear: there is no single or simple definition of what work-based learning entails beyond the notion that it is about learning (not teaching) and occurs in the workplace (rather than on campus). It should not be assumed that work-based learning in the higher education context is specifically about training; work-based learning may take many forms and be undertaken for a number of different purposes; and it is not restricted to performance-related learning in a narrow sense. Instead, the emphasis is on

identifying and demonstrating learning that has occurred through work-based activity, wherever and however this may have been achieved. Gallacher and Reeve (2002) suggest that four concepts are regarded as particularly important to understand work-based learning in higher education:

1. Partnership
2. Flexibility
3. Relevance
4. Accreditation.

Partnership

A partnership between an external organisation and an education institution specifically established to foster learning is seen as a relationship of satisfying need by the external organisation in return for revenue to the education institution. Partnership is increasingly regarded as key to the development of lifelong learning, in which boundaries between previously separate organisations or sectors become blurred. This emphasises the importance for higher education institutions of developing partnerships with 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.

Flexibility

Flexible learning has come to be associated with the concept of 'capacity building', incorporating notions of investment in social and human capital, flexible and innovative problem-solving, and reciprocal transfer of knowledge between structures. Capacity building, in turn, is linked to individual 'capability' and with the belief that employees have to reconceptualise not only their tasks and roles but also themselves – their identity and subjectivity. Capacity building is, therefore, about developing a workforce of 'enterprising selves' with capabilities that enable them to successfully engage with the unpredictability of the market-place. Work-based learning satisfies the criteria for flexile learning by being flexible in terms of time, place, and mode of learning. It transforms 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, flexible learning has come to be associated with e-learning and distance learning and with negotiated learning outcomes.

Relevance

The need for relevance is frequently used to justify changes to the curriculum and to support the growth in work-based learning. Relevant knowledge is increasingly defined as knowledge which is characterised by being produced in the context of application, as distinct from traditional discipline-based knowledge. Work-based learning has been presented as having a key role in helping higher education institutes to "meet the needs" of collaborating employers.

Accreditation

Accreditation refers to the process of recognising and giving value to a wide range of learning experiences, many of which have previously not been recognised or deemed worthy of credit within higher education. Within this context, it is argued that all forms and modes of learning may be regarded as having equal value to traditional academic learning, and should receive recognition in the form of equal credit (Brennan, 2005). The ability to award credit for learning achieved in the workplace rests on particular approaches to the curriculum in which learning is defined in terms of sets of learning outcomes, grouped in terms of units or modules, and at an identified level and volume.

Overall, a key aspect of work-based learning is the direct involvement of employers and their commitment to providing the context for learning (Boyer, 2000). Employer involvement can range from hosting a period of work experience to delivery of training entirely in the workplace. Employer-led training is increasingly considered an important source of skills development as employers are the end-users of the skills created. Work-based learning is also regarded as particularly effective as it gives trainees realistic hands-on experience and develops skills relevant to employer needs.

2.3 Definitions of Work-based learning

A wide range of terms is used interchangeably for the concept of work-based learning, including: workplace learning, work-related learning, vocational learning. This leads to some confusion and undervalues the potential benefits of work-based learning as a mode of learning at a higher level. Furthermore, since the mid-1990s, there has been a gradual shift in language and techniques used to describe steps taken by employers to help employees perform their jobs more effectively – a point emphasised by the Chartered Institute of Personnel and Development (CIPD) which records that learning, development, and training are often used in the same context. This has again led to some confusion. The CIPD consequently defined work-based learning as "a self directed, work-based process leading to increased adaptive capacity. Individuals 'learn to learn' and possess the capabilities that enable them to do so to help to build and retain competitive advantage" (CIPD, 2005).

Work-based learning is often used in the literature to describe any form of learning in the workplace. Work-based, however, can convey the notions both of:

- learning that takes place *in* the workplace, and
- learning that takes place *for* the workplace, or the employer more specifically (Glass *et al.,* 2002).

The term work-based learning is used to describe a diverse range of learning situations which have differing influences on higher education, students, employers and employees (Foster and Stephenson, 1998). Gray (2001) identified four different forms of work-based learning:

1. Work-based learning used to access higher education programmes – wherein the previous/current experience of employees is recognised by higher education institutions as a valid form of learning. In addition to allowing these employees to enter higher education programmes their experience

may count towards credits for particular units through the recognition of prior learning process.

2. Work-based learning as general preparation for the real world – whereby higher education institutions include work-based competency skills in course programmes, e.g., numeracy, communication, and problem-solving.
3. Work-based learning as the primary form of study – whereby full-time employees take on the additional role of student. Learning takes place within the workplace with support from higher education institutions to discuss and share ideas generated from the workplace.
4. Work-based learning as preparation for future employment – wherein a period of work-experience in an industrial, commercial, or service environment is incorporated into higher education courses.

Most providers of programmes that include at least an element of work-based learning make a distinction between:

■ learning *at* work	in the workplace
■ learning *through* work	learning while working
■ learning *for* work	doing new or existing things better
■ learning *from* work	using the experience of work.

Some of the characteristics of work-based learning have been described as:

- *Task-related* – Learning frequently arises from the performance of tasks in the workplace;
- *Problem-related* or Issue-led – Much work-based learning is associated with tackling problems of production, design, or management. Some work-based problems are very complex, involving state-of-the-art techniques at the frontiers of knowledge;
- *Innovative* – New techniques or approaches are constantly being devised to meet new situations, creating many opportunities for learning, and providing experience of managing change;
- *Both strategic and just in time* – Many people have to think and operate at both levels: strategic in terms of working towards medium- to long-term goals; just in time in terms of learning what is necessary for tomorrow;
- *Autonomously-managed and self-regulated* – Learning often takes place without direct instruction or formal tuition. Learners are expected to take responsibility for ensuring they learn from their work activities;
- *Self-motivated* – Many people are motivated to achieve beyond basic expectations;
- *Team-based* – Tackling problems in the workplace requires effective co-operation between people with different roles and expertise, leading to the development of a range of skills and personal qualities as well as a sharing of expertise;
- *Concerned with enhancing personal performance* – Constant updating and upgrading of expertise is now a normal part of most people's work;
- *Concerned with improving the performance of a business, enterprise or organisation;*

A spectrum of interpretations therefore exists, especially in relation to work-based learning, and this has led to a rather prolonged debate concerning both what work-based learning means and the exact form work-based learning should take to best achieve its learning outcomes. The narrow interpretation of work-based learning relates to learning in the workplace that is driven by employer needs and motivations, whereas the broad perspective focuses on learning that relates to work and is driven more by individual and societal needs.

Terminology and definitions can get in the way of exploring the subject and dealing with what really matters, notably influencing policy environment, dealing with issues and challenges from a structural perspective, and sharing, promoting and encouraging effective pedagogical practice. An inclusive approach that accepts the variety of interpretations is a prerequisite in order to avoid over-compartmentalising provision and straight-jacketing institutions by trying to shape an absolute definition. Nevertheless, it is critically important to establish a shared understanding of the particular area of focus from both an academic and employer perspective, regardless of the terms used.

2.4 What do People Learn at Work and How?

There has been a considerable shift in the way that individual learning and development is understood and characterised. There has been a move from identifying training needs to identifying learning needs, suggesting that development is owned by the learner with the need rather than by the trainer seeking to satisfy that need (Nikolou-Walker, 2008). In other words, learning is demand led rather than provider driven. This has implications for who identifies the needs and the way that those needs are met. Current thinking suggests that needs are best developed by a partnership between the individual and the organisation, and that the methods of meeting these needs are not limited only to formal courses, but to a wide range of on-the-job development methods and distance/e-learning approaches. There has also been a shift in the type of skills that are the focus of development activity. Hallier and Butts (1999) for example identify a change from an interest in technical skills to the development of personal skills, self-management, and attitudes. Recent studies have summarised that people learn at work as follows:

- by doing the job itself,
- through co-operating and interacting with colleagues,
- through working with clients,
- by tackling challenging and new tasks,
- by reflecting on and evaluating one's work experiences,
- through formal education, and
- through extra-work contexts

(Heikkila, 2006; Tikkamaki, 2006; Billett *et al.,* 2005; Collin and Valleala, 2005).

Eraut (2004b), after developing a typology of learning outcomes at work, summarised that there is little that people cannot learn at work. The typology includes the following categories of learning outcomes:

(i) Task performance, including sub-categories such as speed and fluency, range of skills required and collaborative work;

(ii) Awareness and Understanding, involving understanding of colleagues, contexts and situations, of one's own organisation, problems, risks etc.,

(iii) Personal Development with aspects such as self-evaluation and management, handling emotions, building and sustaining relationships, and the ability to learn from experience;

(iv) Teamwork with subcategories such as collaborative work, and joint planning and problem solving;

(v) Role performance, including leadership, supervisory role, delegation, crisis management etc.,

(vi) Academic knowledge and skills, such as assessing formal knowledge, research-based practice, theoretical thinking and using knowledge sources;
(vii) Decision making and problem solving, involving, for example, dealing with complexity, group decision making, and decision making under conditions of pressure; and
(viii) Judgement, including quality of performance, output and outcomes, priorities, value issues and levels of risk.

It is clear from the above learning outcomes that employees learn by working with their colleagues. Group working in one way or another is a factor which seems to promote knowledge exchange and the sharing of expertise, and thus enhances learning by individuals. Furthermore, it has been argued that not only individuals but also groups can learn in organisations. The ability to learn in collaboration with other people, both within and outside one's organisation, often makes the difference between success and failure. According to Slotte and Tynjala (2003), employees who cannot network with others to share and construct knowledge will fall visibly behind their peers in the possession of such abilities. Interaction between novices and experts is also of crucial importance in work-based learning. Billett (2004) has distinguished between direct or close guidance and indirect guidance. The former is salient to knowledge that would be difficult to learn without the assistance of a more experienced and knowledgeable partner. Learning processes or concepts that are hidden require close interaction with more experienced co-workers who can make these practices or concepts accessible. Indirect guidance contributes to how tasks are undertaken and completed.

The studies cited above deal with informal workplace learning and learning outcomes that come about incidentally, as a side effect of work. In recent years, some attention has also been paid to the ways in which learning can be intentionally promoted in the workplace. Poell (2006), for example, proposed a model of learning projects through which employees learn something new by solving work-related problems. A learning project is organised by a group of employees who participate in a set of activities centred on a work-related problem with a specific intention to learn and to improve their working at the same time. The activities include different kinds of learning situations: both on-the-job and off-the-job, both self-organised and facilitator-directed, action-based and reflection-based, group-focused and individual-oriented, externally and internally inspired, and pre-structured and open-ended. Poell's studies have shown that in organised learning projects participants are able to combine developing their competences with improving their work. While work-based learning programmes can be constructed from any coherent mixes of activities it is the pursuit of learning projects in the workplace that tends to characterise such programmes. These projects could form a major or a minor part of the overall activities. Learning is designed not just to extend the knowledge and skills of the individual, but to make a difference to the organisation. Projects are undertaken not just to equip students to contribute to the organisation, but to make a tangible step towards doing so. Organisational and individual capabilities are thus linked. Boud *et al.* (2003) suggest that this grounds learning and gives a focus to it. It enables managers and supervisors to see that learning is not a self-indulgent activity, but actually contributes to the organisation and needs to be supported by it.

Overall, individual and group learning in the workplace can be characterised as a highly social activity which requires interaction and dialogue, requires the kinds of challenges that make learning necessary, and involves reflection on past experiences and the planning of future activities.

3 Summary of Courses which include Work-Based Learning

3.0 Introduction

This chapter summarises the current 'state of play' of courses which include elements of work-based learning currently offered by the partner institutions surveyed. A questionnaire was developed by a sub-group of the work-based learning members in order to gather data on such courses. The survey aimed to illustrate a snapshot of the higher education landscape by highlighting 'what we know' and 'what we do not know' about work-based learning, and in doing so identify areas on which to focus attention in the future from an institutional and pedagogical perspective. The questionnaire was aimed at course co-ordinators and was available to be filled in electronically or at a face-to-face meeting with a member of the working group. The criteria for inclusion of courses were that they were targeted at students who are in employment, i.e., courses which are not accessed by CAO (Central Applications Office) entry, and usually delivered through part-time provision. The summary data presented here represents four hundred and thirty-three courses, which is the total number of courses accounted for by all partners. A very large variety of courses is currently offered to the workplace by the third-level education providers, these include management, marketing, professional cookery, energy management, auctioneering, accountancy, palliative care, interior design, lean manufacturing, retail management, and enterprise development. The questionnaire aimed to ascertain a wide range of information relevant to work-based learning, including: course duration, course fees, NQAI (National Qualifications Authority of Ireland) level, minimum entry requirements, recognition of prior learning, and course delivery, in order to assist third-level institutions and employers in identifying available approved modules which will benefit learners.

3.1 Course Duration

The first question enquired about the duration of each course. Figure 1 illustrates the replies to this question:

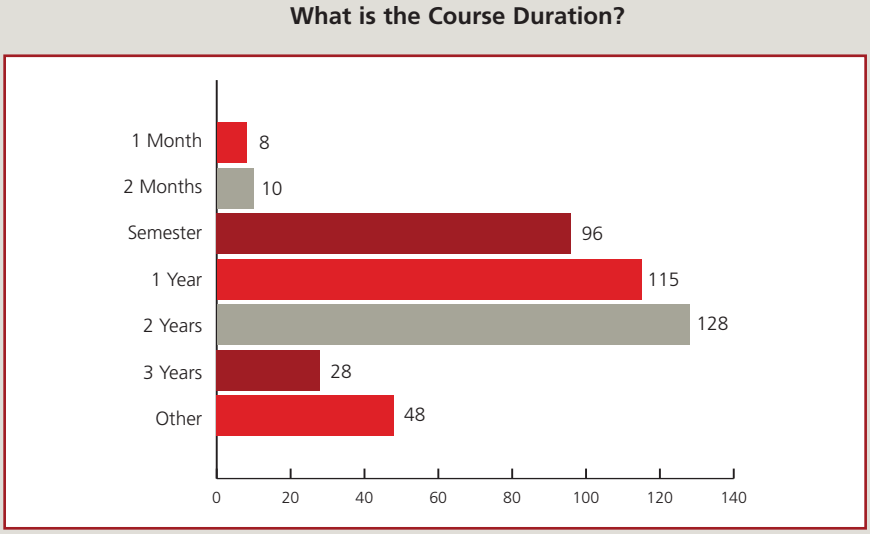


Figure 1: Course Duration

As illustrated, the duration of courses on offer ranged from one month upwards. Most courses were offered over one or two years: 115 courses took one year to complete, and 128 courses took two years to complete. These results suggest a reliance on more traditional timetables, whereby the learner attends a higher education institute on a part-time basis for either one or two years to gain their qualification.

3.2 NQAI Level

The second question asked what level each course on offer was classified by the National Qualifications Authority of Ireland (NQAI) in the National Framework of Qualifications (NFQ). The need for work-based learning to operate in the dual worlds of work and education means that a common language must be used to describe the outcomes of what is being undertaken. This language is represented in the national framework of qualifications. The NFQ comprises ten levels of qualifications, with each level based on nationally agreed standards, skills and competence. These standards define the learning outcomes to be achieved by learners seeking qualifications at each level. The ten levels include qualifications gained in settings from schools to places of work, the community, training centres and to colleges and universities, from the most basic to the most advanced levels of learning. Figure 2 presents the replies to this question:

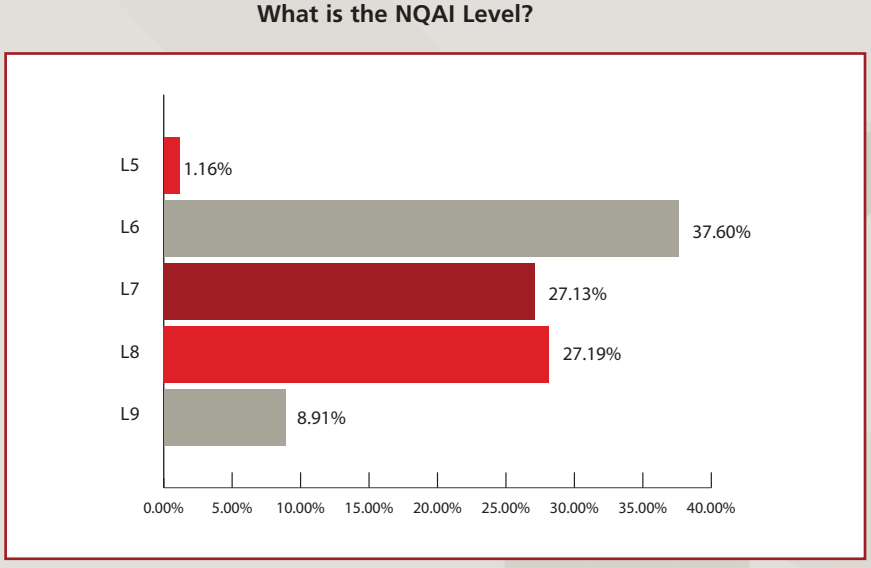


Figure 2: NQAI level of courses

As illustrated above, only 1.16% of courses are offered at Level 5. In general, courses ranging from Level 1 to Level 5 are offered by the Further Education and Training Awards Council (FETAC), while courses from Level 6 to Level 10 are offered by the Higher Education and Training Awards Council (HETAC), the Dublin Institute of Technology (DIT) and the universities.

From the responses received, most courses (37.60%) are offered at Level 6, whereby the learner receives a certificate on completion of the course. 'New Economy' theory suggests that advanced countries are witnessing a growth in 'knowledge jobs' and there is an emphasis placed on knowledge-rich employment. One of the challenges, therefore, for higher education providers and employers is to promote further learning and to increase participation rates at Levels 7 and 8. The requirement to enhance the skill level of the working population presents a substantial task as Ireland's participation rate in continuous learning (non-formal learning) is relatively poor. Only 14% of the 25-64 years age-group in Ireland engaged in non-formal learning in 2002, contrasting with a 16.5% average in the twenty-five European Union states, and 34.5% in Britain. The Forfás report (2007a) suggests that the National Framework of Qualifications is a vital tool for progressing the development of skills in the Irish knowledge economy and that the availability of data based on the NFQ is of the central importance. For employers and employees, the NFQ provides a means of assessing or demonstrating that particular skill levels have been achieved. Qualification systems clearly add value to training and learning investments at the level of the national economy. Qualification systems promote labour mobility and the more effective matching of candidates and vacancies.

3.3 Course Accreditation

The third question asked related to the accreditation of courses. As can be seen from the results presented below, most (289) courses are accredited by the higher education provider. One hundred and twenty-five courses are accredited by outside organisations such as London's City and Guilds, various accountancy bodies, the Chartered Institute of Personnel and Development, the Marketing Institute, etc. Only nineteen courses are accredited by FETAC and this reinforces the distinction between further and higher educational provision. It is clear from the results that courses currently on offer are primarily accredited by the education provider. There is a need, however, to establish if recognition of prior learning and of informal learning in the workplace contribute towards the learner gaining exemptions as part of the accreditation process. Recognition of prior learning involves students preparing a portfolio that documents the learning outcomes and the evidence of the learning achievements they undertook informally or in a non-accredited course. Such a portfolio is submitted and credit allocated on the basis of the extent to which it demonstrates equivalence to learning outcomes from formal courses. Boud (2003), however, suggests that most learning developed in the workplace has until recently been unaccredited, but it provides the foundation on which students will build their work-based learning studies.

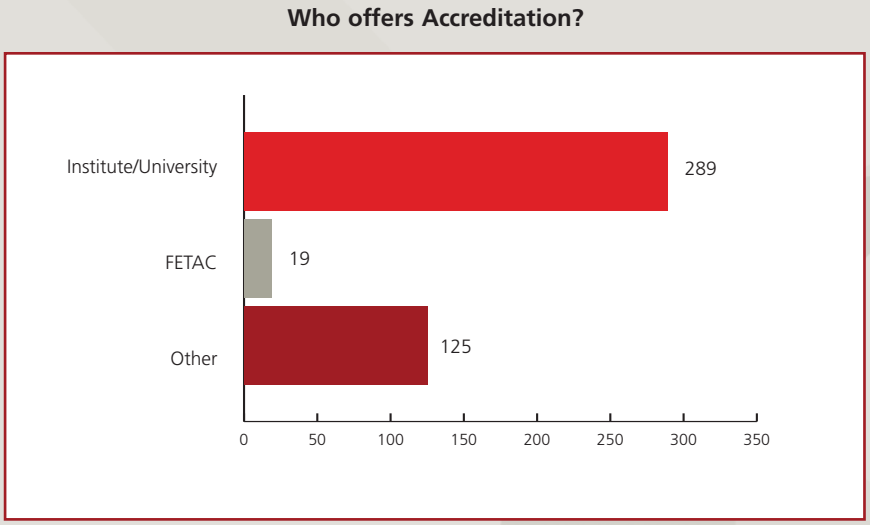


Figure 3: Course Accreditation

3.4 Recognition of Prior Learning

The next area to be investigated was the recognition of prior learning. Recognition of prior learning (RPL) is the generic term for systems such as Accreditation of Prior Learning (APL) or Advanced Academic Standing, which are used within higher education to describe the awarding of credit to students on the basis of demonstrated learning that has occurred prior to admission. RPL is also used to refer to the recognition of (prior) non-formal and informal learning for qualifications. The term 'prior' concerns learning that has taken place, but has not been formally assessed or measured, prior to entering a programme or seeking an award. The philosophy underlying the recognition of prior learning is to enable and encourage people to enter or re-enter formal education, leading to qualifications, by awarding or recognising credit for what they already know in the course curriculum. Workman (2008) summarises that academic recognition and academic assessment of experiential learning are the essential features of the recognition of prior learning. The measurement activities within the assessment process relate to two key factors: the volume of credit and the level of learning which reflect academic level equivalence to undergraduate or postgraduate learning. The onus is on the student to demonstrate the prior learning, by preparing and submitting adequate evidence, under the guidance and advice of the academic institution and employer.

As illustrated by Figure 4, there was no recognition of prior learning for 267 of the 433 courses surveyed. This finding suggests that significantly greater emphasis needs to be placed on recognising prior learning by third-level education providers. Recognition and accreditation of prior learning enables non-traditional entry into third-level courses as well as earning credit for advanced standing. A recent OECD report (2007) on RPL observed that an awareness of RPL among Irish employers, workers, and the general public is low. Until now, awareness of RPL has been limited to a small number of policy makers, education professionals, and people partaking in RPL.

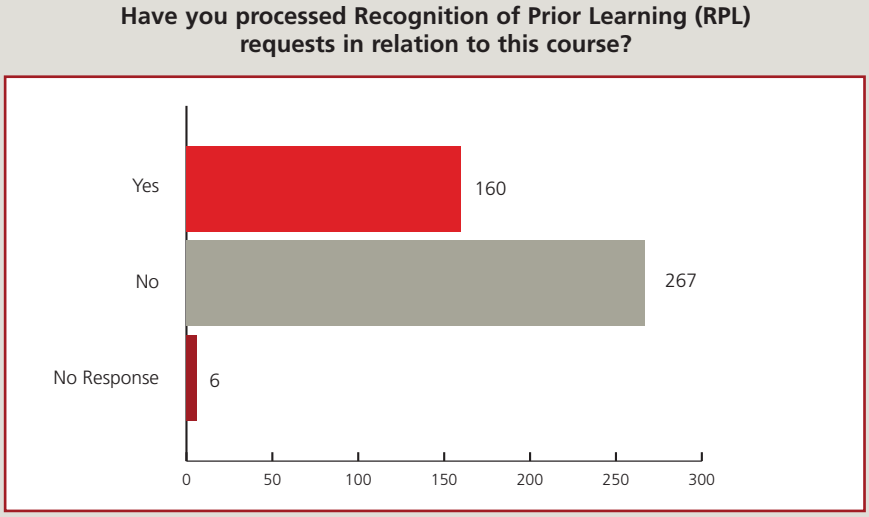


Figure 4: Recognition of prior learning

Three purposes of RPL are set out in the National Qualifications Authority of Ireland's *Policies, Actions and Procedures for Access, Transfer and Progression* (2003):

- Entry to a programme leading to an award;
- Credit towards an award or exemption from some programme requirements;
- Eligibility for a full award.

The recognition of prior learning in Ireland is closely associated with the promotion of lifelong learning and the full implementation of the NFQ. For some decades, the recognition of prior learning has been used in Ireland to facilitate broader access to education and training programmes (particularly by mature learners in further and in higher education and training), to meet workplace requirements and personal needs/interests of learners. The number of learners who avail of the recognition of prior learning has been and continues to be relatively small in comparison to the number who access education and training qualifications by formal routes. There is, however, a range of practice and experience in the recognition of prior learning in many fields of education and training.

The OECD report (2007) on the recognition of non-formal and informal learning notes that in Ireland "while RPL for access, credit/exemptions is generally practised, the concept of making full awards on the basis of RPL is a relatively new one (there is some international practice of this)". Ireland's Qualifications (Education and Training) Act, 1999, however, sets out that learners may seek awards directly from HETAC or FETAC without having participated in specific programmes. The OECD also noted that RPL practice in Ireland is mainly funded from Government sources (project based), by education and training institutions (financing RPL from their regular budget), and from international funds. The OECD recommends that Ireland should increase the availability of part-time education, and other flexible forms of education and instruments such as RPL, to facilitate access to education.

Recognition and accreditation of prior learning are important and necessary for work-based learning courses. A process of portfolio development and assessment is needed for students to identify the point at which their formal work-based learning should commence. A major objective of the NFQ is to recognise all learning achievements. The NFQ aims to do this by supporting the development of alternative pathways to qualifications/awards and by promoting the recognition of prior learning. Boud (2003), however, suggests that there are important adaptations needed for work-based learning courses: First, the prior learning documented in the portfolio must relate directly to the proposed programme of study to be undertaken for work-based learning; credits given must be allocated in terms of the actual curriculum proposed for work-based learning. Second, it is important that only current competencies are recognised; since the knowledge identified in the portfolio is to be used immediately as part of the course, it must be current and deployable.

Many Irish third-level institutions are now moving towards modularisation – organising academic courses in smaller rather than larger units, which should make it easier to adopt the accreditation of prior learning. This move to modularisation, as well as enabling learners to gain credit for their learning in Irish third-level institutions, helps individuals to transfer easily to third-level institutions across Europe. The change to modularisation is largely driven by the Bologna Declaration, convened in Bologna on 19 June 1999 and signed

by 31 representatives of 29 EU member states and accession candidates. By 2010, the Bologna Declaration aims to have full student mobility through the transferability of their achievements (European Credit Transfer System), with credits also being obtainable in non-higher education contexts such as lifelong learning.

Overall, the OECD report summarised that the recognition of non-formal and informal learning is closely associated with work-based learning. The report suggested that learning outcomes are fundamental to the development of programmes by employers, and these outcomes can be supported by continuous assessment. Additionally, the report recommends that some smaller awards are "ones that could be picked up in the workplace" (2007: 31). These awards could be supplemental or could focus on specific skills for competences to support continuous professional development.

3.5 Applicants and places for courses provided

Question 5 dealt with the demand for courses, and asked if there were more applicants than places for the courses provided. A very clear result emerged: 333 courses can accommodate more students, but 100 courses are over-subscribed.

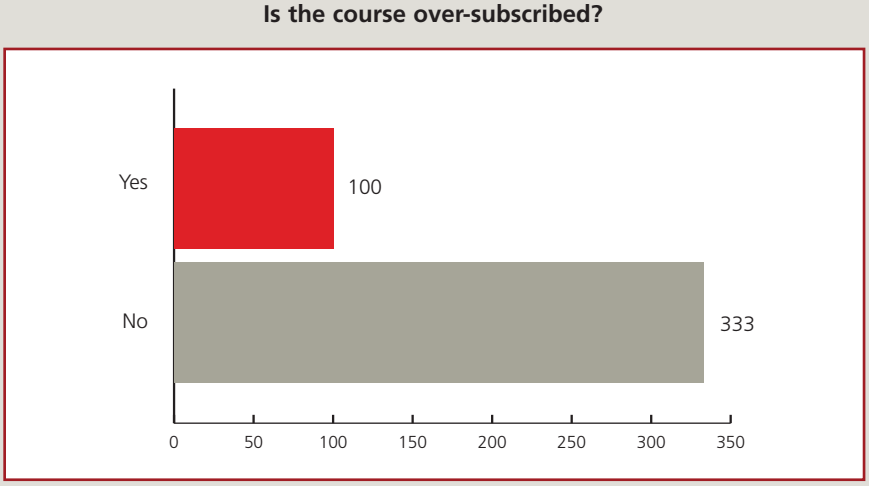


Figure 5: Applicants versus places

Ireland's participation rate in continuing learning is relatively poor. Only 14% in the 25-64 year age-group in Ireland was engaged in non-formal education and training in 2002, compared with 16.5% in the EU25 and 34.5% in Britain. An OECD (2006) report illustrated that Ireland was ranked fourteenth out of 27 selected OECD countries in 2004 in terms of the proportion of the labour force with tertiary education. The report also highlighted that 37% of the Irish labour force had not completed upper secondary education and this represents a far larger proportion than among other leading performers. These statistics leave Ireland educators with significant room for improvement and do not allow grounds for complacency.

A number of studies, including one in 2005 by the Expert Group on Future Skills Needs (Forfás, 2005), have analysed education and training participation of those in the workplace. Summary findings of these reports illustrate that:

- Younger persons receive more training than older persons;
- Higher educated persons receive more training than lower educated persons;
- Employees receive more training than self-employed;
- Professionals and managers receive more training than craftspersons and labourers;
- Full-time employed receive more training than part-time;
- Permanent employees receive more training than temporary employees do;
- Those employed in the Dublin region receive more training than those in other regions;
- Union members receive more training than non-members;
- Women receive more training than men.

A challenge exists for third-level education institutes to target those in employment, as engagement with continuing learning should facilitate workers to achieve both personal and organisational goals and objectives.

3.6 Delivery Schedule

The sixth question asked when the course is delivered. As illustrated below, 394 courses are delivered every year or semester, with only 39 courses delivered on demand/request.

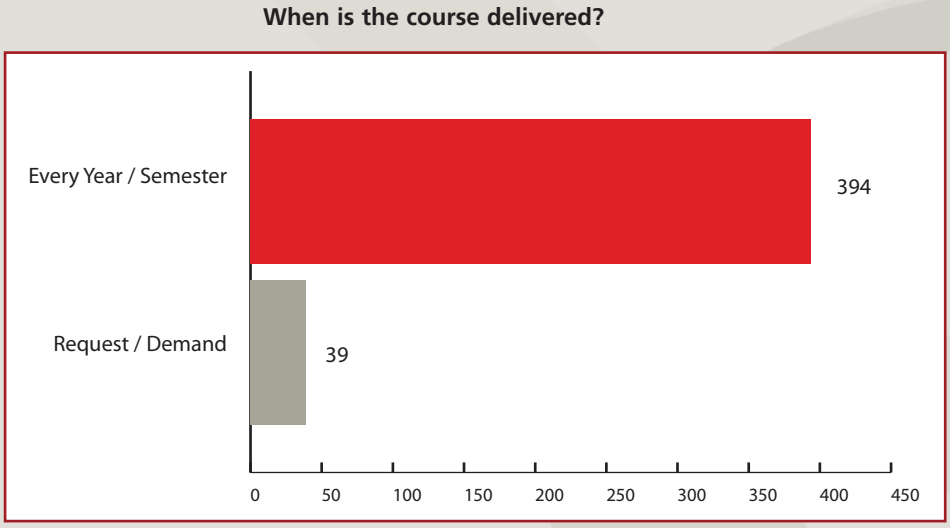


Figure 6: Delivery Schedule

This finding suggests that the third-level education provider takes the decision to provide courses based on the traditional annual college calendar. It is clear that education providers need to re-examine their timeframes and to commence their courses at times which would be more user friendly for adult learners. Specific steps may be required to tempt people already in employment to re-engage with non-formal education through work-based learning projects and initiatives. This finding further suggests that academic staff involved in designing courses aimed at those *in* employment should form stronger links with industry partners to establish time periods which may be more suitable for course delivery.

3.7 Delivery Location

Question seven addressed the issue of where courses are delivered. As illustrated, 366 courses are still delivered on campus, with only two out of the 433 courses surveyed delivered in industry/workplace.

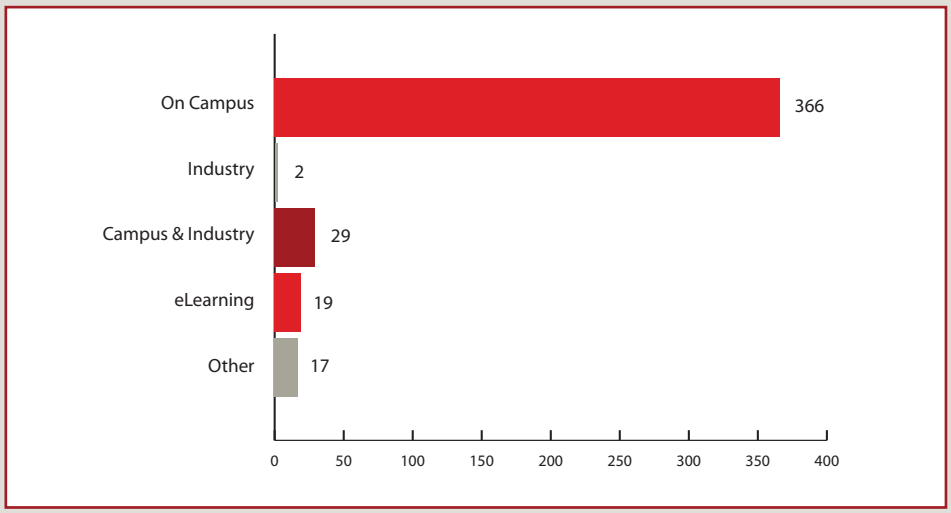


Figure 7: Delivery Location

This finding poses some serious challenges for Irish third-level education providers, and particularly for the delivery of work-based learning programmes. Most education providers have become conditioned to a classroom model that separates theory from practice, which can risk make learning seem impractical and irrelevant. Work-based learning, however, merges theory with practice and knowledge with experience. It recognises that the workplace offers as many opportunities for learning as the classroom does. While the workplace creates possibilities for learning, it is how individuals participate and interact in their workplace that is central to learning by individuals.

Learning in the workplace can occur at different levels and is different to classroom-based learning. Learners may be individuals, groups, whole organisations or inter-organisational networks. The nature of the learning varies as well. Although formal learning and informal work-based learning are different in nature, both are equally important for the development of vocational and professional expertise. Formal learning usually produces explicit knowledge, whereas informal learning largely produces tacit or implicit knowledge.

Martineau and Hannum (2003) believe that organisations will gradually turn towards approaches that address immediate corporate issues rather than those that "subject their executives to lengthy and lofty theoretical lectures or even worn-out case studies". Similarly, Raelin (2008) suggests that the classroom need no longer be the primary sanctuary for learning but, instead, that the workplace can be viewed as a prime location for learning. Third-level academic providers are now facing the challenge of working with course modules that require them to deal with converting work practices into learning practices that meet both education and industry standards. There are also issues regarding the place of theory and critical reflection for courses delivered in the workplace rather than those delivered in the classroom. The third-level providers also need to make the adjustment that courses delivered off campus enables the learner to be responsible for, manage, and to timetable one's own learning, and to provide courses that require minimal attendance at a third-level institution.

3.8 Methods of Assessment

The next issue to be addressed was that of assessment methods. As can be seen from the results, very traditional modes of assessment are still utilised by mainstream education providers. Exams and continuous assessments remain the favoured means of evaluation. One of the more interesting findings emerging from the research is that only two courses were assessed by means of project work.

What assessment methods are used?

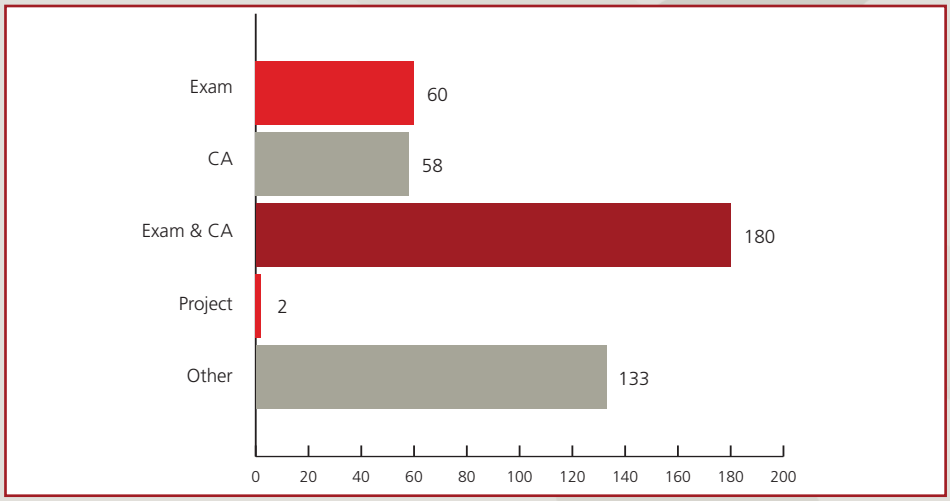


Figure 8: Methods of assessment

Currently, most education institutions organise courses around credit points. These credits represent a discrete component of a course with specific learning outcomes and assessment processes. A challenge for education providers is to move from traditional class-based examination and assessment procedures to more innovative project work which could be completed in the workplace. This means that work-based learning programmes must be flexible and responsive to the circumstances of the learner and of the work setting but without compromising on quality and standards from the perspective of the third-level institute. Boud (2003) suggests that work-based learning provides an excellent example of a learner-centred approach to curricula. The focus is on what students wish to learn, not just on what is provided for them to learn. The need for work-based learning, however, to operate in the dual worlds of work and education means that a common language must be used to assess the learning and describe the outcomes of what is undertaken. This language is represented in the NFQ. Assessment of work-based learning must meet the quality challenge as specified by the education institution, and should have reliable measures of the volume and level of work-based learning required. Lyons and Bement (2003) advise that once the learning has been delivered its assessment must be based on appropriate standards. In order to plan, manage, and measure learning from experience, work-based projects, or from other sources, Lyons and Bement suggest that three sets of tools are required:

(i) Means by which volumes of credit can be standardised;
(ii) Means for establishing appropriate levels for learning outcomes;
(iii) Criteria by which work-based learning may be judged and graded.

Overall, academic institutions needs to be assured that all courses meet rigorous academic standards, and the employer needs assurance that courses will prepare employees to contribute to the workplace with the highest attainable quality standards. Although the ultimate award of credits rests with the education provider, the employing organisation has to sustain its own interests. By reducing on-campus assessment methods, such as examinations, work-based learning can be responsive to the needs of those *in* employment who have multiple responsibilities in their lives.

3.9 Identified Need for Particular Courses

Question nine asked who identified the need for particular education/training courses, i.e. whether it was the education provider or the industrial partner. From a work-based learning perspective, it is interesting to note that of the 433 courses on offer, industry identified the need for only 27 of these. Perhaps of greater interest, given the importance of educational and industrial partnerships in relation to work-based learning, the need for only 60 of these courses was identified by such partnerships. As illustrated below, the need for 254 courses was identified by the third-level education provider.

Who identified the need?

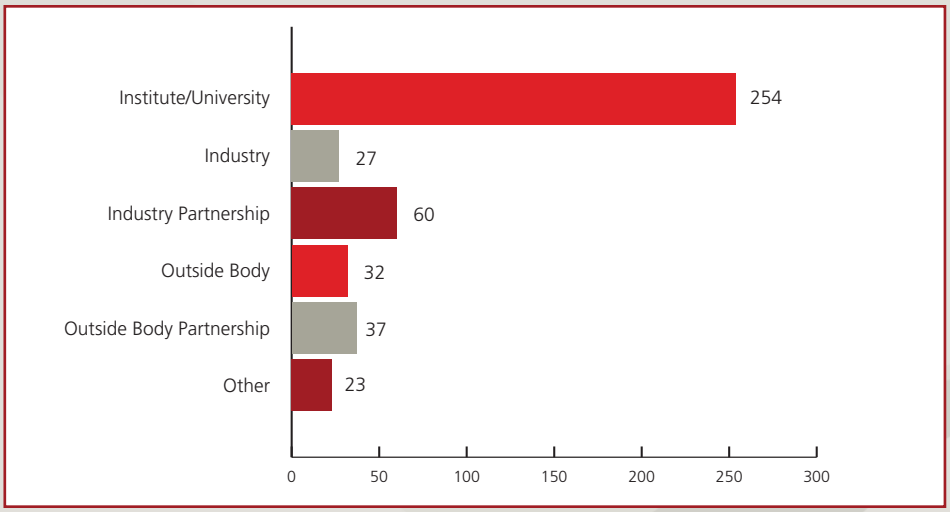


Figure 9: Identified need for particular courses

Nikolou-Walker and Garnett (2004) believe that, if the need for particular courses are identified in partnership by both the education institution and the employing organisation, there are many advantages, for example:

- A partnership between an industrial organisation and an education institution specifically established to foster learning is seen as a relationship to satisfy a need by the industry partner in return for revenue to the education institution;
- The course followed derives from the needs of the workplace and of the learner rather than being controlled only by an educational curriculum;
- The starting point and level of the course is established after a structured review and evaluation of current learning;
- A significant element of the course is work-based learning projects that meet the needs of the learner and the organisation;
- The education institution assesses the learning outcomes of the negotiated course with respect to a transdisciplinary framework of standards and levels.

The central feature of a work-based learning course is the selection of learning activities the learner undertakes. This should be equivalent to lectures, tutorials, practical work, and placements undertaken by students on conventional courses. Ideally, the nature of the course should be driven by the identified needs of the learner and of the workplace, but at all times it must satisfy the requirements of the education provider by meeting optimal standards and levels.

3.10 Course Design

After examining some of the issues relating to identifying the need for particular courses the next question to be asked related to the design of such courses. A similar pattern emerged: the education institutions were responsible for designing 221 courses; only 10 were designed by industry; and 47 were designed by both the education providers and industry. These findings, relating to course design, provide a challenge to third-level education providers, particularly because of the limited consultation with industry. It is clear that, if academics develop courses in conjunction with employers, academics will necessarily lose much of their traditional role as the sole or primary course designer. The curriculum for the newer model is ultimately located within the workplace, and is individually renegotiated with each learner. Actual teaching is seldom required. It is replaced by two important new roles: that of the assessor and that of manager of the learning process. As assessor, the academic is required to evaluate learning in the workplace and determine its academic merit and worth. The role of the academic manager is about identifying, structuring, providing opportunities, mentoring, assessing, but not teaching or lecturing (Onyx, 2003).

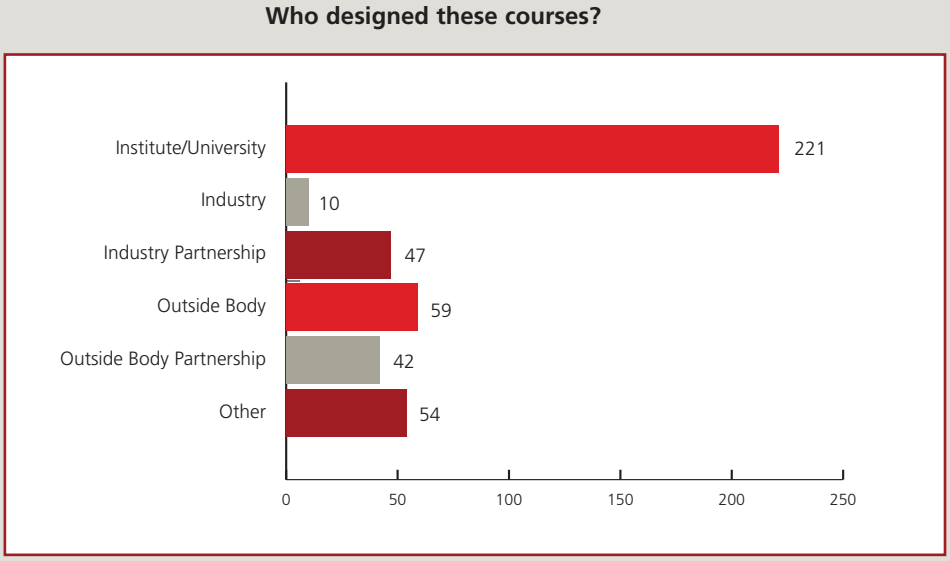


Figure 10: Course design

Traditionally, courses have been designed by the education providers, however, current thinking on work-based learning provision is that initiatives should be 'learner' and 'employer' centric rather than being developed from the perspective of education or training providers. This in turn should give both the learner and employer greater ownership of newly developed courses. The design of work-based learning courses requires an appreciation of the complexities of learning and of the circumstances in which it can take place. Considerable design preparation is needed if meaningful and worthwhile courses are to be planned to suit the diversity of students in the workplace. One of the valuable features of courses designed by the industrial and educational partnership is the potential richness of resources and support available to learners. They can draw not only on the resources of the education institution but also those of the workplace. Boud (2003) suggests that the level of resources, reference materials, and expertise is often greater in the organisation than in the third-level institution. Additionally, when a course is designed in partnership by the educator and the employer its role becomes one of assisting learners in identifying, developing, and recognising their individual learning in the context of their current jobs and future professional development.

The formation of a partnership between academics and employers should bring a new perspective to course design and development. Participation by employers in course design (covering duration, timing and content) should ensure that their employees would be beneficiaries of the course. One of the methods of achieving success for work-based learning courses is the inclusion of a work-based learning project which would be designed by the employer and the third-level educator. Advocates of work-based learning courses suggest that a main focus of these courses is on the delivery of a major work-based project (whether on an individual or collaborative basis) which addresses real-life issues and has the capacity to have an impact on the organisation. Garnett *et al.* (2003) caution that, to be effective, it is necessary for the third-level provider to be flexible in the timing of project work and the provision of supervisory support. Once again, this reinforces the importance of a partnership between the learner, the educator, and the employer.

A further reason for having the employer involved in course design is because of a difficulty faced by many organisations in placing due value on learning. While it is broadly accepted that learning is an essential capability for organisations, it is often among the first areas of activity to face budget cutbacks in times of difficulty. Shipley (2003) suggests this is because it is difficult to demonstrate a cause-and-effect link between the expenditure on learning and training and improvement in business performance. Traditional approaches to business performance measurement have focused chiefly on financial performance. If the employer has co-designed a course tailored to the needs of both employees and organisational needs, it is more unlikely that the course will suffer financial cutbacks.

Garnett *et al.* (2003), in agreement with previous research on course design and development, emphasise and propose an approach to work-based learning based on partnership – in the design, development, delivery, and assessment of the programme – between employers and third-level providers. The third-level institute provides a quality assured framework within which individual employees and their organisations negotiate courses of study which meet the personal development and career needs of individuals, the developmental objectives of the employing organisation, and the academic requirements of the third-level institute. Garnett *et al.* summarise that the crucial part of the joint development of courses is gaining a common understanding from all the partners of what each wishes to gain from the course and what each can contribute.

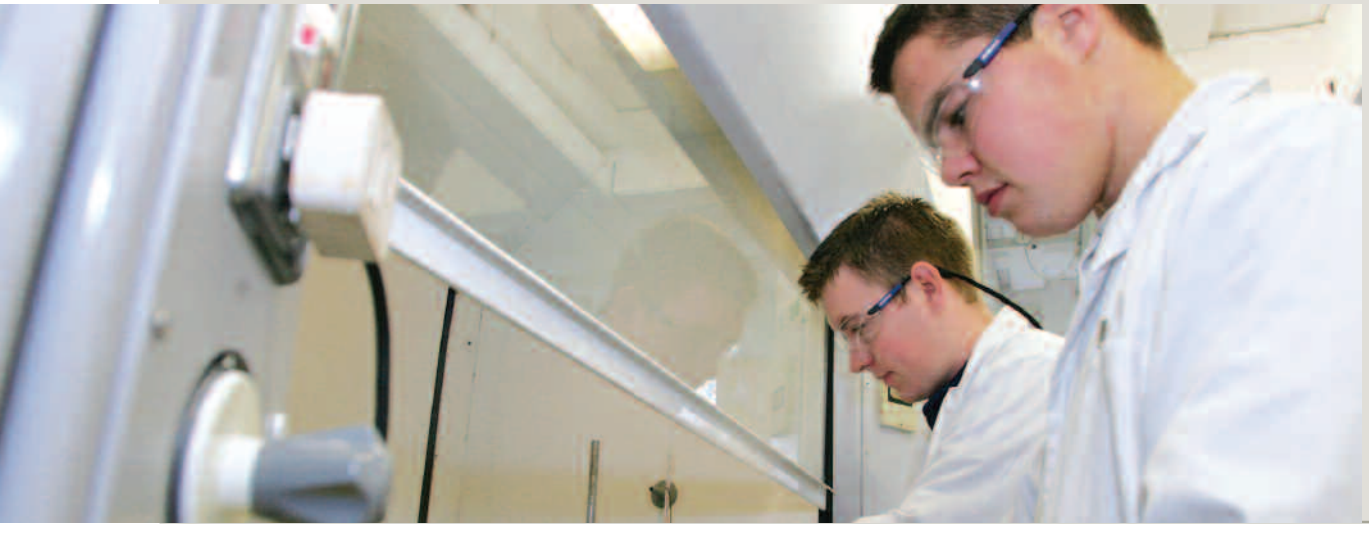
Finally, in relation to course design and development, Garnett *et al.* believe that there are a number of essential employer requirements for a third-level provider to develop an effective and sustainable work-based learning programme. These include:

- Recognition and enhancement of high-level learning, where it already exists within the organisation (e.g. training courses, the experiential learning of individual employees);
- Flexibility in the pattern of delivery, pace of the programme, and the particular approach to pedagogy;
- Willingness to work with other providers of high-level learning utilised by the employer (e.g. independent training providers);
- Customisation of programmes to meet the needs of the individual and the organisation;
- Tangible outcomes which have the potential to enhance the intellectual capital of the organisation;
- Provision of a quality-assured and flexible route to reliable and internationally recognised qualifications.

The partnership approach to course design and development demonstrates that the third-level provider is itself a learning organisation as it is able to transform the curriculum and develop new ways in which individuals and organisations can engage with higher education.

3.11 Support Services from Employers

Question 11 investigated the types of support services students receive from their employers while studying. As can be seen from Figure 11, the largest bar chart shows that no response was available for 156 of the courses surveyed. This finding may suggest that the course coordinators who were asked to partake in this survey were unsure of the support services (if any) that students received, and therefore may have chosen not to respond. Two other interesting results to this question which emerged were the low levels of (i) mentoring, and (ii) workplace support.



Do students receive any of the following suport services from employers?

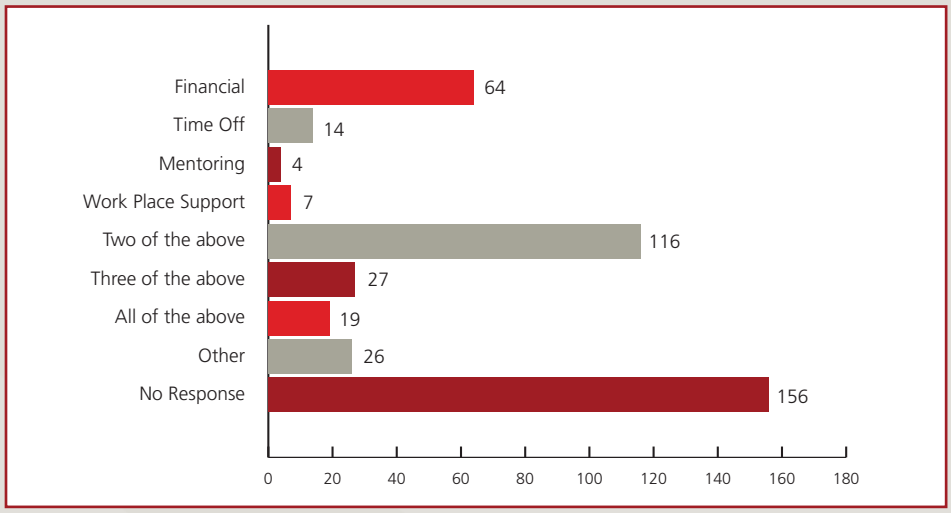


Figure 11: Support services from employers

Raelin (2008) suggests that learning at work can be facilitated by the advice of a significant individual with whom the learner can engage with in a reflective process about their thoughts and behaviours. Clearly, for a mentoring relationship to work, learners need someone who can be committed to them and who can afford the time for the mentoring relationship to evolve. A mentoring role is frequently performed by a training manager in an organisation, but it could also be another senior figure within the organisation. Mentoring is usually a one-to-one process. The role of a mentor is to provide a junior employee with guidance and a clear understanding of how an organisation operates. The mentor also focuses on enhancing an employee's fit within an organisation. In the context of an employee pursuing a third-level course, the role of the mentor is to offer support and help in the completion of work-based projects etc. Garavan *et al.* (2003) suggest that it is important that the focus of the mentoring is on helping the employee to learn. They caution, however, that while direct advice and instruction from the mentor can be helpful, it is important to ensure that employees learn to think for themselves and that the mentoring process does not, either intentionally or unintentionally, create dependence where they just blindly follow the mentor's instructions and cannot take action without advice.

Workplace support in the form of resources, organisational reference material, and expertise are all valuable features of work-based learning. Workplace supervisors also have an important support role, but their prime responsibility is to ensure that work is performed effectively. It is important for learners and their workplace supervisors and managers to agree on learning plans and to provide the conditions in which learning can take place at work. A useful device is a learning journal or learning portfolio. This provides for the ongoing keeping of records on learning and allows for reflection. Critical reflection is important because it is only through deeper

critique that work situations can be improved, workplaces transformed, and productivity significantly enhanced. It is about noticing and critically questioning the taken-for-granted assumptions held by oneself and by others.

3.12 Financial Support for Students

Building on the previous question, which related to support services from employers, the next question specifically dealt with the availability of financial support. As can be seen from Figure 12, students were unable to avail of any financial support for 292 of the courses on offer.

Can students avail of financial support from FÁS or other bodies?

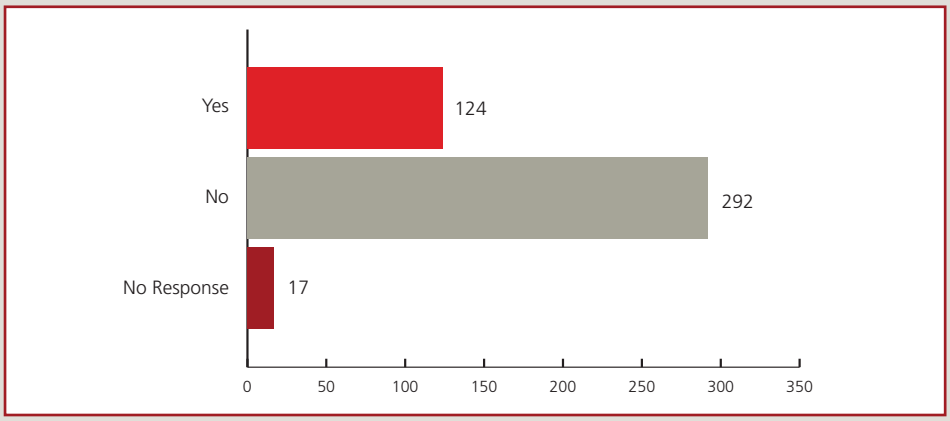


Figure 12: Financial support for students

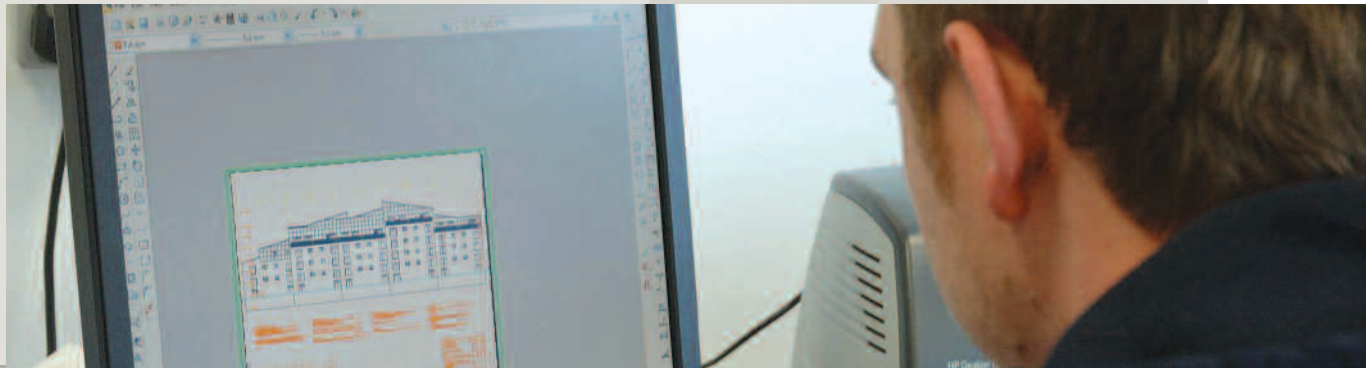
The Expert Group on Future Skills Needs report (Forfás, 2007a) noted that public expenditure on education and training for those in employment is on a very modest scale. The majority of public expenditure on continuing vocational education and training in 2003 was related to the training of the unemployed rather than on those in employment. The Forfás report further suggests that organisations are generally slow to invest in training that equips workers with transferable skills (i.e. general training), because such training would make an employee attractive to other organisations. Firms are generally more likely to invest in specific training, so that they can reap some of the benefits for their own organisation when the worker becomes more productive as a result of training. They recommended that the State should fund targeted, specific cohorts of the population, primarily low-skilled individuals, who would otherwise be unlikely to partake in either education or training. Currently, there is a substantial number of low skilled workers employed in Ireland. This has significant implications both for the individual (in terms of their employability in a rapidly changing workplace) and for the economy as a whole (in terms of their impact on overall productivity levels). The Expert Group on Future Skills Needs further outlined that there is a similar return from investing in the low skilled as there is from investing in those with intermediate or high-level skills. The main distinguishing factor, however, is that the low skilled are less likely to

be offered, seek, or avail of learning or training. There is a greater need, therefore, for proactive intervention at the low skilled level by the State.

Despite the benefits accruing to the State, individuals, and employers from education and training investment, expenditure in Ireland on education and training lags behind leading OECD countries. Policy-makers here, therefore, need to focus on ways of providing financial support for the part-time learner. The Expert Group on Future Skills Needs suggests that, as a general principle, those that do not currently hold a qualification commensurate with a qualification at Levels 4 and 5 on the NFQ should be able to achieve such an award through full-time or part-time study, without incurring tuition costs. Additionally, there is a commitment in *Towards 2016* (Government of Ireland, 2006) to establish a fund which will alleviate fees in public institutions for part-time courses at third level for those at work who have not previously pursued a third-level qualification. This policy has yet to be implemented. The Expert Group on Future Skills Needs summarises that the accelerating pace of change at all levels within the economy, and particularly in relation to skills, necessitates flexible and responsive education and training provision. An ongoing radical and meaningful dialogue must be engaged with by those providing education and training and those demanding it. This approach is reflected in the recommendation of the Expert Group on Future Skills Needs that "the provision of workplace-based training which is fitted around working hours needs to be actively promoted" (Forfás, 2007: 98).

3.13 Use of Web-based Learning Tools

The next question dealt with the use of Web-based learning tools. As illustrated in Figure 13, no responses were received in relation to 201 courses surveyed. This finding suggests that Web-based learning tools are under-utilised in the delivery of work-based learning courses. As noted earlier, the traditional classroom style of delivery of courses is still very much used by the institutions surveyed. The use of Web-based learning tools is a growth area for both academic institutions and employers and has many advantages for those learners *in* employment. Web-based tools and their wide availability is an area which should be further explored for delivery of work-based learning courses. The use of Web-based tools provides learners with the chance to maintain a flexible schedule. There is also the opportunity to build a virtual network of others studying the same course, enabling the learner to gain the benefit of group learning without having to attend a college or an off-site training course.



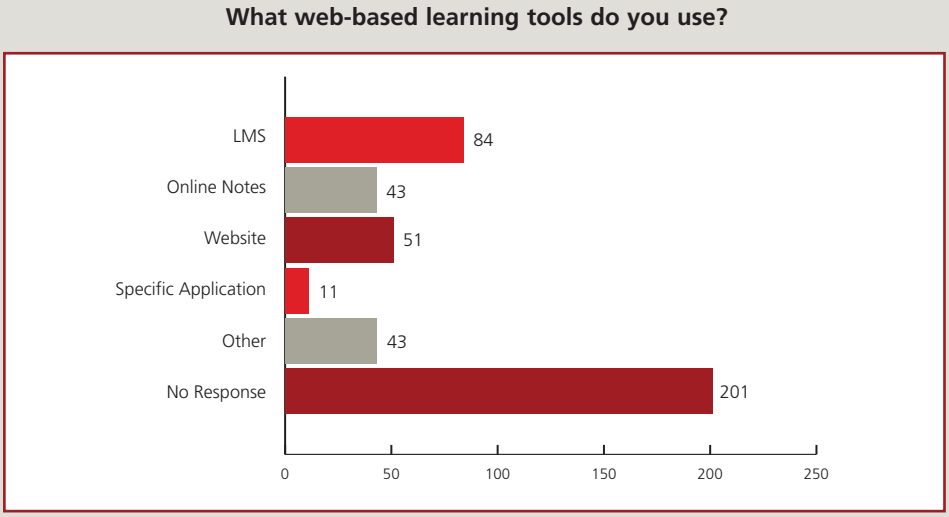


Figure 13: Use of Web-based tools

Eighty-four of the courses surveyed use a learning management system (LMS). A LMS is a set of software tools designed to manage user learning interventions. LMSs go far beyond conventional training records management and reporting. Some of the additional dimensions to a LMS include: computer-based training, online assessment, management of continuous professional development, and collaborative learning. A LMS also provides the tool for control, monitoring, and evaluation. While free and open-source LMS models are available, most LMSs are commercially developed.

Given the relatively low level of LMSs used in the courses surveyed, third-level education providers might usefully consider moving from the traditional classroom-based delivery to 'user-friendly' on-line systems of delivery. LMS is suited for the delivery of work-based learning courses because:

- it is flexible: the person can learn at their own pace and at a time that is convenient for them. This increases commitment to the learning as well as benefiting those who work shifts, weekends, or are trying to fit their learning around other commitments such as work and family;
- it is learner centred: as it gives the learner control over the pace, level, and sequence of learning. Learners can concentrate on the part of the course they need. For example, in a six-hour module, participants might find they already know two hours of the material and do not need another two hours, so two-thirds of a conventional classroom course could be a waste of time;
- it is time effective: it takes less time to deliver than traditional classroom methods;
- it is cost effective: there are no travel or accommodation costs, and it can be used more than once;
- Information can be presented in a variety of ways: the use of multimedia such as graphics, audio, video and diagrams allows information to be presented in a way that is attractive to different learning styles;
- it offers potential for a virtual classroom: once set up, people from different areas can be connected to share experiences and knowledge (Clifford and Thorpe, 2007: 54).

Online notes were only used in 43 of the courses surveyed. This finding again illustrates the relatively conservative and traditional delivery methods still used by third-level providers. In contrast, according to Garavan *et al.* (2003), online learning is used increasingly in organisations, with some companies having set up open learning centres, so that employees at all levels can follow a variety of general educational courses. As well as benefiting the learner, online notes allow for greater flexibility of delivery and can be linked with employers' needs to fit work-based learning around staff working hours with the minimum disruption to production. The research conducted by Garavan *et al.* (2003) also illustrated that many organisations are increasingly using online learning tools as part of continuing training and development of their employees. Their research noted that fewer employers are prepared to give day release to employees and, even if they do, the employees may not feel able to do their jobs in four days a week. Additionally, Garavan *et al.* suggest that employees frequently have evening commitments that prevent them from attending conventional courses, and many people prefer to study on their own time. Online learning tools also reduce commuting time, thereby proving to be more cost effective for both employees and their employers. A further advantage of using Web-based learning tools is that learning is self-paced, so for slow and quick learners stress is reduced. The Forfás Enterprise Strategy Group (2004) also suggested that the future of the higher education sector in Ireland will require all institutions to be flexible and adaptive to the needs of students and employers. They also recommended that third-level institutes need to be creative and innovative in their delivery methods, together with supporting high levels of participation in lifelong learning.

3.14 Blended Learning

Question 14 asked if blended learning is incorporated in the delivery of work-based learning courses. As illustrated by Figure 14, currently 248 courses do not include blended learning, this finding again emphasises the reliance on the traditional mode of course delivery.

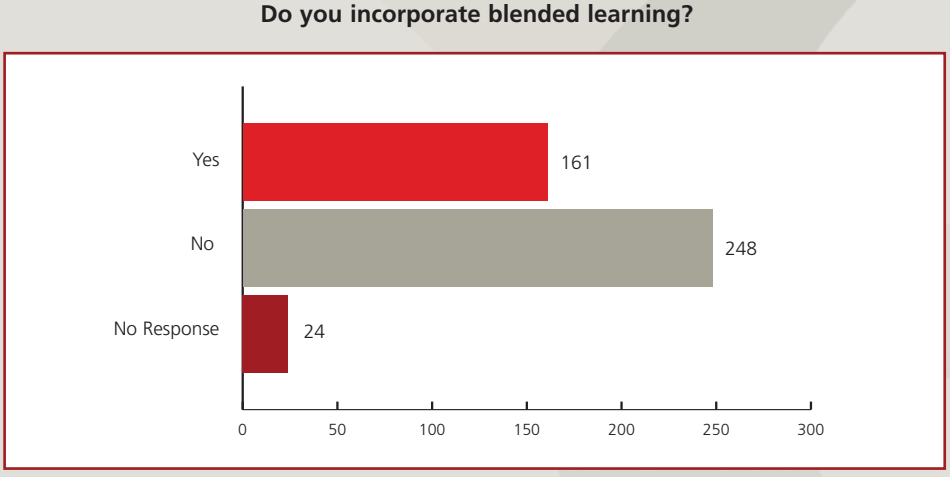


Figure 14: Use of blended learning

Blended Learning is an approach to course design that brings together the best of both online and face-to-face learning strategies. It is not intended to replace either of these two approaches, but rather to build from each to create an innovative and more effective learning experience for students. Blended learning is a combination of multiple approaches and can be accomplished by utilising both virtual and physical resources. Typically, technology-based facilities and face-to-face sessions would complement each other throughout this learning process. In the strictest sense, blended learning is when an educator combines two methods of delivery of instruction, normally combining e-learning with other educational resources. E-learning is naturally suited to distance learning and flexible learning but can also be used in conjunction with face-to-face teaching, in which case the term blended learning is commonly used. Generally, blended learning initiatives have attempted to leverage what is best done person-to-person (group presentations; debates; reflexive response/thought) in combination with what is best done online (deeper, reflective discourse; document management, and organisation). The major aims of blended learning are to:

- Use information and communication technologies to support more active approaches to student learning;
- Support learning activities that extend outside face-to-face sessions;
- Assist students in being better prepared for face-to-face sessions.

Research conducted in Britain by Sharpe *et al.,* for the Higher Education Academy (2006) emphasises the need for education institutions to take on a more flexible approach to delivery that utilises a mixed mode or blended approach to learning, integrating e-learning and distance learning alongside more conventional and formal approaches to education. The report outlines that this enables the student to have a greater say over when and where the learning takes place, and allows the learning to be built around other work and lifestyle commitments. Similarly, Clifford and Thorpe (2007) suggest that the blended approach is the key to success for workplace learning and development. They believe that mixing e-learning with tutor support and/or classroom sessions reduces the loneliness of one learner with a computer and maximises potential for practice and improves motivation. They further suggest that e-learning can contribute greatly to training and education but only as part of an overall learning strategy.

The expressed vision of the Expert Group on Future Skills Needs poses significant challenges for third-level education providers to effect a well-educated and highly skilled population in Ireland. Current education and training courses on offer and their delivery mechanisms are not sufficient to upskill 500,000 persons already in the labour force by 2020. The Expert Group suggests that innovative programmes need to be implemented to foster a culture of continuous lifelong learning. The increased use of blended learning should be one of these initiatives.

Overall, the survey results demonstrate that higher education institutions are in a transition period where they are moving to place more emphasis on work-based learning. Currently, the provision of work-based learning courses varies from institution to institution. It is clear from the results of the research carried out that third-level institutions need to adopt a more proactive approach in developing work-based learning courses and, in particular, engaging in consultation with employers and employees. There are many opportunities for third-level providers to utilise more distance-learning tools and to make the transition from an over-reliance on traditional

course delivery mechanisms which are currently in place. There is little doubt that current models of work-based learning and practices are evolving and will change considerably over the next decade. There are varied levels of emphasis and extent of provision of work-based learning courses, which in some instances are driven by the institutional mission, while in others it happens as a by-product. In tackling the work-based learning agenda, institutions have started to create an environment that enables them to respond in a timely manner to identified employer needs. Building and sustaining longer-term closer relationships between the higher education providers and employers will have to underpin any drive by higher education institutes to expand their role in supporting workforce development.

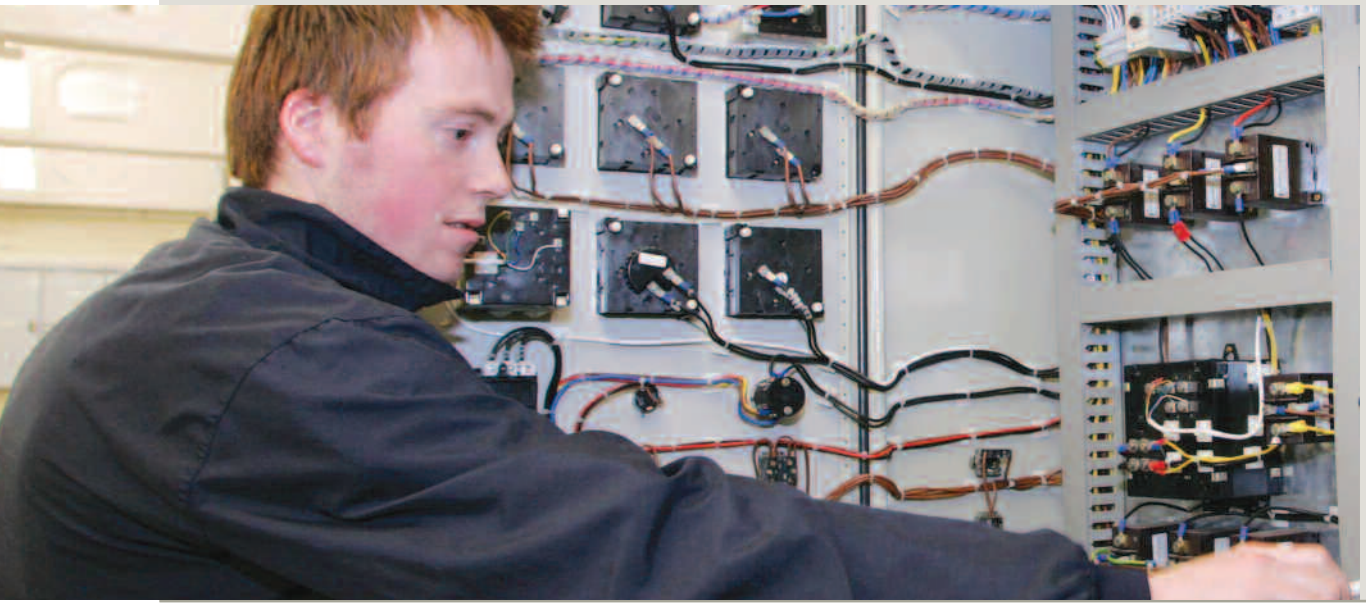
4 Individual Learning Plans

4.0 What are Individual Learning Plans?

Individual learning plans (ILPs) are a statement of the intended learning of an individual over a specified period. A learning plan relies on an assessment of learning needs, usually identified jointly by the individual and his/her manager. An individual learning plan involves establishing what a learner wishes to achieve, deciding where they want to go in the short and long term, and identifying the learning needs in terms of knowledge, skills, or competence. The process also defines the learning and development that is appropriate to meet perceived needs. Learners have different needs and these needs change over time. Their particular requirements typically do not fit into any standard pattern of courses. A learning plan, therefore, has to be created for each learner. In order to ensure that this plan can be supported and resourced, it has to be agreed on by all the parties concerned. The development of a plan goes beyond mere evidence collection, "it aspires to form an intermediary stage leading to continuous professional development and lifelong learning" (Pickles, 2000).

According to Garavan *et al.* (2003), learning and development is a lifelong process of nurturing, shaping and improving skills, knowledge and interests in enhancing effectiveness. It does not necessarily imply upward movement; instead, it is concerned with enabling the individual to improve and realise their potential. The personal development cycle is one of continuous learning, with a longer time span than a specific training need would require, and requires considerable reflection and thought. Successful planning for learning is very dependent on the individual's willingness and ability to develop.

Dearing (1997) defined an individual learning and development plan as "a structured and supported process undertaken by an individual to reflect upon their own learning, performance, and/or achievement, and to plan for their personal, educational, and career development". Key elements from this definition are:



- A structured and supported process, where an individual's needs are clearly identified and correct measures are made available for employee upskilling;
- Undertaken by an individual, so a focus on the development of the individual employee occurs;
- Reflect upon their learning and/or achievement, allowing for individual self-assessment;
- Plan for their personal, educational, and career development, which can be very beneficial for individuals to identify and plan future career progression avenues.

According to Brennan and Shah (2003), the primary objective of such a plan is to provide a means by which one can monitor, build, and reflect on their development, and enables individuals to:

- Become more effective, independent, and confident self-directed learners;
- Understand how they are learning and relate their learning to a wider context;
- Improve their general skills for study and career management;
- Articulate personal goals and evaluate progress towards their achievements;
- Encourage a positive attitude to learning throughout life.

Garavan *et al.* further suggest that the characteristics of these plans are:

- *Personal document:* The most significant feature of a personal learning and development plan is that it is personal and specific to the individual producing it, as it represents their goals and ambitions. While it is personal, it is important that management communicate that they also place value on the plan;
- *Individual-oriented:* The personal plan is a tailor-made statement. It reflects the ambitions, aspirations and learning needs of that person. The individual has full responsibility for producing the plan.
- *Individual ownership:* The personal development process is the responsibility of the individual, so each employee has ownership of the plan. If an individual has the responsibility for their own learning and development, they are more likely to learn and develop. The personal plan puts the individual learner in control.
- *Management support:* There may be a tendency for line managers to make the mistake of assuming that the introduction of personal learning plans frees them of responsibility for the training and development of staff. While the plan is the responsibility of and is owned by the individual, the manager has a key role in supporting the process. The manager should be prepared to provide guidance and assistance to help the employee achieve their learning and development goals.
- *Time for reflection:* Personal development planning demands that learners engage in self-reflection. Individuals must understand themselves before they can decide what to improve. Thus, adequate time for self-reflection is crucial to prepare a useful personal development plan.
- *Personal development planning is a continuous process:* The development process is continuous as there is always something to learn and always room for improvement.
- *Provision of learning resources:* Training and development resources relevant to the individual's learning needs should be made available. Where the organisation might not have appropriate resources to meet identified personal development needs outside resources must be availed of.
- *Balancing the past and future:* When an individual produces a personal learning and development plan, it is essential that they review past achievements as well as mistakes. Although there is a lot to be learned from the past, there must be a strong focus on the future. Learners who over-analyse the past may be expressing a reluctance to change (Garavan *et al.,* 2003: 437-8).

The existence of an up-to-date individual learning plan demonstrates a professional approach to continuing professional development. It is a mechanism by which educational needs are identified and prioritised, and commitments made to address those (Rughani *et al.,* 2003). Each plan is personal and helps to direct an individual's learning, specifically in relation to professional development.

A report by The National Committee of Inquiry into higher education in Britain introduced the concept of a 'progress file', as part of an individual development plan, to be implemented across all British higher education institutions. The term 'progress file' represents a transcript of individual learning and the opportunity for engaging in the individual development planning process. Progress files, in particular the self development planning aspect, are artefacts which articulate a particular meaning of learning (Haigh, 2008: 57). The Quality Assurance Agency (the organisation in Britain responsible for defining and making explicit standards for higher education institutions) required that undergraduate and postgraduate students have the opportunity to engage in the process of creating individual learning plans by 2006/07 (Clegg and Bufton, 2008: 1). While advocates of individual learning plans highlight their many benefits, Fry *et al.* (2002: 108) claim that the extant relevant literature is quite ambiguous: "several concepts are ill-defined, and often used with multiple meaning, are under-researched, poorly problematised, and very often dependent on context".

4.1 Individual Learning Plan Construct

An individual learning plan is not a new concept and many incarnations exist within secondary education and more recently in higher education institutions. An individual learning plan is a proxy for a number of different constructs that attempt to draw benefits from recording information, reflecting on the information recorded, and devising an action plan to enable the learner to identify current gaps in knowledge and to devise a plan of action which enables the learner to take progressive steps to upskill and close-in on gaps identified. While terms such as 'progress file' exist in Britain, the terminology used in North America presents itself differently and is articulated as 'self regulation' and 'portfolio building'. Such variety in terminology, however, embraces a similar range of actions. Some terms which are frequently used in the literature include:

1. *Transcript records,* which provide a record of assessed achievement, drawn from a Managed Information System (MIS);
2. *Personal Development Records,* denoting achievements and aspirations recorded by the learner and drawn from the private personal records the learner has developed through a Personal Development Planning (PDP) process. It may also consist of a testimonial from a person who has supported the learner's personal and educational development.
3. *A portfolio,* which is also draw from the learner's records, and presents evidence of assessed or non-assessed achievements that are identified through the learners PDP (Grant *et al.,* 2003: 3).

The personal learning and development record is, therefore, owned by the learner and arises from the individual development planning process. A learner's progress file emerges when a personal development record is combined with a formal transcript. While individual development planning promotes learner ownership, this is

a process which can be facilitated or self directed. Both approaches place responsibility on the learners to plan their learning, embark on training that acts on the plans and then generate evidence of learning.

Activities such as reflection (self-review, skills auditing, evaluation) and planning (learning goals, career planning) are central to developing a learning plan. Individual plans generate outputs or products which act as an archive of evidence of learning. A number of common activities are associated with an individual learning plan:

- Drawing up a short personal reflective statement;
- Completing a skills audit or SWOT analysis;
- Developing or setting out career goals and action plan;
- Building a curriculum vitae.

A wide range of activities has been identified as useful for supporting the individual learning and development planning process. It is important, however, not to reduce the individual plan to skills auditing and skills development. An individual learning plan is at its best when it is motivated by and tied closely to the individual's learning goals. A professional development portfolio offers individuals the opportunity to share their learning with others, thereby promoting on-going professional development.

When individual learning plans are being developed the learner should, therefore, create a portfolio which may include their personal development record as evidence made in associated with their individual development plan. Today, many companies and institutions are choosing to implement individual learning plans, or may have systems already in place to aid in professional development. The most preferred medium for implementation is through electronic means, which encourages learners to manage their development records in a structured manner, also confirming that the individual learning plans and e-portfolios are linked.

4.2 Individual Learning Planning as a Reflective Learning Process

'Reflective practice', a term used in education pedagogy, was a concept introduced by Donald Schön in 1983. It refers to a continuous process from a personal perspective, by considering critical incidents within the experiences of one's life. As defined by Schön, reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the relevant discipline. He identified a critical evaluation process whereby beginners in a particular discipline could recognise their own individual practices and those of successful practitioners. Schön believed that learners should be helped to reflect on their experiences and to learn both the process and the outcomes of that reflection. He suggests that the learner should focus on the process of building a mental map or framework within which one can locate one's learning and to which one can make explicit reference in subsequent situations. Garavan *et al.* (2003) suggest that reflection is a process of thinking through, or mulling over, a particular learning experience in order to draw out lessons that can be applied in the future. It is the basis of much managerial and professional learning. Clifford and Thorpe (2007) also believe that reflection is an essential part of the learning process and that reflective practice is the method by which reflection is made a deliberate and structured activity.

While the idea of reflection is at the core of individual learning plans, neither defining nor carrying out the process of reflection is easy. Reflection demands a rigorous level of mental effort and critical self-analysis that many are unwillingly to engage in. Sometimes resistance arises simply because the learner recognises that the reflection will lead to uncomfortable conclusions, such as a need to change practices or to work harder. It is simply easier to deny the need to reflect in the first place. Even if learners are willing to change habits, they will not necessarily continue to engage in reflecting unless they can see a rapid benefit from their efforts, but any such speedy reward would typically be elusive. Initially, learners who are asked to engage in reflection tend not to go beyond simply recording recent events, outcomes, etc., sometimes in a very superficial way. Learners may simply not have the ability to go beyond superficial descriptions, either simply through lack of practice or because they just do not have the mental tools to analyse. It is not until deeper analysis leads to plans to modify behaviour and until that modified behaviour is seen to produce an increase in desired outcomes that the process will be perceived as worthwhile. Learners can start reflecting only when they are given:

- Clear guidance, in terms they can understand, on what they should be achieving. This includes explicit intended learning outcomes, assessment criteria, and detailed guidance for the process;
- Detailed feedback on their work, in terms that they can understand, that sets out the differences between what they have done and what they should have done.
- Guidance on how they might repeat the learning activities more successfully. They might know that what they have done is not satisfactory, but might be unclear of ways in which they should do things differently;
- The opportunity to repeat activities so they can see the effects of trying new approaches.

According to Raelin (2008), two valuable tools for reflective learning practice are journals and portfolios. The journal helps participants to distil lessons from everyday experience in order to help them track their learning. The journal is viewed most often as a powerful technique to enhance self-reflection. It is often used as an introspective tool for personal growth, but, it can also serve as an aid to bring together the inner and outer part of a person's life. It offers a lens to view experience – before, during, or after the event under scrutiny – and it even allows further reflection on the journal entries themselves. The journal also helps learners more deeply to understand their current reasoning and associated behaviour, or it can spur their consideration of new methods or skills introduced through the course.

Cunliffe (2004) suggests that many academic courses use the journaling process as a strategy to spur metacognitive thinking from a reflective learning perspective. Metacognitive thinking constitutes a thinking about self, others, context, and even about one's own thinking in action. It asks learners to be more self-conscious about their assumptions and their ways of being, acting, and relating. Hogan (1995) believes that, within the academic setting, journaling can enhance learning in a number of ways:

- It can promote learner autonomy to work on areas of personal and professional interest;
- It can enhance associated experiential learning activities;
- It can encourage critical reflection in order to challenge personal and organisational practices;
- It can enable holistic learning involving all the senses;
- It can promote self-development and self-understanding through real-world experience.

While journals allow for focus on the self, the primary aim is, however, to learn more about oneself and one's reasoning about phenomena rather than to merely describe what one does. Students, therefore, should be encouraged to critically question their past actions and future possibilities as a way to become reflective about their being in the world. Clifford and Thorpe (2007) also recommend the use of reflective journals because:

- True learning cannot take place without reflection;
- Reflection and review of situations and experiences help the learner and the organisation to make sense of situations, to view them from different perspectives, and, in some cases, to reframe them, i.e. to put them into a different, usually more positive, context;
- Reflection gives learners the chance to 'hold up a mirror' to their experiences and to potentially see themselves as others see them;
- Reflection has benefits for all levels of an organisation;
- Reflection provides the opportunity to consider not just the 'how' but 'why' things are done.

In summary, according to Clifford and Thorpe (2007), many professions now encourage the use of reflective journals as part of the continuing development process; others – such as practitioners in teaching, health, and social care – regard it as essential to everyday work.

Although similar to the journal, the *portfolio* tends to be more inclusive and is often more a public document. Richardson and Ward (2005) suggest that the term portfolio generally describes a collection (or archive) or reflective writing and associated evidence, which documents learning and which a learner may draw upon to present her/his learning and achievements. Similarly, Larkin *et al.* (2002) defined a portfolio as a collection of documents and other evidence illustrating progress towards a goal. The portfolio, now increasingly produced in electronic format, can include the journal. Heath (2004) noted that portfolios tend to contain collections of self-generated artefacts and reflections that demonstrate the author's knowledge, skills, dispositions, and growth over time. A portfolio allows learners to illustrate their work in a self-directed and comprehensive fashion, well beyond the presentation of a curriculum vitae. Within the realm of work-based learning, portfolios are inherently developmental, helping the learner to focus not only on current accomplishments but also on future needs. When using portfolios, learners become engaged as they record, interpret, and evaluate their own learning. When reviewing one's portfolio with workplace supervisors and academics, one can extract the skills already possessed and those in need of development. In addition, the comprehensive account in a portfolio can

provide the workplace supervisor and academic with a basis for providing useful feedback to the learner. Portfolios also have a number of purposes beyond their use as a reflective tool in work-based learning. They are often employed to showcase the knowledge and skills of the writer for job-seeking or promotion purposes. They are also designed to meet the needs of courses to satisfy institutional standards (Heath, 2004).

4.3 E-Portfolios

As information and communications systems become more sophisticated, the emergence of the e-portfolio (or digital portfolio) is becoming more prevalent than materials-based portfolios, giving rise to a technology dedicated to valuing and celebrating achievements of the individual. The growth of e-portfolios is fuelled by three broad factors: the dynamics of functioning in a knowledge economy, the changing nature of learning, and the changing needs of the learner. In a knowledge economy, the most valuable resource is, axiomatically, knowledge. A person's ability to express his/her knowledge effectively (through artefacts, examples of work, progression of growth, and instructor comments) improves their opportunities for employment and access to education. More effectively than a static transcript, a portfolio permits the learner to display competence. The richness of an individual's learning can be portrayed through multiple media. Using a particular website, for example, to communicate web development skills is far more effective than simply presenting a certificate on a CV. Learning is also changing. The traditional classroom model is being replaced with alternative approaches like problem-based learning, competency-based learning, and work-based learning. Learning is now arguably a process of living, which means that learning continues in virtually all aspects of life. The ability to include these experiences is an important motivation for e-portfolio development. The needs of learners are also being recognised, especially in light of the social impact of technology. The majority of learners entering higher education are now technically proficient. They are familiar with the online domain. Seely-Brown (2002) describes these learners as multi-processors who think in hyperlinked fashion (not linear), and are comfortable with a range of media. He suggests that e-portfolios may be as familiar to many of today's learners as writing pads were to previous generations.

One of the key motives behind the growth and development of the e-portfolio, therefore, has arisen from a desire to have learners take responsibility for planning, documenting, assessing, and reflecting on their own learning (Cambridge, 2001). The e-portfolio is a dynamic online personal resource which allows learners to build, manipulate, and present portfolios to different audiences. An e-portfolio is a digitised collection of artefacts including demonstrations, resources, and accomplishments that represent an individual, a group, or an institution. This collection can include text, graphics, or multimedia elements archived on a website or on other electronic media such as a CD-ROM or DVD. An e-portfolio is more than a simple collection: it can also serve as an administrative tool to manage and organise work created with different applications and to control who can see the work. The learner is in control and is solely responsible for his/her portfolio. E-portfolios can enable individuals to learn from one another by sharing ideas and opinions about their work, and they provide individuals with an opportunity to talk about factors that have a positive impact on their professional development. An e-portfolio is a reflective tool that demonstrates growth over time. Learners create 'presentational' e-portfolios through the use of e-portfolio tools or systems, and in the process (depending on

the tools or systems used) can be helped to develop one or more key skills, such as collecting, selecting, reflecting, sharing, collaborating, annotating and presenting (all of which are suitably e-portfolio related processes). Descriptions of the use of e-portfolios tend to include the concepts of learners drawing from both informal and formal learning activities to create their e-portfolios, which are personally managed and owned by the learner, and where items can be selectively shared with other parties such as peers, academic assessors, or employers.

E-portfolios are defined in different ways by different people (e.g. Truer and Jenson, 2003), as the term is not fixed and, thus, confusion can arise from different or ambiguous definitions. E-portfolios have been referred to as knowledge builders and vehicles of radical change. Nevertheless, some common features of the e-portfolio include:

- A digital archive, which enables the learner to keep a record, and to maintain and organise materials or outputs from their learning;
- A learning environment, which allows for a range of activities such as preparing a learning plan, or building a CV;
- Information exchange, which is important when developing an individual development plan as one can share/exchange information with employers, mentors, tutors or peers and obtain feedback electronically.
- The provision of an authentic record, related to an individual's status, particularly associated with learning.

E-portfolios provide many benefits, they can be used for many purposes, and they provide a structured and organised format for presenting personal and professional evidence of achievements. The practice of e-portfolio usage aims to foster the skills of independent learning, reflection, and the individual planning process that supports lifelong learning by drawing on personal and academic information. Roberts *et al.* (2005) suggest that the e-portfolio reduces contact time, stimulates reflection, contributes to lifelong learning, and facilitates progression of learners within and between institutions. A recent study by Meyer and Latham (2008) reports that e-portfolios are being increasingly adopted as they are more manageable than paper copies, display appropriate evidence, and demonstrate a learner's performance and mastery. Heath (2005) summarises the advantages of e-portfolios as:

- Many artefacts – reports, presentations, websites – are already in electronic format, so it is much easier and less cumbersome to report them digitally;
- Since they are portable, e-portfolios can be easily reproduced and distributed;
- They capture the dynamics of knowledge work by employing and combining a variety of media, such as text, graphics, audio, and video;
- The structure of e-portfolios can be hierarchical rather than linear by showing the relationships among major headings, thereby reflecting the complex interactions that exist in most professional practices.

While many benefits accrue to e-portfolios, there are also some potential weaknesses: Like any computer-based tool, one can avail of an e-portfolio only if one is computer proficient and not technophobic. Additionally, as learners control the portfolios they have complete control over what parts of their portfolio can be viewed and by whom. McMullan (2006) cautioned that while e-portfolios can be very effective as assessment and learning tools both students and mentors need to receive clear guidelines and support on how to use them.

Standardisation of e-portfolios is also a potential challenge. Heavily regulated efforts may stifle creativity and innovation. Ultimately, in order for a tool of technology to succeed, it must be adopted at the end user level.

In many work-based learning contexts, learners construct their individual development plan within an e-portfolio system. This system supports the creation of a CV and the uploading of multimedia files – comprising assignments, presentations and resources – in addition to a reflective journal. An individual development plan allows an individual to set their own personal targets and find the best way to achieve them through constructive self reflection and through mapping out a progression path. This allows for the improvement of individuals in understanding what and how they are learning, and to review, plan, and take responsibility for their own learning. Cambridge (2008) observed that various types of e-portfolios exist. These include:

- Student e-portfolios, which support student advisement, career preparation, and credential documentation;
- Teaching e-portfolios, which allow for the sharing of teaching philosophies and practices;
- Institutional e-portfolios, which give rise to institutional and programme accreditation processes;
- Professional e-portfolios, which are responsible for producing and maintaining records for individuals in the workforce, and support continuing professional development and re-certification.

E-portfolio implementations can best be viewed as a continuum. E-portfolios are driven by the intended task: assessment, professional/personal development, learning portfolio, or group portfolio. The expressions of learning in an e-portfolio can range from simple blogs to enterprise-level implementations. The intended task of the portfolio is the ultimate determinant of value. For certain courses, a blog may be all that is required. Regardless of the format selected, each e-portfolio effort should encourage learners to develop skills to continue building their own personal portfolio as a lifelong learning tool. Implementing an institutional approach for e-portfolios can be a difficult task. To be effective, the concept needs to be embedded in the process of instruction and assessment. Siemens (2004) suggests that for an education institution to implement a learner's e-portfolio system it should possess the following characteristics:

- The e-portfolio should be viewed as a personal learner-in-control tool, and treated as central to the learning and assessment process;
- Learners should be introduced to the concept, and instructed on how to use the system (both from a technical perspective and from a perspective clarifying its personal benefits);
- The curriculum should be designed to require learners to use the e-portfolio in completing their course work and assignments;
- The e-portfolio should be used for assessment of learning objectives. Instructor feedback can be integrated to the portfolio and treated as an artefact;
- Learners should be provided with staged advisory sessions evaluating their effective use of e-portfolios (i.e., metacognitive evaluation of portfolio use);
- An e-portfolio culture should prevail, encouraging learners to include personal life experiences, awards, non-academic activities, and other character/learning-revealing artefacts in their portfolio;
- Dialogue, debate, discussion, and examples of e-portfolio use should be commonplace;
- Time should be allotted for e-portfolio development;
- Academic staff should understand and promote the value of e-portfolios;
- Technical details should be well managed, resulting in straightforward, positive end-user experiences.

McAlpine (2005) believes that e-portfolios have the capability of changing learning and assessment paradigms currently in place. The manner in which change occurs will be an important factor to the future success and benefits to learners, educational establishments, and awarding bodies. A key consideration for the development of an e-portfolio strategy should be the responsibility that the awarding bodies have, and a distinction needs to be made to highlight whether the e-portfolio is owned by the awarding body or the candidate. McAlpine further believes that e-portfolios present immense potential in terms of enhancing the validity and authenticity of candidate assessment, as well as assessing learning processes.

4.4 Learning Contracts/Agreements

In traditional education the learning activity is structured by the academic instructor and the institution. The learner is told what objective to work toward, what resources are to be used and how (and when) to use them, and how any accomplishment of the objectives will be evaluated. This imposed structure conflicts with the adult's deep psychological need to be self-directing and often induces resistance, apathy, or withdrawal. Learning contracts, instead, provide a vehicle for making the planning of learning experiences a mutual undertaking between a learner and any helper, mentor, or teacher. By participating in the process of diagnosing personal needs, deriving objectives, identifying resources, choosing strategies, and evaluating accomplishments, the learner usually develops a sense of ownership of (and commitment to) the plan. Learning contracts are a means for making the learning objectives of any field or practical experience clear and explicit for both learners and facilitators.

Learning contracts also allow for shared responsibility of the planning and learning experiences. This allows for the learner to actively participate in the learning process from start to finish. Students begin to feel the need to learn because the learning objectives become their own personal goals. In turn, students begin to take responsibility and control over their own learning. In this way they are an effective teaching strategy in helping students to become intrinsically motivated and responsible for their own learning. There is more, however, to the principle of the learning contract than a convenient administrative device. It is based on the principle of the learners being active partners in the teaching-learning system, rather than passive recipients of whatever it is that the academic thinks is good for them. It is about their ownership of the process.

According to Boud (2003), negotiated learning has become accepted in most higher education institutions, even if it is far from pervasive. Negotiated learning commonly uses the form of a learning plan, often called a learning contract or learning agreement. A learning contract is a written agreement between a learner and others which sets out a range of activities that will need to be undertaken if certain learning outcomes are to be achieved. The typical components of a learning contract are statements about the learning goals to be pursued, the strategies and resources involved, what is to be assessed, and the criteria for assessment. These are normally summarised in a short document and signed by the student, an academic adviser, and a workplace supervisor. Learning contracts have contributed to the array of individual development planning templates which exist today. To ensure that an individual learning plan can be supported, and resources to pursue it made available, the plan has to be agreed between the learner, the education institute, and the employing organisation. The negotiation of the learning plan provides an opportunity for the learner, the educationalist, and the employer to communicate their respective needs clearly to each other and to illustrate their respective commitments to the plan.

Brown and Knight (1994) specify four stages in learning contract development:

- The skills, knowledge and understanding profile which can be constructed using specifically designed proformas;
- The needs analysis, specifying the learning outcomes learners need to achieve;
- Action planning either individually, in small groups, or with a tutor, to identify what learners are going to do, and the timescales and resources (particularly tutor and peer support) required;
- Evaluation of how successfully, or otherwise, learning outcomes have been achieved.

Bement (1993) proposes that, during the development and subsequent delivery of these contracts, students are faced with a number of real quality management tasks, for example:

- The work planned forms a unified and achievable package;
- Work-based learning and the third-level course are complementary;
- The course provides sufficient opportunities for the assessment of progress and achievement;
- The time within which the course is to be completed is defined;
- The resources necessary to achieve success are made available;
- The volume and level of the credit that the work-based learning is worth is made clear;
- The criteria by which the work-based learning outcomes will be graded.

The contract must justify the total study programme, the relationship between the parts, and the connection to the recognition of prior learning. For the education institute, the only limitation is that the contract should cover only areas of learning in which the third-level institute has the expertise that would enable it to contribute meaningfully to its assessment. Contracts are only accepted when all three parties have reviewed and accepted the proposed programme and signed up to the contract.

4.5 The Use of Individual Learning Plans in Organisations

The individual development cycle is one of continuous learning, with a longer time horizon than a specific training need and requires considerable reflection and thought. Successful planning for development is very dependent on the individual's willingness to develop, as well as having the ability to develop. As Kneale (2007) observed, the individual planning process is not a 'one-size fits all' concept, as what is effective for one person might not work for the next person. Individual learning plans, however, have a significant contribution to make to training and development in organisations. Like any strategy for growth, individual learning plans must be managed and monitored effectively to yield results. They provide a structure, facilitate motivation, and offer a useful framework for monitoring and evaluating achievements. An effective plan can lay the basis for continuous learning processes in organisations, ensuring that employability issues are addressed and that a learning culture within the organisation is established. Individual learning plans are a statement of the intended development of an individual over a specified period. Individual learning plans, therefore, provide a powerful yet flexible way to link employees' professional and personal development with the development of the business. While individual learning plans in industry do not always need to be directly related to specific work tasks, the overall benefit to the company, for supporting the particular personal aspiration of the employee, usually accrues from developing a more accomplished employee, whose motivation and self-esteem grow through achieving an objective identified in the individual learning plan.

A key question a manger/supervisor asks when devising the training and development schedule might be, "Is my reportee currently capable of achieving his/her annual objective?" If not, then a learning gap exists. In order to bridge the gap one must first identify what exactly an employee needs to learn or change in order to achieve his/her objectives. Newby (2003) suggest that the 'SMART' acronym which sets out the key elements of the learning objectives should ensure that the individual development plan is successful. This means that an employee needs to:

- Be **S**pecific about the change one requires;
- Have **M**easurable actions to assess if the activity worked;
- Make the learning **A**chievable; development actions should be limited to approximately three per person;
- Ensure that all learning activities should be **R**elevant to the annual objectives or the person's development;
- **T**ime the activity appropriately to fit in with the work schedule.

Garavan et al. (2003: 441) suggest that development plans provide benefits both for organisations and individual learners in organisations. Organisational benefits include:

- *Reputation of organisation:* Organisations that adopt individual learning plans to support the continuous development of employees will gain a reputation as leading edge employers;
- *Increased productivity:* An increased concern for an employee's development is likely to lead to better performance;
- *Shifting responsibility to employees:* The introduction of individual learning plans is a strategy to shift responsibility for career management to the employee. It encourages individuals to be independent and proactive;

- *Retention:* Organisations that place a greater value on employees and demonstrate interest in individual development are more likely to retain high performing employees;
- *Flexibility:* Individual learning plans are an effective mechanism in producing a more flexible workforce in the organisation;
- *Developing Competence:* Employers are increasingly seeking individuals who will work hard but also be innovative. Individual development can contribute to producing employees that have initiative, and are proactive and innovative;
- *Pool of Talent:* Some employers use individual learning plans to scout for talent and in assessing employee progress and suitability for senior positions. This represents a continuous use of the individual development planning process;
- *Enhanced Communication:* The individual development planning process is a useful mechanism to enhance communication between a manager and a subordinate.

Learner benefits include:

- *Job Satisfaction:* Individuals who engage in personal development are more likely to experience satisfaction with work. The perception of support and encouragement from management also enhances job satisfaction;
- I*dentifying Learning Needs:* The individual development plan process enables the learner to focus on learning needs and to influence and shape the priority of these needs;
- *Employability:* Producing an individual development plan enables the learner to acquire knowledge and skill that will make him/her more employable in the event of job loss. Learners may have less fear of losing a job because of the potential job opportunities arising from this employability;
- *Investment in Training:* Individual learning plans are more likely to stimulate investment in training. The learner and/or the organisation may resource this;
- *Self-Awareness:* The individual development plan allows the learner to identify strengths and weaknesses and to develop self-awareness – a necessary precondition for personal change;
- *Enhanced Self-Efficacy:* Learners who participate in self-development are likely to gain increased self-confidence. This self-confidence relates to the learner's belief in his/her ability to perform to a high standard;
- *Net Worth:* Individual learning plans provide evidence of a learner's skills and knowledge and signal important and positive messages to the employer.

In summary, having an up-to-date personal learning plan demonstrates a professional approach to continuing professional development. According to Rughani *et al.* (2003), a personal learning plan is a mechanism by which educational needs are identified, prioritised, and commitments made to address them. Each plan is personal and helps to direct an individual's learning, specifically in relation to professional development. Knowledge gained through an undergraduate qualification has an average life of four years before it requires updating. Many professionals are, therefore, engaging with continuous professional and individual development as a commitment to lifelong learning.

4.6 Designing Individual Learning Plan Forms for the Current Project

One of the outcomes to be achieved from the current project is the design and implementation of one thousand individual learning plan forms. An outcome for the first year of the project specifies that individual learning plans should be designed and piloted on a sample population of work-based learners. The primary focus of these plans is on *learning* and development, rather than performance review and reward. One of the main purposes for developing these plans is to enable the learner to be proactive about their learning and to identify their learning needs. Additionally, the development of the plans should help the learner in a structured and supportive process to reflect upon their own learning, performance, and achievement and to plan their personal, educational, and career development. This section details the steps taken in the design and piloting of the individual learning plan forms during the first year of the project.

Step 1

Research Conducted on Existing Individual Learning Plans

Lengthy discussions took place regarding the terminology to be used in relation to the design of such plans, in particular, the use of *personal development* plans versus *individual learning* plans. This dilemma was resolved after a discussion with a training manager from one of the industry partners who suggested that he would have difficulties approaching his staff using the word *personal*. It was, therefore, agreed that the group would adhere to designing a form for individual learning plans. It also became clear from the research conducted that these terms are used interchangeably and there is no one definition of either a personal development plan or an individual learning plan. For the purpose of this project, however, it is important to restate that the emphasis is on learning and on the planning of individual learning, and the completed plans will be used in third-level institutes by staff dealing with career guidance and by staff dealing with the recognition of prior learning.

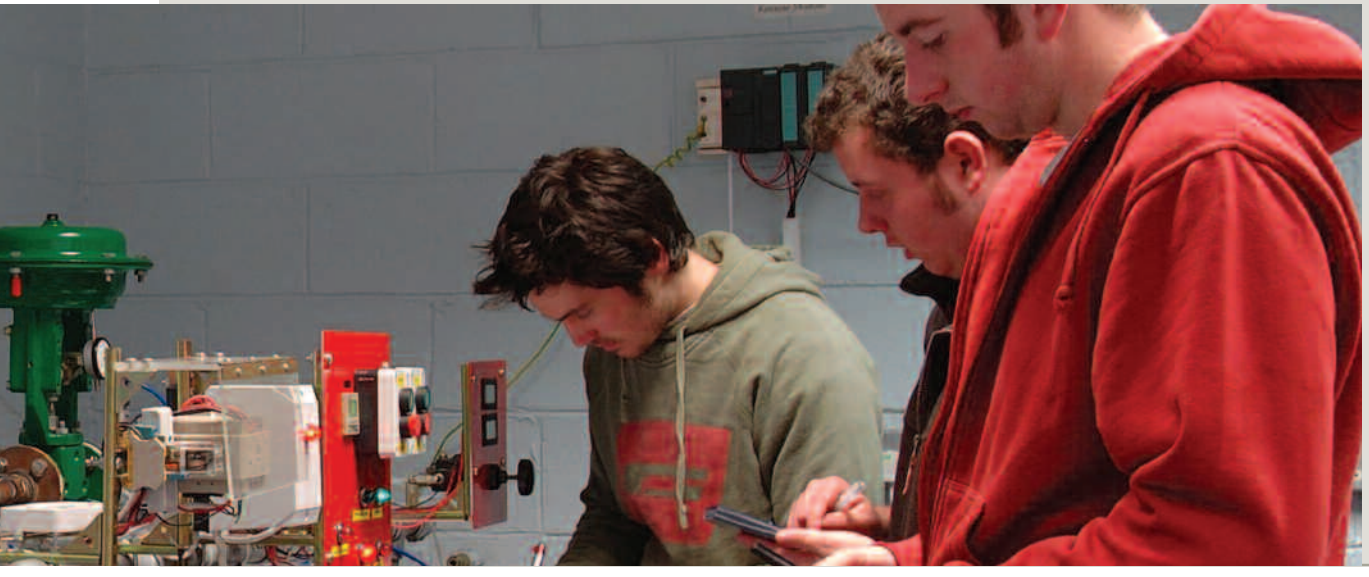
In assessing the existing plans the model deemed to most closely meet the needs of the group was the plan used by the University of Ulster (www.ulster.ac.uk). This model was considered attractive as it includes both a reflective process and an exercise on self-assessment of skills. A further advantage of this plan is that it can be completed online. It was agreed that a paper-based model of an individual learning plan form would be developed initially and at a later stage an online version would be used.

From the literature reviewed and the Internet searches conducted it was clear that many of the existing plans were developed for full-time third-level students. It was, therefore, decided that new empirical research needed to be conducted to develop a template suitable for work-based learners. This research concentrated on two main areas: research with training managers in various industries, and research with career guidance/advisory professionals in some of the third-level institutes partaking in the project. First, the research conducted with the training managers attempted to ascertain the tools they currently use to determine the upskilling needs of employees as part of their career progression, broadly in support of company objectives. Second, the objective of the research conducted with the career advisors was to review the tools they use when working with adult learners and with third-level learners who wish to progress or to change their careers.

The results of the research conducted with the training managers illustrated that, in general, they assess the training needs of employees as part of the organisation's overall objectives. The research also illustrated that the organisations were primarily focused on training rather than learning. From the research conducted with the training managers it was evident that some organisations operated a casual approach to assessing training needs, for example, conducting only one face-to-face meeting on an annual basis. Other organisations operated a more structured approach using variations of a performance management development system (PMDS), the results of which were used to determine the training plan for the entire organisation. This was often supplemented by employees doing online skills assessments and career planning exercises and, in some industries, this was linked with continuous professional development. The research revealed that individual learning plans were not used in any of these organisations. The training managers, however, willingly and enthusiastically agreed to pilot the plans in their respective organisations with the intention of using such plans over the duration of the project.

The research conducted with career advisors showed that they frequently direct learners to websites such as www.windmillsonline.co.uk and www.prospects.ac.uk. Both of these websites involve a reflective process on values, interests, motivations and skills emphasising self-assessment and reflection in a holistic context. Both of these website tools include skill definition and rating descriptors for learners to rate themselves, usually on a scale of 1-5. The career advisers emphasised the role of reflection in developing self-awareness as a first step in the career planning process. The career advisers also believed that it is often necessary to meet with individuals to discuss the learning from the self-assessment exercises and to give guidance on the possible career options arising from the exercises completed.

The outcomes of the primary research, together with the secondary desk-research, allowed for the creation of a new paper-based template focusing solely on learners in the workplace rather than on full-time third-level students. The next step summarises the issues considered in the development of the template.



Step 2

Designing an Individual Learning Plan Form

Designing a generic learning plan form for learners across a broad spectrum of industries was a difficult task. Consideration had to be given to the myriad of industries involved and the very broad range of educational qualifications. The instrument would need to capture as much information as possible regarding long-term and short-term goals and objectives, and also need to focus on individual development. Throughout the design stage it was important to bear in mind the realistic outcomes which were to be achieved on the completion of the template, and not give false expectations to the learner. If a learner, for example, identified that he or she would benefit from completing a course which is not yet in existence, it would be necessary to point out that this was outside the scope of this exercise.

It was agreed that individual learning plan forms would include sections which were relevant to all learners, for example, transferable skills and career progression planning. It was also decided that a number of discipline-specific skills would be included with a rating of 1-5 (description of ratings provided) to gain a more comprehensive viewpoint of individual learners. Additionally, the need for confidentiality and data protection needed to be observed. To protect the anonymity of the learner, it was agreed that each plan would be given a unique number and, when completed, the first page of the plan would be removed and stored in a locked cabinet.

Step 3

Pre-pilot survey of Individual Learning Plan Forms

Ten individual learning plan forms were distributed to each of the third-level institutes participating in the project. It was decided that these forms would be pre-piloted with learners in each of the industrial partners. In order to reach work-based learners from a wider variety of backgrounds (rather than receiving ten from the same organisation) it was also agreed that a pre-pilot survey would be conducted with a class of evening students in one of the institutes. The students chosen were studying for a Higher Certificate in Business Studies.

The pre-pilot study was a beneficial process in identifying areas within the template which need to be improved. All respondents were asked to critically evaluate the form and were advised that all comments, both positive and negative, regarding the structure and content would be welcome. On average, the learning plan took between twenty and thirty minutes to complete. The following observations represent the general feedback from the pre-pilot study:

- Respondents who partook in the pre-pilot survey as part of their evening class were briefed by a member of the work-based learning working group in relation to completing the instrument and specifying the main aims and objectives of individual learning plans. The working group member was also present to provide assistance (if required) while learners completed the form and in turn to gather feedback. These completed learning plans offered more insights and details of the learners than those which were completed by the industry sample. A number of sections were not completed (they remained blank) where respondents were not briefed.

- No difficulties were reported by respondents in relation to completing the employment history and current employment section of the plan. Respondents, however, noted that completing the first three sections of the template were the most time consuming, but agreed that these details are necessary for formulating learning plans.
- In relation to the section dealing with completed education and training courses, many respondents did not know what 'NFQ level' meant and as a result this section remained blank. From this feedback, the next version of the learning plan will explain academic terms such as 'NFQ level' and 'awarding body'.
- The feedback in relation to the section of the plan which dealt with career and learning progression goals suggested that the amount of space allocated to this particular area was insufficient.
- Positive feedback was received from the majority of respondents in relation to the section which dealt with transferable skills and competencies. Respondents suggested that this was a useful exercise as it stimulated reflection on skills that need to be improved. A further analysis of this section highlighted that, as no descriptor of skills or benchmarking rating was provided, the transferable skills and ratings provided by respondents are open to interpretation and are deemed less objective.
- The discipline-specific skills section does not represent an exhaustive list and many respondents believed that their particular discipline was not portrayed effectively. Respondents, however, selected a discipline from the list which they believed was most suited to them. This difficulty will be overcome when the template is converted to a Web-based version, as there will be much more scope for inclusion of different sectors, as this would have been too cumbersome for a paper-based version. As with the transferable skills section, no descriptor of discipline-specific skills or benchmarking rating was provided, thereby, allowing for subjectivity. The majority of respondents rated 5 for their desired proficiency level of their discipline-specific skills. One possible interpretation for this rating is that most people like to portray themselves positively in questionnaires as they perceive that they are being evaluated in some way.
- The final part of the template dealt with future directions, and responses to this section were simply 'yes' or 'no', or were left blank. A possible reason for the blanks could be because the format of the questions were of a closed nature, and it might have appeared that only a 'yes' or 'no' response was required. These questions also came at the end of a learning plan which required a large deal of self-examination in relation to one's career (not an easy process for many people), and respondents may have just wanted to complete the exercise quickly.

Step 4

Evaluation and Recommendations for Future Improvements

Having received the completed pre-pilot individual learning plans, an evaluation process took place. Overall, respondents suggested that the terminology used was clear and unambiguous. Respondents welcomed the concept of individual learning plans and believed that it was a very useful tool in assessing their current proficiency levels and desired proficiency levels. They further suggested that individual learning plans are also helpful for identifying gaps in their education and training. Building on the feedback, a number of recommendations for future improvements will be adopted. These include:

- A short introduction to individual learning plans will be included to clarify the purpose of the exercise. It is considered important to highlight that the plan is a development tool used to promote individual career and professional development and is not linked to performance appraisal or any form of assessment.
- When rating skills and competencies, a rating scale of 1-5 will be included, with a brief explanation of what is meant by each rating. Terms such as 'limited' or 'advanced' could also be explained to allow respondents to rate themselves more accurately.
- Questions relating to career goals and learning goals will be rephrased from a closed line of questioning and will include more open questions. Replies to open questions should ideally produce more qualitative responses rather than simply 'yes' or 'no answers.
- A representative from each of the higher education institutes will visit the partner organisation to meet employees before they complete the learning plans. A brief introduction to the learning plans will be given, together with an explanation of the purpose of the process. The higher education representative will be available to answer any questions while employees are completing the plans. The confidentiality of the responses will be emphasised, the value of their cooperation in the research exercise will be acknowledged, and all feedback will be encouraged.

Step 5

Design of New Improved Paper-based Version of Individual Learning Plan Forms

Following the pre-pilot survey and having incorporated the feedback received, a revised paper-based form will be piloted with a sample of employees in all industrial partner organisations during the academic year 2008/09. An evaluation of the replies will subsequently be carried out before introducing the final paper-based version of the learning plans.

Step 6

Convert from Paper-based ILP Form to Web-based ILP Form

As noted earlier, the potential of a Web-based individual learning plan form has far greater capacity to record information and to reach a much wider target audience. Members of the Education in Employment working group have met with colleagues from the University of Limerick led SIF funded Individualised Digitised Educational Advisory System (IDEAS) project, and have arranged to cooperate in developments in this area.

In summary, it is envisaged that individual learning plans will enable learners to understand and reflect on their achievements and will facilitate them in identifying gaps in their skills, training, and learning. The completed ILP forms will be treated in the strictest confidence in each academic institution and will be analysed by a career advisor and by a recognition of prior learning expert.

5 Work-Based Learning Partnerships

5.0 An Overview of Higher Education and Industry Partnerships

Alliances between higher education institutes and business organisations have existed for decades, mostly in research and development. The types of partnerships established between industry and higher education institutions 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 industry and a third-level education institute often starts with some kind of solicitation from each part. The basic collaboration process between academia and industry usually begins with each party identifying what can possibly be acquired from the partnership and the potential needs of the other party. The goal of partnerships between a higher education institute and a business should not be a merging of mission, culture, and philosophy; rather it should be to establish an effective working relationship that benefits both parties. Partnerships are required to established infrastructures to enable and support learning. If learning is to occur in the workplace, then it is necessary to ensure that the conditions which prevail are suitable and that learning projects are undertaken in cooperation with the given needs of a workplace. Work-based learning requires formal arrangements, which are overseen by the establishment of partnerships. These partnerships are of benefit to both parties. For the employer, partnerships support the needs of the organisation while providing a flexible approach to the learning needs of employees and the organisation itself. For the education institution, partnerships create links with new areas of educational need and diversify the institution's sources of income (Boud *et al.,* 2003).

Lloyd (2008: 56) suggests that outside providers – whether in the private, public or voluntary sector – have historically been too timid to approach or engage with a third-level institution because of an 'untouchable' or 'ivory towers' perception that such institutions are purely academic centres of learning. Lloyd argues that third-level education institutes need to proactively open up new dialogues with outside providers and must break down any traditional perceived barriers of not being receptive to being approached or of not wanting to engage with outside partners.

Partnership is an important underlying concept for the development and provision of work-based learning courses at all levels. 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 and the workplace has to underpin development in this arena. The partnerships, therefore, 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. This approach challenges the position of the third-level education provider as sole validator and evaluator of high-level knowledge (Garnett *et al.* 2003). A work-based learning course not only has to satisfy academic scrutiny by the third-level institute but it must also embrace fully the complexity of the specific context. The work-based learning course has to demonstrate 'fitness for purpose' at the level of the individual, the immediate community of practice, and in some instances the wider professional community. 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.

Stoney (2002: 58) asserts that "partnership 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 within the modern economy. Work-based learning is a central element of the partnership approach. It is argued to be a particularly powerful means of developing employees. What is actually experienced at the workplace is seen to have a much greater impact and relevance. Learning is drawn out of experience rather than bolted on as an added extra (Keithley and Redman, 1997). Partnerships can take a number of forms and vary in intensity of collaboration and scale of intervention. They range, for example, from the provision of a short course to a consortium of courses to sponsoring and facilitating applied research to more ad hoc relationships involving secondments. Boot and Evans (1990) conceptualise this diverse array of co-operative relationships along a "collaborative continuum". At one pole, an organisation simply purchases a product, such as an MBA from the third-level provider. At the other pole, Boot and Evans locate such ventures as the validation and accreditation of the organisation's own management programme(s). This latter form of partnership is one that is predicted to grow considerably as general 'open' management development programmes fall into decline due to organisations demanding the customising of programmes to meet their specific needs (Keithley and Redman, 1997). Similarly, Patel (1996) believes that the traditional customer–supplier model in management development is being replaced by a 'learning partnership' involving a mixture of learning, consultancy, and research.

Researchers have highlighted many characteristics necessary for successful partnerships. Mohr and Spekman (1994) believe these characteristics include commitment, coordination, interdependence, and trust. Communication behaviour is another factor identified by Mohr and Spekman which contributes to the success of a partnership. Communication behaviour includes the quality of communication, information sharing, and participation. Communication quality includes the accuracy, timeliness, and credibility of the information shared, while information sharing refers to the extent to which critical information is exchanged. Participation has been described as the degree to which the partners jointly plan and set goals. Without effective communication, partnerships fail, as a result of doubt and mistrust which inevitably result in the absence of adequate communication. The final factor described by Mohr and Spekman is the type of conflict resolution technique used by the partners. They identify joint problem solving, persuasion, smoothing, domination, harsh words, and arbitration as possible techniques, but note that the most successful partnerships will rely primarily on constructive resolution techniques such as joint persuasion and problem solving.

Research by Boud and Solomon (2001) focuses more specifically on highlighting the education–industry link and they suggest six key characteristics for successful partnerships:

- The partnership between the organisation and the third-level institute must foster learning;
- Learners are employed or in a contractual relationship with the external organisation;
- The programme followed derives from the needs of the workplace and the learner: work is the curriculum (i.e. the vehicle through which the curriculum is critically explored);
- Learners engage in a process of recognition of current competencies prior to negotiation of the programme of study;
- A significant element of the programme is through learning projects undertaken in the workplace;

- The third-level institute assesses the learning outcomes against a trans-disciplinary framework of standards and levels.

More recent research by Shiel *et al.* (2007) suggest that for the partnership to be successful certain conditions need to be in place in both higher education institutes and partner organisations. They believe that in making a judgement on the feasibility of embarking upon the development of a work-based learning partnership it is important to consider whether the partnership organisations:

- are receptive, responsive and sufficiently visionary;
- are supported by senior management;
- have sufficient funding and resources;
- understand the underlying pedagogical ethos of work-based learning;
- have procedures in place to approve/accredit and quality assure flexible learning programmes;
- have key practitioners with a sufficiently broad repertoire of expert knowledge and skills of work-based learning that incorporate a 'toolbox' of work-based learning and teaching competencies;
- have a detailed understanding of relevant institutional policy, politics and procedures, curriculum development, consultancy and project management skills.

In addition to the above factors, financial considerations must also be recognised. Evidence suggests that work-based learning can be more resource intensive than other models of learning. A study undertaken in Britain by JM Consulting (2003) aimed to cost different types of pedagogy, including e-learning, distance learning, foundation degrees, workplace learning, and accreditation of prior learning. These various modes of learning were identified as being more resource intensive than conventional approaches. Similarly, Rose Rose *et al.* (2001)(2001) observed that establishing and operating a work-based learning partnership is not a low-cost exercise. They suggest that additional infrastructure needs to be provided, for example, videoconferencing equipment, laboratory equipment. etc. General administration costs, such as time working on projects and time provided by workplace mentors also need to be considered.

A further consideration for developing an education–industry partnership is the role that trade unions play in both organisations. Stoney (2002) suggests that the emphasis needs to be on co-operative partnership in contrast to the adversarial approach sometimes used between unions and management. Stoney acknowledges that partnership cannot remove the tensions and contradictions inherent within the employment relationship, but, "the unitarist overtones used by both parties indicate a willingness to resolve issues before they escalate into conflict or protracted disputes that may undermine company performance" (2002: 60). Similarly, Forrester (2001) recognises the important role of trade unions in workplace learning. He suggests that they play a pivotal role in encouraging members to talk openly about their learning needs, especially where they might be reluctant to admit perceived weaknesses (for example in basic literacy or numeracy) to line managers. Forrester further believes that union representatives have a key role to play in helping members to overcome resistance to learning which may have built up due to age, low self-esteem, an unhappy time at school, cynicism etc. Consequently, by actively encouraging applications from less qualified employees and those for whom English is a second language, Forrester believes that trade unions are helping to extend training and workplace development to employees who have previously been overlooked or underrepresented in terms of personal development.

The literature on industry–education partnerships has highlighted many commonalities, such as improving the quality of the workplace and providing employees with unique learning experiences and a new understanding of the educational system. From the extant literature, the objectives of industry–education partnerships can be summarised as:

1. To facilitate learning for students, employees, and educators;
2. To improve the education setting through upgrading facilities or equipment;
3. To foster student success by learning new skills and knowledge;
4. To integrate learners into the labour market by involving them in cooperative education experiences;
5. To connect education institutions with local businesses so that each partner becomes more familiar with the role of the other partner within community;
6. To assist with curriculum development, new learning opportunities, and skill development;
7. To meet the labour market needs of business and industry.

For students, therefore, partnerships provide opportunities for career exploration. For educators, partnerships can bring new resources to enrich the curriculum and to ensure their teaching is relevant to the skill sets required of the private sector industry. It is clear that there are many advantages to partnerships between academics and industry. On one hand, academic institutions are interested in practical learning opportunities and the real-world experience gained through these partnerships. On the other hand, organisations value lower research and development costs and the cutting-edge knowledge and technology transfer opportunities that directly affect their competitiveness in the market. Partnerships between academic institutions and industry, however, have some drawbacks. First, each party has a different working culture and values. Third-level institutions may sometimes consider a partnership to be successful only when there is a new research finding, when the discovery is published, or when an innovation is patented. Likewise, some organisations might consider a relationship to be fruitful when an innovation or discovery can be commercialised. As long as the value gained from the partnership is seen as beneficial to both partners, the basis of the partnership is established. This foundation must be supported by continuous learning and by restructuring processes to overcome the divergent or conflicting approaches between the partners (Roth and Magee, 2002). Project management capabilities are, therefore, required to address differences in priorities, cultures, and individual strengths. Emulti *et al.* (2005) optimistically concluded that the different points of view are the surplus of such cooperation, and when this is accepted and valued the gain from partnerships will follow.

Research by Foskett (2003) concludes that it is important for both partners to have complementary aims, compatible missions, good personal relationships, clear responsibilities, trust in each other, and that they are prepared to sign up to a common agreement on respective roles and commitments. Foskett, however, cautions that the reality of bringing these varied factors into alignment, however, is not always as easy as the rhetoric of employer engagement and work-based learning might imply. Similarly, research by Rowley (2005) suggests that "working in partnership is not easy". Rowley believes that successful partnership working requires: clear objectives and strong commitment, clear statements of the respective partners' responsibilities, schedules and staff resources that allow for individuals from different organisations to learn how to work effectively together, effective communication, and persistence in managing the partnerships.

Keithley and Redman's (1997) experience of setting up an education–industry partnership leads them to conclude that it can be a highly rewarding joint venture, with both sides developing new organisational competences. Their experience leads them to summarise that "despite the claims of much of the literature, such benefits are not gained easily but are painstakingly acquired" (1997: 164). They believe that the acid test for successful education–industry partnerships is if they can prosper over the long term and accommodate new contexts in a turbulent and highly competitive business environment.

5.1 Implementing Academic Industry Partnerships in the Current Project

One of the outcomes of the Education in Employment project proposal was to establish a workplace–education partnership in each of the collaborating institutions. The following table lists the partnerships which are currently in existence:

Higher Education Institute	Industry Partner
Athlone Institute of Technology	Bord na Móna
Cork Institute of Technology	Thomas Crosbie Holdings Ltd (TCH)
Dundalk Institute of Technology	Health Service Executive (HSE)
	Northeast – Education and Training Division
Institute of Technology Sligo	Masonite Ireland Ltd
Letterkenny Institute of Technology	Pramerica Systems Ireland Ltd
University College Cork	Musgrave Retail Partners Ireland Ltd

Some of the participating third-level institutes had previously established workplace partnerships but, generally, these partnerships were perceived as *informal*. Working group members 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 following provides a brief summary of the partnerships listed in Table 1 above.

5.1.1 Athlone Institute of Technology and Bord na Móna

Bord na Móna, established to develop Ireland's peat resources in the immediate post war years, is now active across a range of peat-based and other industries. Through the acquisition of complementary skills and experience across sixty years, it now has established skills in resource management and development, manufacturing, distribution, science, engineering, and human resource development. It owns 80,000 hectares of peat land, employs approximately 1,800 people, and operates out of thirty localities mainly in Ireland, but also in Britain and the United States. It has a turnover of nearly €296 million.

Bord na Móna supplies peat as a fuel for the generation of electricity; a range of peat-based fuels, coal and oil for residential and industrial heating; horticultural products for commercial horticulturists and home gardeners; and pollution abatement products, environmental consultancy and commercial laboratory services to industry and public authorities. It is a leading international supplier of products and services based on peat.

A partnership between Athlone Institute of Technology and Bord na Móna had already been in existence. Bord na Móna approached Athlone Institute of Technology Business School to provide a programme to upskill up to thirty of their Regional Operations Leaders (formerly foremen) to Higher Certificate level using a part-time delivery mechanism. The education and experience of these potential students were assessed and a customised programme was proposed that took account of prior learning, following previous training programmes undertaken by the group.

Thirteen modules were identified for inclusion on the course. Eight modules are to be delivered over a two-year timescale. These modules are to be delivered in classroom mode and amount to 80 credits of the required 120 credits. The remaining five modules are assessed using recognition of prior learning, over the first year, and credit is given where learners demonstrate achievement of the learning outcomes through prior knowledge or work-based learning. Learners must present a portfolio of learning for each of these five modules that will include evidence of their learning to the required standard.

5.1.2 Cork Institute of Technology and Thomas Crosbie Holdings (TCH) Ltd

Thomas Crosbie Holdings Ltd (TCH) comprises eighteen newspapers: *Irish Examiner, Sunday Business Post, Evening Echo, Waterford News & Star, The Kingdom, Western People, Roscommon Herald, Sligo Weekender, Newry Democrat, Down Democrat, The Nationalist, Leinster Times, Kildare Nationalist, Laois Nationalist, New Ross Echo, Gorey Echo, Wexford Echo* and *Irish Post*. Thomas Crosbie Media (TCM), the electronic media division of TCH, comprises RecruitIreland.com, BreakingNews.ie, and Motornet.ie. In addition, TCM manages all TCH group newspaper websites. TCH also has shareholding in the following radio stations: WLR FM, BEAT 102-103, Red FM, 4FM, and Mid West Radio.

Cork Institute of Technology has been a close partner to TCH for many years, originally through its School of Printing and its training of printing apprentices. This programme was discontinued, but a new course in Print

Media Communications evolved into the current Bachelor of Arts (Hons) in Visual Communications, and many graduates of these programmes have found employment with TCH over the last 20 years.

In September 2004, TCH Ltd was recognised by HETAC as an accredited provider of academic programmes, the first of which was accredited shortly afterwards. CIT worked in partnership with TCH during the preparation of TCH's submission document for the HETAC-accredited Higher Diploma in Journalism Practice, a Level 8 award.

In autumn 2006, CIT was one of two providers who assisted TCH Ltd with its submission for a Level 7 Bachelor of Arts in Sales; the other provider was the Sales Institute of Ireland. This submission was successful and the programme commenced in October 2006, with the Sales Institute providing 30 of the 60 total credits from a blended learning delivery model, and CIT delivering the other 30 credits through three modules delivered in the more traditional manner in CIT. The first graduates were conferred in autumn 2007.

5.1.3 Dundalk Institute of Technology and the Health Services Executive (HSE) Northeast: Education and Training Division

The HSE is responsible for providing health and personal social services for residents in Ireland. These services include, for example, providing public health nurses, treating older people in the community, caring for children with challenging behaviour, educating people on how to live healthier lives, planning for major emergencies, and controlling the spread of infectious diseases.

The establishment of the HSE in 2005 represented the beginning of the largest programme of change ever undertaken in the Irish public service. The HSE is now the single body responsible for enabling everybody to access cost effective and consistently high quality health and personal social services. The HSE is the largest employer in the State, and also has the largest public sector organisation budget of almost €15 billion.

Dundalk Institute of Technology and the HSE Northeast have worked closely for a number of years to develop nursing, health studies, and management education programmes for regional HSE staff. It seemed a natural option to consider work-based learning as part of the cooperative partnership already in place. At present the partnership is embryonic and informal.

5.1.4 Institute of Technology Sligo and Masonite Ireland Ltd

Masonite Ireland Ltd is based in Carrick-on-Shannon, Co. Leitrim, and is the Irish division of the US multinational Masonite company, specialising in the manufacture of wood-based building products – primarily doors, door facings and wood panelling. The Irish operation supplies products to Masonite distribution outlets across Europe, the Middle East, and North Africa. With 13,000 employees worldwide, some 350-400 of these are attached to the Co. Leitrim plant. Winners of the Fás-promoted Excellence Through People gold award, the

project of collaboration with IT Sligo was also shortlisted for the 2006 Chartered Institute of Personnel and Development awards.

In 2002, following discussions between staff at the Institute of Technology Sligo and Masonite Ireland Ltd, it was agreed to concentrate on training in engineering for the company's manufacturing facility. The company had initiated the discussion, displaying a firm understanding and commitment to a staff development programme. The company had identified a particular cohort of employees with specific training needs, but the concept of accredited learning, with consequent progression opportunities, had not been high on its agenda. In follow-up discussions it was agreed to offer a National Certificate in Engineering in Combined Studies using the ACCS (Accumulation of Credits and Certification of Subjects) mechanism. The delivery would take place primarily on the company premises, the company having agreed to the establishment of a learning centre that was equipped to Institute specifications. The company agreed to organise shift work, to facilitate access by all participants to all scheduled classes. Transport to the Institute for essential practical work, as well as examinations, would be provided by the company. The examinations were initially held in the Institute and later in the company learning centre. The programme would be delivered over two and a half years, to help the student to achieve a full 120-credits. Senior managers from the company were invited to deliver guest lectures. Work-based projects are an integral part of programme. Shortly before completion of the Certificate programme, negotiations were finalised on a progression programme – a Level 7 BEng in Mechatronics.

In February 2005, a new Level 7 add-on degree targeted at front-line management was introduced. In January 2007, talks commenced on the design and delivery of a course in Occupational Safety and Health to be delivered online to Masonite staff across Europe and the Middle East, involving collaboration between the company, the School of Engineering, and the School of Science. This course leads to a ten-credit Special Purpose Award.

5.1.5 Letterkenny Institute of Technology and Pramerica Systems Ireland Ltd

Pramerica Systems Ireland Limited is a technology development subsidiary of Prudential Financial, Inc (USA). Pramerica commenced operation in Letterkenny, Co. Donegal, in July 2000 where it supports a wide range of technology, including mainframe, client server, internet, and integration between legacy systems and systems involving more modern technology. Pramerica currently employs 670 people making it the largest employer in Donegal and the largest software development company outside Dublin.

In late 2003 Pramerica approached Letterkenny Institute of Technology because it was encountering difficulty recruiting Cobol Programmers. At that time no third-level institution in Ireland or in Britain was offering Cobol Programming. Letterkenny Institute of Technology responded by training a number of its lecturers in mainframe computing and associated technologies and leased a mainframe environment from IBM at its Atlanta US facility.

Simultaneously, Letterkenny Institute of Technology in partnership with Pramerica and Allstate Insurances in Northern Ireland developed a Higher Diploma in Financial Services Technologies, specifically to equip graduates with the technology and commercial and managerial skills required of next-generation team leaders. Currently,

in addition to this full-time Level 8 Programme, Letterkenny Institute of Technology is offering a variation of the Higher Certificate in Computing in Information Technology Support programme for Pramerica Call Centre operators to allow them to progress to the software development environment. Letterkenny Institute of Technology is also delivering specific training programmes in aspects of mainframe technologies for Pramerica. 80% of Letterkenny Institute of Technology graduates of the Higher Diploma in Financial Services Technologies programme have gained immediate employment with Pramerica.

5.1.6 University College Cork and Musgrave Retail Partners Ireland Ltd

Musgrave Retail Partners Ireland Ltd work with entrepreneurial food retailers to provide the consumer with a food offer that is different and better. Their approach is to equip independent retailers that are associated with their brands with sales, marketing, information technology, finance, and logistical expertise accompanied by an advanced retail model. Musgrave Retail Partners and their staff work hard to ensure that their stores will thrive through excellence – including well-trained staff; strong lines in fresh, local produce; superb in-store experience; and high standards of hygiene.

The current partnership between UCC and Musgrave Retail Partners Ireland is symbiotic in nature and involves informal interactions but presents great potential for future development. To date, many employees of Musgrave Retail Partners Ireland have graduated with NUI qualifications from programmes delivered by UCC. They have studied on programmes such as Supply Chain Management and Food Retailing, which were designed to aid the upskilling and continuous professional development of employees. The interaction with Musgrave extends beyond this, as they have contributed and provided expertise, guidance and support for the development of a number of programmes. The Food Retailing programmes were first launched in 2000-01 as a result of industry demand. Modules such as buying and trading were added to the programmes to facilitate the specific needs of the Musgrave partner. The programme development committee for the new undergraduate programme, BSc (Hons) Food Marketing & Entrepreneurship, worked closely with the Training & Development Manager in Musgrave Retail Partners Ireland on programme design and content. Furthermore, Musgraves have also provided many UCC students with industry experience. This type of relationship is seen as critically important to UCC when developing innovative programmes. When choosing a partner to be involved in UCC's Education in Employment project, it was judged fitting to contact Musgraves because of their previous involvement and experience. Both parties believe that through close collaboration many opportunities can be explored. UCC and Musgraves are both very open to exploring new opportunities that can be identified by working together on the Education in Employment project.

5.2 Evaluating Existing Partnerships

It can be seen from the summary descriptions of the education–industry partnerships that a variety of levels of involvement exist. A questionnaire (Appendix B) was designed to evaluate the partnerships in the current project. A representative from each of the participating third-level institutes met with a senior manager from their respective industry partner in order to complete the questionnaire. A brief summary of the findings from this research is be presented below.

Background to Partnerships

Eight questions focused on obtaining background information on the partnerships. In all of the partnerships, it was perceived that the higher education institute takes the lead role, but there is a shared management of the partnerships. All partnerships have existed for at least two years, the longest fifteen years, and all of indefinite future duration.

Continuing Professional Development

When designing the questionnaire, it was deemed important to investigate the activities associated with continuing professional development within each of the partner industries. Nine questions, thus, focused on issues associated with staff training in these industries. In particular, there was an emphasis on gathering data in relation to: the training relationship between the industry partner and the higher education institute; the development of training programmes; the extent to which employers support staff in continuing professional development activities; and, individual learning plans, and if these plans formed part of professional development.

Staff training needs were identified by the Training Managers or Human Resource Managers in the organisations involved. Three organisations had annual or biannual Personal Development Planning meetings with staff to identify their needs. The training needs identified were then discussed with the respective organisation's in-house experts and with external training providers to implement the most appropriate type of training. All industry partners had approached the higher education institutes to source training expertise and to have programmes tailored to suit their specific requirements. Programmes had been put in place where employees attended the higher education institute during work hours. One higher education institute had delivered programmes within the workplace. Overall, staff were supported by their employers while undertaking courses at the higher education institute. This support included the funding of fees and books, travel and accommodation, and study and exam leave. Individual learning plans were in use in four of the organisations and steps had been taking to introduce them in other organisations.

Work-based Learning Support Activities

Six questions focused on a variety of learning activities in organisations which support staff engaging in continuing professional development. These supports ranged from using technology to enabling distance and Web-based learning, the recognition of prior learning, and the assessment of workplace learning. Additionally,

workshops, projects, task-based activities, supervised activities, on-the-job learning, secondment, and mentoring were in place to support staff in their professional development. Distance and Web-based learning was utilised in five of the higher education institutes; one institute has plans to implement distance learning; and one institute does not use this form of learning. All of the industries use a combination of individual and group learning activities, with all activities supported by a workplace mentor. Professional development is also supported by the enrolment of staff on accredited courses. The recognition of prior learning is acceptable as a route into higher education courses by all institutions. Five of the seven higher education institutes have worked with the industry partner on the recognition/delivery/assessment of workplace learning.

Higher Education Institute–Industry Partner Interactions

Six questions focused on the level of interaction between the industry partners and the higher education institutes. These questions related to interactions such as the industry partner's involvement in: hiring graduates, participating in career days and open days, providing work placements, acting as course advisors, providing course review panel members and external examiners, or providing a guest lecturer for the course. Six of the industry partners hire graduates and provide work placement for students from the higher education institutes. This was not the case for one of the industry partners because its level of entry to the organisation was at apprentice level. Staff from each of the industry partners have acted as a course advisors or review panel members. Staff from two of the industry partners currently act as external examiners for the higher education institute. Six of the industry partners have presented guest lectures and seminars, and one organisation is preparing to becoming involved in contributing to the programme in this manner.

Research and Postgraduate Interaction

Five questions focused on the relationship between the industry partner and the higher education institute regarding research and interaction at a postgraduate level. These particular questions were not relevant to one of the industrial partners as the entry level to the organisation is at apprenticeship stage. Two of the industry partners have sponsored research projects in their partnering third-level institutes. To date, industry partners have not engaged in research partnerships with any of the higher education institutes. All of the six industry partners who have the capacity to hire postgraduates have done so from their local third-level institute. Staff from three of the organisations have attended research seminars in those third-level institutes. Additionally, staff from four of the organisations attend research-project demonstrations and open days, and staff from another one of the organisations expressed that they would become more involved in such activities during the following academic year.

Values/Benefits of Partnerships

Five questions focused on the perceived values/benefits of the partnerships. The industry specialists believed that the values/benefits for the learner include: accreditation and qualification, upskilling and wider development, the recognition of workplace learning, and participation in tailored programmes to enable career progression locally.

The perceived benefits for the employer included: the opportunity to hire qualified, upskilled staff who have benefited from participation in a programme tailored to suit the needs of the organisation. This enables succession planning, a greater business understanding across units, ability to grow the business, and increased productivity and flexibility. A further benefit reported was accessibility to third-level courses, which are provided locally, which in turn encourages retention of employees.

The participating industry specialists believed that, for the higher education institute, the benefits include their employees bringing rich experience and industry knowledge to classroom discussions that in turn influence the relevance of courses. Additionally, the delivery of relevant courses to local industry partners enables regional development. Interestingly, four of the higher education institutes have other partnerships, two of which are more mature partnerships, including one partnership that has progressed to enable the delivery of a Masters programme.

Future Directions of the Partnerships

As stated earlier, the existing partnerships tend to be at the informal level. Two of the questions focused on whether there were plans for growing and formalising the partnerships. All respondents envisage formalising and developing the already established partnerships. Respondents indicated that they would be interested in introducing more diverse programmes, to Levels 7, 8, and 9. They also expressed an interest in using individual learning plans, providing guest lectures, and developing closer relationships overall.

The third question in this section related to the plotting of the partnership on the Partnership Continuum, devised for this project (Appendix C). The Partnership Continuum is a model for plotting five different levels of engagement between a higher education institute and its industry partner. The five levels of the Partnership Continuum are: Awareness, Involvement, Active Engagement, Long-term Partnership, and Strategic Partnership. Ideally, it is envisaged that the partnerships between the higher education institutes and their industrial partners would progress and evolve through the various levels over time to reach a strategic partnership. There were various responses to this question for example, one of the respondents indicated that they are at the Involvement level, one positioned themselves as moving between Involvement and the Active Engagement level, three respondents indicated that they are at an Active Engagement Level, one at Long-term Partnership level, and one at Strategic Partnership level.

Individual Learning Plans

Eight questions focused on the implementation and use of individual learning plans in the industry-partner organisations. Four organisations currently use individual learning plans. Two of these organisations use learning plans for all employees, one organisation uses them for employees who want to engage in further learning, and the fourth organisation did not provide any data in relation to their use.

In two of the organisations, the learning plans are aligned with an individual's specific skills and career plans, together with their industry's strategic planning goals. The use of individual career plans in one of the organisations is specifically driven by its strategic plan with the individual's career plan taking a secondary

position. In three of the organisations, the responsibility of the career plans rested with the line managers and the individual employees. In two of these organisations, however, the performance and development division or senior learning and development specialist are also involved. Currently, online templates are used in two organisations and a combination of online and paper format is used in one organisation. Two organisations provide additional support through mentoring, additional documentation, online guides, and online biographies. No e-portfolios are in place in any of the organisations. The remaining organisations expressed an interest in investigating and implementing individual learning plans, with one respondent adding the comment: "Subject to clarifying implications for staff".

Current Education and Training Provision

Five organisations responded to questions seeking to establish who provides training for their organisations. All five organisations use an amalgam of their local third-level institute, corporate training provided through headquarters, private local providers, and in-house training. In addition to the above, two organisations used online training modules.

Criteria for Choosing Course and Provider

After establishing the education and training providers, respondents were asked to rank their criteria for choosing particular courses and course providers. Respondents were given a ranking of 1-5, with 1 being rated as most important. The results received from five organisations are as follows:

Criteria for Choosing Course & Provider	Level of Importance
Cost; Customised Provision	1
Direct Relevance Duration & Time Commitment	2
Convenience & Location	3
Staff Motivation; Credit Earning against National Framework of Qualifications	4
Delivery Method format (including online)	5

Current Most Urgent Education/Training Need in the Workplace

Only four organisations completed the questions in relation to their perceptions of the current most urgent education or training need in their workplace. Respondents suggested that a gap exists in the provision of job-related technology courses and also in the provision of specific job-related modules. The next perceived need was management training, followed by generic skills such as communication, presentations, conflict resolution, quality, and safety. One organisation suggested that corporate compliance training was required.

In summary, from the initial evaluation of the partnerships currently in existence, it is clear that there are many perceived benefits for developing educational relevance in the workplace and in third-level education institutes, and as well as benefiting the student's career prospects. The interaction between the working group members and the industry representatives to date has been very positive. All of the industry partners have indicated that they are willing to build on the partnership foundations which are currently in existence and are interested in continuing to be actively involved in such partnerships.

6 Recommendations and Conclusions

6.0 The Challenges of Work-based Learning

There are many challenges that higher education institutes are confronting in the design and delivery or work-based learning programmes, not least the widespread confusion on what constitutes work-based learning, which is also referred to by a variety of terms, such as: workplace learning, work-related learning, and vocational learning. Such confusion, arguably, leads to an undervaluing of the potential benefits of work-based learning as a mode of learning at a higher level. A focus on terminology and definitions could, however, get in the way of exploring and dealing with what really matters, notably influencing the policy environment, dealing with issues and challenges from a structural perspective, and sharing, promoting and encouraging effective pedagogical practice. Nixon *et al.* (2006) suggest that an inclusive approach that accepts the variety of interpretations is a prerequisite in order to avoid over-compartmentalising its provision and the risk of "straight-jacketing" institutions by trying to shape an absolute definition. Nixon *et al.* believe that it is critically important to establish a shared understanding of the particular area of focus from both an academic and employer perspective, irrespective of the terms used.

Academic standards continue to be a key challenge for academics involved in work-based learning. While concerns regarding academic standards are not confined to work-based learning practitioners, they are fuelled by a fear that work-based learning is contributing to a more general lowering of standards by making such qualifications available to all employees. Academics working in work-based learning programmes are confronting the challenge of articulating not only conventional academic standards but also how the learning outcomes in work-based learning programmes are equivalent to those standards. The movement to cross-disciplinary and transdisciplinary knowledge, the participation in partnerships with organisations, and the reframing of entry requirements that allow non-graduates to access some postgraduate awards mean that the traditional predictability of knowledge learnt and the actual academic standard of that knowledge are no longer certain or easily measurable. This is particularly the case for work-based learning awards. The challenge for academics is to work within an educational framework that recognises and accredits learning that occurs outside the higher education institute. The framework needs to acknowledge that the work-based learning arrangement accommodates notions of academic learning and at the same time legitimises 'working knowledge'. The challenge is not to apply the same criteria as one might for conventional awards.

Symes (2003) observes that another challenge is caused by 'the flirtation' with non-academic organisations that work-based learning necessarily entails, and this is seen by many academics as a threat to higher education institutes, which might risk undoing its standards and academic standing. Symes believes that, in this respect, work-based learning has to prove itself far more than the more orthodox forms of third-level learning and to demonstrate that what is happening under its banner is worthy of being within the preserve of the third-level institute. Hence, according to Symes, work-based learning seems to have been subject to more interrogation and surveillance than is usual in the case with standard third-level courses. Symes also observes that a further challenge in the provision of work-based learning courses is the degree of control which surrounds it. This is evident by the "web of documentation" that surrounds it: portfolios, learning agreements, contracts, memoranda of understanding, assessment inventories, reports, and so on. Symes suggests that in some

respects, such documentation makes the learning processes involved more transparent, but more susceptible to challenge and renegotiation, much more so than in the case of traditional academic courses.

Boud and Solomon (2003) believe that an immediate challenge for all institutions adopting work-based learning is to select staff who can cope with working with students operating outside their "disciplinary comfort zone". Work-based learning courses require teaching staff to change their role from being experts on the content of what is being learned to becoming animators and assessors of learning. This might often be in areas of learning and knowledge in which students and their workplace colleagues may be more expert. They may also have to engage in knowledge generated through work that does spring from structures they are most familiar with.

A further challenge identified by Boud and Solomon (2003) is in relation to research. They observe that at present there is a large gap between work-based learning and collaborative research. They suggest the reason for this is a structural one. This division also often exists at third-level institute level and faculty levels. Work-based learning is, for the most part, located within the area of teaching and learning, while research is located in the area of research and consultancy. Boud and Solomon believe that the prospects for associating research with work-based learning partnerships are more problematic than they might first appear. They suggest that the great potential for research is unlikely to be realised if work-based learning is seen only within a framework of course delivery and as an adjunct to more conventional work in third-level education institutions. Work-based learning programmes, however, are far more worthy than just as sites of interest in terms of their potential for establishing collaborative research partnerships with organisations. These organisations also provide a location conducive for researching new kinds of teaching and learning practices associated with the concept of 'work as the curriculum' (Boud and Solomon, 2003: 222).

Another important consideration in the fostering of work-based research through to work-based learning should be an examination of what calibre of person represents the third-level institute when interacting with organisations. There is a risk when structuring work-based learning that the most skilled research academics might have the least likelihood of interacting with partners. All too frequently, staff negotiating partnerships, coordinating courses, and undertaking assessments of work-based learning are neither research trained nor active researchers.

6.1 Recommendations for Implementing Work-based Learning

For many practitioners, work-based learning is already a vital and legitimate mode of learning which offers significant value for the strategic teaching and learning agendas of higher education institutions. Work-based learning also acts as a driver for greater innovation in the broader third-level education system. Extending this legitimacy, however, will necessitate developing strategies which cross the cultural bridge between learning and work, address the issues and challenges throughout the system, and demonstrate how the practices of work-based learning have wider applicability in the higher education sector. Based on a review of the relevant extant literature and drawing on the experiences of working group members, a number of recommendations for implementing work-based learning programmes can be suggested. These recommendations for higher education institutes and industry should enable significant progress on work-based learning agendas in the next number of years.

For Higher Education Institutes

- Acknowledge and provide a variety of approaches for those in employment to avail of work-based learning offered by higher education institutes;
- Provide support for the development of academic staff who are operating at the interface between higher education and the world of work, through internal programmes of staff development;
- Assist academic staff in their transition from being a lecturer of a specific body of knowledge to being a facilitator of learning;
- Ensure that the recognition of prior learning is an integral component of all work-based learning programmes;
- Design user-friendly approaches for the recognition of prior learning and continuous professional development;
- Promote teaching and learning reforms, including enhanced teaching methods and e-learning;
- Identify ways of improving support for the provision of cost-effective work-based learning solutions;
- Establish strong industry partnerships as a means to ensure participation and progression into higher education;
- Involve the employer in the design of the programme, particularly in relation to work-based projects and assignments to support the assessment of learning;
- Develop customised programmes to meet the needs of the individual and the organisation;
- Address the diverse range of knowledge and skills possessed by learners at the commencement of work-based learning programmes;
- Ensure work-based projects and assignments fulfil the essential measurement criteria of validity, reliability, and authenticity;
- Provide learners with frequent feedback on their progress and achievements;
- Encourage critical reflection throughout the programme;
- Provide accreditation for work-based learning programmes through the National Framework of Qualifications.

For Employers

- Identify ways in which to provide financial and other support for those wishing to avail of work-based learning courses;
- Direct more energy and effort towards motivating employees to see value and to engage in higher-levels skill development;
- Allocate a workplace mentor to help the student identify their individual learning needs, apply knowledge to practice, and act as a resource for the student's development;
- Encourage employees to have a greater sense of responsibility for individual and continuing professional development;
- Develop a clear sense of purpose for work-based projects and assignments and the personal rewards that can come from them;
- Promote more online learning to overcome the barrier of lost production time, with employees having to spend less time away from the workplace, a benefit for SMEs in particular;
- Accommodate and exploit informal peer networks of support in the workplace;

- Provide an informal culture of support and official recognition of achievement;
- Promote the use of individual learning plans for all employees;
- Place greater weight on encouraging high level engagement for work-based learning within organisations, reaching above human resource management professionals to chief executives and managing directors;
- Recognise and encourage the role of trade unions in work-based learning processes (if operating in a unionised environment);
- Consolidate the workplace as a place of knowledge production.

It is clear there are many considerations for the implementation of work-based learning for both third-level institutions and employers. Work-based learning, however, also presents considerable implications and challenges for learners. As identified by Boud and Solomon (2003), work-based learning is a very attractive option. Its relevance is clear and it provides an opportunity to gain qualifications through drawing on recent or current everyday work practices. It enables one to be responsible for, manage, and timetable one's own learning and it is likely to require minimal third-level attendance. Such freedom, however, often presents its own problems. While some learners easily manage the work-based learning experience, many find the increased responsibility a struggle. In work-based learning programmes, learners have to deal with the complexities of being both a worker and learner, and having increased responsibility in the learning process. While flexibility in both process and content is an important part of the appeal for both the organisation and the learner/employee, flexibility has to be provided and timetabled. Learners, their organisations, and academics demand this. It is important that boundaries are constructed within an educational framework that maintain academic standards while at the same time provide guidelines and practices that make explicit the educational parameters within which work-based learning partnership awards are to be negotiated, organised, and assessed.

6.2 Conclusions

As the work-based learning strand of the Education in Employment project has a three-year schedule, definitive conclusions are not available after just one year of activity. Some interim suggestions for the future of work-based learning, however, can be highlighted, and these suggestions can be built on over the remaining two-year project duration. From the experiences and activities of working group members, and in agreement with Boud and Solomon (2003), work-based learning is still in its infancy and there are many different directions in which it might develop.

Based on the original Strategic Innovation Fund project proposal, the work-based learning strand of the Education in Employment project set out to achieve three outcomes during its first year:

- Identify courses which are delivering elements of work-based learning programmes in each of the third-level institutes participating in the project;
- Develop and pilot an ILP form with employees in industrial partner organisations;
- Establish a third-level education partnership with industry.

As outlined in this report, these three outcomes have been achieved, but further work is required to build on what has been established, and this work will continue over the next two years. It is envisaged that in relation to the maintenance of the education and industry partnerships, and the utilisation of individual learning plans, that the timeframe will extend far longer than the duration of this project. A brief number of concluding remarks may be drawn in relation to the three outcomes.

First, in relation to the audit conducted of courses which provide work-based learning, it is clear that none of the participating third-level institutes offers a full programme leading to a qualification in work-based learning. For work-based learning programmes to be truly work-based and learner-centred, they typically commence with a structured review and evaluation of current learning. This, in turn, challenges the education institution to move beyond the traditional concept of the recognition of prior learning, to formally recognise learner-defined learning for possible inclusion in a future work-based learning programme. Currently, most of the third-level institutes incorporate elements of work-based learning at varying levels, through programmes offered on a part-time basis. In general, accessing information on these programmes from academic staff was a difficult and time-consuming exercise. Departmental heads and course coordinators were often unsure of what constitutes work-based learning for the purpose of the audit. If, for example, a programme contains one work-based assignment, and if this is the only element of work-based learning evident in that programme, it was unclear if that programme should be considered to be offering work-based learning. There was also widespread variation and a lack of clear policies within the third-level institutes on the issue of giving credits for recognition of prior learning. The working group members, however, have plans in place to raise awareness and offer staff training sessions in each of the institutes regarding the recognition of prior learning and work-based learning practices.

Second, in relation to the development of individual learning plans, working group members have been evaluating and incorporating the feedback received. As outlined earlier, very positive responses regarding the potential use of these learning plans have been received. A subgroup of working group members are redesigning a further paper-based version of an ILP form which will be piloted during the 2008/09 academic year. The original target for one thousand learning plan forms to be completed by employees, in various organisations, before the remaining two years of the current project is completed, should be reached. Further work will continue regarding moving from a paper-based form to an electronic version of these ILP forms.

Third, in relation to academic–industry partnerships, it can be seen from the research conducted for this project that the partnerships are at a different developmental levels. Most of the partnerships, however, have been established at an informal level, but it is intended that these partnerships will be established on a more formal basis. To date, the experiences of all staff members from both the academic institutes and the industrial organisations involved in these partnerships are very positive, with reports of a win-win situation from all participants. The participants have expressed interest in further developing the partnerships. There are also plans in place for each academic institute to establish a further partnership with a different industry in their locality. As proposed by the partnership continuum, it is hoped that, in practice, each of the current arrangements will move to the level of a strategic partnership. The SIF cycle 2 Roadmap for Employment-Academic Partnership (REAP) project will further develop concepts and models of partnership.

Overall, the workplace holds the promise of a powerful learning environment. Work-based learning is becoming increasingly important both for organisations – which need professional development to create a dynamic, flexible workforce – and for higher education institutions that recognise the workplace as a legitimate site of learning. Work-based learning deliberately and perceptively merges theory with practice, and acknowledges the intersection of explicit and tacit forms of knowing at both individual and collective levels. It recognises that learning is acquired in the midst of practice and typically occurs while working on the tasks and relationships at hand. Applebaum and Reichart (1998), however, note that "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" (1998: 52). 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 challenging many fundamental beliefs and operating principles.

Delanty (2001: 103) also believes that knowledge creation is no longer solely assumed to be the responsibility of the third-level institute and this has led to the establishment of other centres of knowledge production, such as "industrial laboratories, research centres, think-tanks, and consultancies". Work-based learning within higher education recognises the legitimacy of the workplace as a source of learning and it is increasingly recognised that developing higher level skills is not restricted to the learning gained within the protected confines of the higher education environment. Work-based learning, however, poses real and wide-ranging challenges to higher education structures, procedures, and practices. A key challenge for work-based learning is to develop structures, contacts, and ways of working which effectively draw upon and enhance subject disciplines without being restricted by them. Work-based learning is now challenging most of the conventional assumptions about teaching, learning, knowledge and course curricula. Boud and Solomon (2003: 225) suggest that work-based learning "is a disturbing practice – one that disturbs our understandings about our academic identity and its location".

Rapidly changing workplace environments, increasingly influenced by accelerating developments in information and communications technology, require new models of training and education from higher education institutions. Higher education in general, as well as organisational learning and workplace learning in particular, has to draw on the valuable resource of prior learning in the workplace. Prior learning must be more readily and formally recognised for its solid and valuable contribution to third-level education. The more static curricula of yesterday's education systems cannot serve the demands of today or tomorrow. As change in the workplace is at the cutting edge of new demands for training and education, it is the workplace that has, of necessity, to inform much of the training and education curricula of tomorrow. A paradigm shift is required in third-level education, as new and ever-changing curricula will continually and dynamically be informed by the workplace, to address student requirements in the twenty-first century.

References

Applebaum, S.H. and Gallagher, J. 2000. "The competitive advantage of organizational learning", *Journal of Workplace Learning*, 12 (2): 40-56.

Applebaum, S.H. and Reichart, W. 1998. "How to measure an organization's learning ability: The facilitating factors", *Journal of Workplace Learning*, 10 (1): 15-28.

Bement, J.M. 1993. Learning in the workplace: *The Portsmouth partnership experience*. In Proceedings of the Second Congress on Engineering Education, Lodz, Poland.

Billet, S. 2004. Learning through work: Workplace participatory practices. In H. Rainbird, A. Fuller and A. Munro (Eds.), *Workplace learning in context*, London: Routledge, pp. 109-25.

Billet, S., Ovens, C., Clemans, A., and Seddon. T. 2005. *Interdependencies at work: Constituting reflection, performance dialogue and reward.* Paper presented at Researching Work and Learning Conference, Sydney, Australia, 12-14 December.

Boot, R. and Evans, J. 1990. "Partnership in education and change", *Management Education and Development*, 21 (1): 13-21.

Boud, D. 2003. Creating a work-based curriculum. In D. Boud and N. Solomon (Eds.), *Work-based learning: A new higher education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 44-58.

Boud, D., Solomon, N., and Stynes, C. 2003. New practices for new times. In D. Boud and N. Solomon (Eds.), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 1-17.

Boud, D. and N. Solomon N. 2001. *Work-based Learning: A New Higher Education?* Milton Keynes: Open University Press.

Boyer, D. 2000. "An insecure future for work- based learning?", Working Brief, Issue 114, May.

Brodie, P. and Irving K. 2007. "Assessment in work-based learning: Investigating a pedagogogical approach to enhance student learning", *Journal of Assessment and Evaluation*, 32 (1): 11-19

Brown, S. and P. Knight. 1994. *Assessing Learners in Higher Education*. London: Kogan Page.

Brennan, L. 2005. *Integrating Work-based Learning into Higher Education: A Guide to Good Practice.* A report by the University Vocational Awards Council. Bolton: University of Bolton.

Brennan, J. and Shah, T. 2003 *Access to what? Converting educational opportunity into employment opportunity.* Final Report. London: Centre for Higher Education Research and Information.

Cambridge, B. 2001. "Electronic portfolios as knowledge builders". In B. Cambridge (Ed.), *Emerging Practices for Students, Faculty and Institutions.* Washington, DC: American Association for Higher Education.

Cambridge, D. 2008. "Audience, integrity, and the living document eFolio Minnesota and lifelong and lifewide learning with e-portfolios", *Computers and Education*, 51 (3): 1227-1246.

Chartered Institute of Personnel and Development. 2005. *Learning and Development: An Overview*. London: Chartered Institute of Personnel and Development.

Clegg, S. and Bufton, S. 2008. Student support through personal development planning: retrospection and time. *Research papers in Education: Policy and Practice*, 3 (2): 1-16.

Clifford, J. and Thorpe, S. 2007. *Workplace Learning and Development*. London: Kogan Page.

Collin, K. and Valleala, U.M. 2005. "Interaction among employees: How does learning take place in the social communities of workplace and how might such learning be supervised", *Journal of Education and Work*, 18 (4): 411-20.

Connor, H. 2005. *Workforce Development and Higher Education*. London: CIHE.

Conradi, C., Evans, N., and Valk, A. 2006. *Recognising Experiential Learning: Practices in European Universities*. Estonia: Tartu University Press.

Cunliffe, A.L. 2004. "On becoming a critically reflexive practitioner", *Journal of Management Education*, 28, (4), pp. 407-26.

Dearing, R. 1997. *Higher Education in the Learning Society*. London: Stationery Office.

Delanty. G. 2001. *Challenging Knowledge: The University in the Knowledge Society. Buckingham:* The Society of Research into Higher Education and Open University Press.

Department of Education and Science. 2000. *Learning for Life: White Paper on Adult Education.* Dublin: Stationery Office.

Elmuti, D., Abebe, M., and Nicolosi, M. 2005. "An overview of strategic alliances between universities and corporations, T*he Journal of Workplace Learning,* 17 (12): 115-29.

Eraut, M. 2004a. Transfer of knowledge between education and workplace settings". In H. Rainbird, A. Fuller and A. Munro (Eds.) *Workplace Learning in Context*. London: Routledge, pp. 201-21.

Eraut, M. 2004b. "Informal learning in the workplace", *Studies in Continuing Education*, 26 (2): 173-247.

European Commission. 1995. *Teaching and Learning: Towards the Learning Society*. Brussels: European Commission.

European Commission. 2001. *Making a European Area of Lifelong Learning a Reality*. Brussels: European Commission.

European Lifelong Learning Index. 2007. *Monitoring Lifelong Learning and its Effects on Economic Prosperity and Social Well-being in the European and Regional Context*. Gutersloh: Bertelsmann Foundation.

Expert Group on Future Skills Needs. See: Forfás.

Fisher, D. 2001. Brokers on the Boundary: *Academy-industry Liaison in Canadian Universities.* Paper presented at annual conference of Consortium of Higher Education Researchers, Dijon.

Forfás. 2004. *Ahead of the Curve: Ireland's place in the Global Economy.* Enterprise Strategy Group Report. Dublin: Forfás.

Forfás. 2005. *Data analysis of in-employment education and training in Ireland.* Prepared for the Expert Group on Future Skills Needs by Philip J. O'Connell, to the Minister for Enterprise, Trade & Employment and the Minister for Education and Science. Dublin: Forfás.

Forfás. 2007a. *Tomorrow's Skills: Towards a National Skills Strategy.* Expert Group on Future Skills Needs. 5th Report. Dublin: Forfás.

Forfás. 2007b. *Promoting Enterprise–Higher Education Relationships.* Advisory Council for Science Technology and Innovation. Dublin: Forfás.

Forrester, K. 2001. "Modernised learning? An emerging lifelong learning agenda by British trade unions", Paper presented at Researching Work and Learning Conference, Calgary University, Calgary.

Foskett, R. 2003. "Employer and needs-led curriculum planning in higher education: A cross-sector case study of foundation degree development", Paper presented at British Educational Research Association Annual Conference, Edinburgh, 11-13 September.

Foster, E. and Stephenson, J. 1998. "Work-based learning and universities in the UK: A review of current practices and trends", *Higher Education Research and Development,* 17 (2): 155-170.

Fry, H., Davenport, E., Woodman, T., and Pee, B. 2002 "Developing progress files: a case study", *Teaching in Higher Education,* 7 (1), pp. 97-111.

References

Gallacher, J. and Reeve, F. 2002. Work-based Learning: *The Implications for Higher Education for Supporting Informal Learning in the Workplace.* Milton Keynes: Open University.

Garavan, T.N., Hogan, C., and Cahir-O'Donnell, A. 2003. *Making Training and Development Work: A Best Practice Guide.* Cork: Oaktree Press.

Garnett, J., Comerford, A., and Webb, N. 2003. Working with partners to promote intellectual capital, In D. Boud and N. Solomon (Eds.), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 103-12.

Glass, A., Higgins, K., and McGregor, A. 2002. *Delivering Work-based Learning.* Glasgow: Training and Employment Research Unit - University of Glasgow.

Government of Ireland. 2006. *Towards 2016: Ten Year Framework Social Partnership Agreement 2006-2015.* Dublin: Stationery Office.

Grant, S., Rees Jones, P., and Ward, R. 2003. "Mapping Personal Development Records to IMS LIP to support Lifelong Learning", Consultation Document. Wigan: The Centre for Recording Achievement.

Gray, D. 2001. *A Briefing on Work-based Learning*. York: Higher Education Academy.

Hager, P. 1998. "Understanding workplace learning: General perspectives. In D. Boud (Ed.), *Current Issues and New Agendas in Workplace Learning.* Springfield, VA: NCVER, pp. 31-46.

Haigh, J. 2008. "Active learning in higher education: Integrating progress files into the academic process", *Active Learning in Higher Education,* 9 (1): 57-71.

Hallier, J., and Butts, S. 1999. "Employers' discovery of training: self-development, employability and the rhetoric of partnership", *Employee Relations*, 21 (1): 80-95.

Harris, M. and Chisholm, C. 2008. "Recognition of learning through work in lifeplace learning environments: An analysis of the way ahead". Paper presented at University Association of Life Long Learning Work-based Learning Network Annual Conference, *Contested Values in Work-based Learning,* University of Cardiff, Wales, 3-4 July.

Heath, M.S. 2004. *Electronic Portfolios: A Guide to Professional Development and Assessment.* Worthington, OH: Linworth.

Heath, M.S. 2005. "Are you ready to go digital?": The pros and cons of electronic portfolio development", *Library Media Connection*, 23 (7): 66-70.

Heikkila, K. 2006. *Tyossa Opiminen Yksilon Lahtokohtien Ja Oppimisymparistojen Valisena Vuorovaikutuksena.* Tampere: Tampere University Press.

Hogan, C. 1995. "Creative and reflective journal process", *Learning Organization,* 2 (2): pp. 4-17.

JM Consulting (2003). *The Costs of Alternative Models of Delivery.* London: Higher Education Funding Council for England.

Keithley, D. and Redman, T. 1997. "University-industry partnerships in management development", *Journal of Management Development,* 16 (3): 154-66.

Kneale, P. 2007. "Personal development planning really happens at work", Planet 18:1-3. [Devon: The Higher Education Academy: Geography, Earth and Environmental Science (GEES)].

Larkin, J.E., Pines, H.A., and Bechtel K.M. 2002. "Facilitating students' career development in psychology courses: A portfolio project", *Teaching of Psychology* 29: 207-210

Lifelong Learning Index. 2007. *Learning Ireland's Lifelong Learning Index*: Survey Report. Dublin: Learning Ireland.

Lloyd, D. W. 2008. "Integrated work and learning as a professional development programme through the experience of work-placement". Paper presented at University Association of Life Long Learning Work-based Learning Network Annual Conference, *Contested Values in Work-based Learning*, University of Cardiff, Wales, 3-4 July.

Lyons, F. and Bement, M. 2003. Setting the Standards: Judging Levels of Achievement. In D. Boud and N. Solomon (Eds), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 167-83.

McAlpine, M. 2005. "E-portfolios and digital Identity: some issues for discussion", *E-Learning,* 2 (4): 378-87.

McIntosh, S. 1999. *A Cross-country of the Determinants of Vocational Training.* London: London School of Economics, Centre of Economic Performance.

McMullan, M. 2006. Student's perception on the use of portfolios in pre-registration nursing education: A questionnaire survey. *International Journal of Nursing Studies,* 43 (3): 333-43

Martineau, J.W. and Hannum, K.M. 2003. *Evaluating the Impact of Leadership Development: A Professional Guide.* Greensboro, NC: Center for Creative Leadership.

Meyer, B. and Latham, N. 2008. "Implementing electronic portfolios: Benefits, challenges, and suggestions", *EDUCAUSE Quarterly*, 31 (1): 34-41.

Mohr, J. and Spekman, R. 1994. "Characteristics of partnership success: Partnership attributes, communication behaviour and conflict resolution techniques", *Strategic Management Journal,* 15 (2): 135-52.

Murphy, A. 2007. Recognising Work-based Learning. Paper presented at HETAC Conference, Griffith College, Dublin, 29 November.

National Qualifications Authority of Ireland. 2003. *Policies, Actions and Procedures for Access, Transfer and Progression*. Dublin: National Qualifications Authority of Ireland.

Newby, D. 2003. "Personal development plans: Making them work, making them count", *American Psychiatric Treatment*, 9: 5-10.

Nikolou-Walker, E. 2008. *The Expanded University: Work-based Learning and the Economy*. Essex: Pearson.

Nikolou-Walker, E. and Garnett, J. 2004. "Work-based learning. A new imperative: Developing reflective practice in professional life", *Reflective Practice,* 5 (3): 297-312.

Nixon, I., Smith, K., Stafford, R., and Camm. S. 2006. Work-based learning: Illuminating the higher education landscape. Final Report. York: The Higher-Education Academy.

O'Connell, Philip J. *See*: Forfás. 2005.

OECD. 2006. *Education at a Glance*. Paris: Organisation for Economic Cooperation and Development.

OECD 2007. *New OECD Activity on Recognition of non-formal and informal learning. Country Background Report Ireland.* [available from www.nqai.ie].

Onyx, J. 2003. Implementing work-based learning for the first time. In D. Boud and N. Solomon (Eds.), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 126-40.

Patel. K. "Learning to manage with those rapid changes", *Times Higher Education Supplement,* 19 January, p. 6.

References

Pedler, M, Burgoyne, J, Boydell, T. 1991. *The Learning Company: A strategy for Sustainable Development.* London: McGraw-Hill.

Pickles, T.A. 2000. Encouraging students to acquire key skills and manage their own learning. In Crossroads of the millennium. Proceedings of the Technological Education and National Development, Conference, April 8-10, Abu Dhabi.

Poell, R.F. 2006. Organizing learning projects whilst improving work: Strategies of employees, managers, and HRD professionals. In J.N. Streumer (Ed.), *Work-related Learning,* Dordrecht: Springer, pp. 151-80.

Pouget, M. and Osborne, M. 2004. "Accreditation or validation of prior experiential learning: Knowledge and savoirs in France – a different perspective?" *Studies in Continuing Education,* 26 (1): 45-65.

Raelin. J. A. 2008. *Work-based Learning.* San Francisco: Jossey-Bass.

Richardson, H.C. and Ward, R. 2005. *Developing and implementing a methodology for reviewing E-portfolio products.* A report presented to the Joint Systems Committee, Wigan: The Centre for Recording Achievement.

Rohlin, L., Skarvad, P., and Nilsson, S. 1998. *Strategic Leadership in the Learning Society*. Lund: Mil Publishers.

Roberts, G., Aalderink, W., Cook, J., Feijen, M., Harvey, J., Lee, S., and Wad, V. 2005. Reflective learning, future thinking: digital repositories, e-portfolios, informal learning and ubiquitous computing. Paper presented at ALT/SURF/ILTA Spring Conference Research Seminar, Trinity College, Dublin, 1 April 2005.

Rose, E., McKee, W., Temple, B.K., Harrison, D.K., and Kirkwood, D. 2001. "Workplace learning: A concept in off-campus teaching", *The Learning Organization*, 8 (2): 70-77.

Roth, G. and Magee, C. 2002. "Corporate-university alliances and engineering systems research", Working Paper Series. Cambridge, MA: Massachusetts Institute of Technology, Engineering Division.

Rowley, J. 2005. "Foundation degrees: A risky business?", *Quality Assurance in Education,* 13 (1): 7-16.

Rughani, A., Ftanklin, C.D., and Dixon, S.H. 2003. *Personal Development Plans for Dentists*. Oxford: Radcliffe Medical Press.

Schön, D.A. 1983. *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Seely-Brown, J. 2002. "Growing up digital: How the web changes work, education and the ways people learn", *United States Distance Learning Journal,* 16 (2), Available online at www.usdla:orghtml/journal/Feb02.

Sharpe, R., Benfield, G., Roberts, G. and Francis, R. *The Undergraduate Experience of Blended e-learning: A Review of UK Literature and Practice*. York: The Higher Education Academy.

Shiel, G., Miller, A., Rhodes, G., Corbett, S., and Duncan, K. 2007. "Reflection and learning amongst diverse student groups in the workplace: Examining the experience", Paper presented at Teaching & Learning in the Changing World of Education, AISHE Conference, Maynooth, 30-31 August.

Shipley, N. 2003. Smart work: What industry needs from partnerships. In D. Boud and N. Solomon (Eds.), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 141-54.

Siemens, G. 2004. "E-portfolios". Available from http://www.elearnspace.org/Articles/eportfolios.htm [Accessed 6 June 2008].

Slotte, V. and Tynjala, P. 2003. "Industry-university collaboration for continuing professional development", *Journal of Education and Work,* 16 (4): 445-64.

Stenstrom, M.L. 2006. Polytechnic graduates working life skills and expertise. In P. Tynjala, J. Valimaa and G. Boulton-Lewis (Eds.), *Higher Education and Working Life: Collaborations, Confrontations and Challenges,* Amsterdam: Elsevier, pp. 89-102.

Stoney, C. 2002. "Partnership and workplace learning in the UK: Pioneering work at British Telecommunications plc", *Journal of Workplace Learning,* 14 (2): 58-67.

Symes, C. 2003. Capital degrees: Another episode in the history of work and learning. In D. Boud and N. Solomon (Eds.), *Work-based Learning: A New Higher Education?* Buckingham: The Society for Research into Higher Education and Open University Press, pp. 203-14.

Tikkamaki, K. 2006. *Tyon Ja Organisaation Muutoksissa Oppiminen.* Tampere: Tampere University Press.

Truer, P. and Jenson, J. D.2003. "Setting standards for educational portfolios: a broader vision for an educational revolution", *EDUCAUSE,* 26 (2): 34-42.

Tynjala, P. 2007. "Connectivity and transformation in work-related learning: Theoretical foundations", In M.L. Stenstrom and P. Tynjala (Eds.), *Towards Integration of Work Learning: Strategies for Connectivity and Transformation.* Dordrecht: Springer.

Tynjala, V., Slotte, J., Nieminen, K., and Olkinoura, L.E. 2006. From university to working life: Graduates' workplace skills in practice. In P. Tynjala, J. Valimaa and G. Boulton-Lewis (Eds.), Higher *Education and Working Life: Collaborations, Confrontations and Challenges.* Amsterdam: Elsevier, pp. 73-88.

Vaill, P.B. 1997. *Learning As a Way of Being*. San Francisco: Jossey-Bass.

Walsh, A. 2008. "The integration of experience-based learning into academic awards: A case study". Paper presented at University Association of Life Long Learning Work-based Learning Network Annual Conference, *Contested Values in Work-based Learning,* University of Cardiff, Wales, 3-4 July.

Workman, B. 2008. "Beyond boundaries: Valuing and assessing experiential learning outside module templates". Paper presented at University Association of Life Long Learning Work-based Learning Network Annual Conference, *Contested Values in Work-based Learning,* University of Cardiff, Wales, 3-4 July.

Appendix A

Individual Learning Plan

Individual Learning Plan

The purpose of this survey is to develop a useful template for an Individual Learning Plan for learners in the workplace taking account of their current formal and experiential learning, career aspirations, and the availability of suitable programmes of study.

Learner Details

Name	
Address	
Phone Number	
Email	

Survey #1

Disclaimer

In completing these pages I agree that the information given can be used in the research activities of the Education in Employment (EiE) Project and the Individualised Digitised Educational Advisory (IDEAS) project. I understand that this first page will be removed and maintained separately within CIT (and the institution where the data was collected) under the provision of the Data Protection Act and that all analysis and processing of the information contained on the following pages will be by Number only. All information supplied is treated in the strictest confidence and is used for Institute/ University purposes only.

Signed	**Date**

Current Employment & Employment History

Please complete or tick (✓) the appropriate box.

Gender	Male						
	Female						
Age Range	Under 20		21-30		31-40		
	41-50		51-60		Over 60		

Employer	
Commencement Date	
Job title/ Role	
Department/Function	

	Tile	From	To
Previous job titles/roles with current employer			

Key duties/ responsibilities in my present role

	Employer	Position Held	From	To
Previous Employment History				

Education & Training Completed

Inter / Junior Certificate (or equivalent) completed	Yes	
	No	

Leaving Certificate (or equivalent) completed	Yes	
	No	

Post-Leaving Certificate /Third Level Education:
(Include Degrees / Diplomas / Certificates/ Trade Certificates etc.)

Award	College/University	Awarding Body	NFQ Level	Year

Professional Body Membership	Level	Year

Additional Training/Continuous Professional Development
(Please include all types of training: in-house, online courses/modules, workshops, evening courses, part-time courses etc)

Course Title	Duration	Accrediting Body	Certification	Motivation

How has this training benefited you in your job? Please be as specific as possible.

Additional comments

Career & Learning Progression Goals

In the next 12 months do you plan to:	Y	N	If yes please specify
Stay in current post			
Seek promotion / progression			
Seek opportunity to change role			
Other – specify:			

What will you need to achieve your 1 year career plan?	Y	N	If yes please specify
Additional transferable skills.			
Additional discipline skills			
Additional academic qualification(s)			
Training courses: (Internal or external)			
Additional workplace experience			
Other - specify:			

What post do you hope to hold 5 years from now?	Y	N	If yes please specify
Same as now			
Higher level			
Transfer into a new post			
Transfer into a related post			
Other – specify:			

What will you need to achieve your 5 year career plan?	Y	N	If yes please specify
Additional transferable skills.			
Additional discipline skills			
Additional academic qualification(s)			
Training courses: (Internal or external)			
Additional workplace experience			
Other – specify:			

Transferable Skills / Competences

Please indicate with a tick (✓) your current proficiency level for each of the following skills on a scale of 1 to 5, where 1 is limited proficiency and 5 is a high level of proficiency. Also please indicate your desired proficiency level for each of these skills.

Skills	Current proficiency level						Desired proficiency level				
	Limited				High		Limited				High
	1	2	3	4	5		1	2	3	4	5
Communication											
Presentation											
Creativity											
IT											
Leadership											
Managerial											
Negotiation											
Numeracy											
Conflict Resolution											
Problem-solving											
Report writing											
Team work											
Time management											
Stress Management											

If there are any other transferable skills relevant to you that you have or desire to enhance please add in the blank cell provided and indicate your current and desired proficiency levels.

Skills	Current proficiency level						Desired proficiency level				
	Limited				High		Limited				High
	1	2	3	4	5		1	2	3	4	5

Discipline Specific Skills - Business Knowledge

Please indicate with a tick (✓) your current knowledge level for each of the following on a scale of 1 to 5, where 1 is no knowledge and 5 is advanced knowledge. Also please indicate your desired proficiency level for each of these skills.

Skills	Current proficiency level						Desired proficiency level				
	None				Advanced		None				Advanced
	1	**2**	**3**	**4**	**5**		**1**	**2**	**3**	**4**	**5**
Management Accounting											
Law											
Business planning											
Economics											
Consumer behaviour											
Financial accounting											
Government and policy											
Management											
Marketing											
Information systems											
Taxation											

If there are any other areas of Business relevant to you that you have or desire to enhance please add in the blank cell provided and indicate your current and desired knowledge levels.

Skills	Current proficiency level						Desired proficiency level				
	Limited				High		Limited				High
	1	**2**	**3**	**4**	**5**		**1**	**2**	**3**	**4**	**5**

Business Specific Skills - Recognition of Knowledge

Please specify if you current knowledge level is recognised by a qualification or not.
(Please tick (✓) the appropriate box).

Business Knowledge	Recognised	Not recognised
Management Accounting		
Law		
Business planning		
Economics		
Consumer behaviour		
Financial accounting		
Government and Policy		
Management		
Marketing		
Information systems		
Taxation		

If there are any other areas of Business relevant to you that you have or desire to enhance please add in the blank cell provided and indicate your current and desired knowledge levels.

Business Knowledge	Recognised	Not recognised

Future Directions

From the previous pages in your opinion should you:

Seek formal awards or qualifications and academic progression?

Seek recognition for learning acquired informally in the workplace?

Seek additional workplace relevant skills?

Seek career guidance assistance in setting career goals?

Additional comments

* The above sample ILP relates to a business discipline. ILPs are available for various other disciplines.

Appendix B

Partnership Questionnaire

General Information

1 Organisation name?
2 Type of business and number of employees?
3 Which Higher Education Institution are you partnered with?
4 Contact name(s) for workplace partnership?
5 Which academic departments do you interact with for this partnership?
6 When was this partnership established?
7 Who has prime responsibility for the partnership?
8 What stage of development is your partnership (on the relationship continuum)?

Continuous Professional Development (CPD) Activities

9 How are CPD requirements of your staff identified and managed?
10 How are staff training needs addressed?
11 Has your workplace approached the higher education institute (HEI) to source training/development expertise?
12 Have your staff attended part-time or CPD programmes in the HEI?
13 Have HEI staff delivered programs within your workplace?
14 Have the HEI developed tailored programmes for your workplace?
15 Are staff supported while taking programmes in the HEI?
16 Are individual learning plans used as part of CPD process, if so who is responsible for facilitating this process?
17 Is training tailored to the needs of staff as identified through individual learning plans?

Work-based Learning Activities

18 What kinds of methods are used to support staff CPD in the workplace e.g. workshops, projects, task-based or supervised activities?
19 Do staff undertake distance/Web-based learning modules from external providers e.g. HEI?
20 Are work-based learning activities undertaken individually, as part of a group, or with a supervisor/mentor?
21 Is learning supported through accredited courses?
22 Are staff aware of RPL routes to HEI courses?
23 Has your organisation worked with the higher education institute on the recognition/delivery/assessment of workplace learning?

Workplace and HEI Interactions

24 Does your organisation hire graduates from the HEI?
25 Does your organisation participate in career fairs or open days?
26 Does your organisation take students on work placements from the higher education institute?
27 Does any staff member act as course advisor or review panel member for the HEI?
28 Does any staff member act as an external examiner or provide guest lectures, or present seminars?

Research

29 Has your organisation sponsored undergraduate projects in the HEI?
30 Does any staff member participate in research demonstrations, or attend research open days?
31 Does your organisation engage in a research partnership?
32 Does your organisation hire postgraduates?
33 Does any staff member engage in joint research with HEI students?

Values/Benefits of partnership

34 What are the benefits of this partnership to the learner?
35 What are the benefits of this partnership to your organisation?
36 What value does your involvement in this partnership add to the HEI?
37 Does your organisation have partnerships with other HEIs?
38 If you are involved with other HEI partnerships, how does it compare?

Future Directions

39 Do you envisage further growth of this partnership?
40 What plans have you for future development of this partnership?
41 Where is your partnership currently on the partnership continuum?
(See Appendix C)

Individual Learning Plans

42 Are individual learning plans developed and used in your organisation?
43 If yes – are they used for all employees?
44 Who is involved in the individual learning plans process?
45 Are individual learning plans aligned with your organisation's goals as well as with the individual's career plans?
46 What form does the individual learning plan take, e.g., paper based, or online templates?
47 Does your organisation use an e-portfolio system?
48 If yes, which one?
49 Would your organisation be willing to assist the EiE project team in developing/piloting individual learning plan forms?

Current Education and Training Provision

50 Who provides education and training in your organisation?
51 Do you employ university staff?
52 Do you employ staff from institutes of technology?
53 Do you engage with corporate training?
54 Do you employ private training providers?
55 Do you develop training programmes in-house?
56 Other

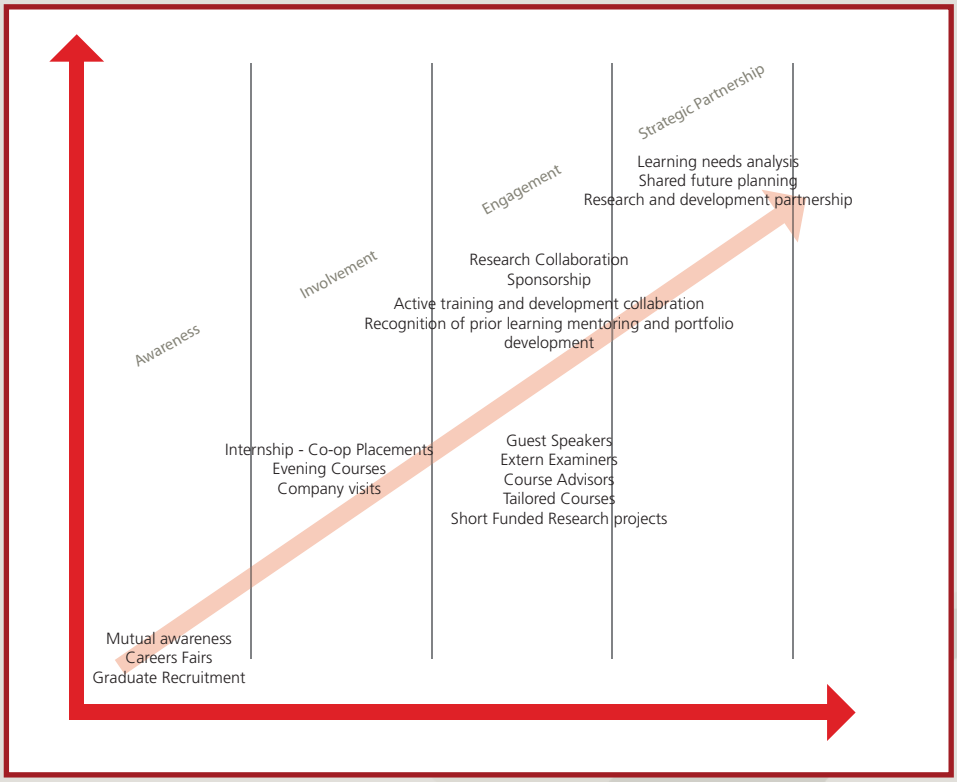
Criteria for choosing course and provider
(Rate 1 to 5 – 1 most important)

57 Cost
58 Duration and time commitment
59 Convenience and location
60 Direct relevance
61 Customised provision
62 Staff motivation
63 Delivery method format e.g. online
64 Credit earning against National Framework of Qualifications

What is the most current education or training need in your workplace?

65 Technological skills
66 Generic transferrable skills – communications, presentations skills, conflict resolution etc.
67 Environmental issues
68 Language skills
69 Management training - including finance management
70 Other

Partnership Continuum



Appendix D

National Framework of Qualifications

The National Qualifications Authority of Ireland (NQAI) was established in 2001 with the principal aims of establishing and maintaining a National Framework of Qualifications (NFQ) and promoting and facilitating access, transfer and progression. The outline framework of qualifications is usually seen in the form of the 'fan' diagram shown below in Figure 1.

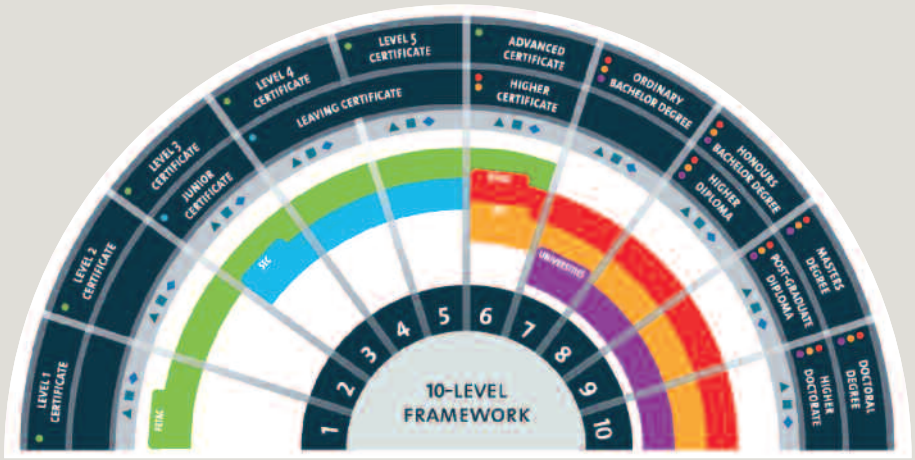


Figure 1 National Framework of Qualifications

Appendix E

List of Acronyms

ACCS	Accumulation of Credits and Certification of Subjects
APL	Accreditation of Prior Learning
CAO	Central Applications Office
CIPD	Chartered Institute of Personnel and Development
CSO	Central Statistics Office
FETAC	Further Education and Training Awards Council
HEA	Higher Education Authority
HEI	Higher Education Institutes
HETAC	Higher Education and Training Awards Council
HSE	Health Service Executive
ILP	Individual Learning Plan
LMS	Learning Management System
NFQ	National Framework of Qualifications
NQAI	National Qualifications Authority of Ireland
OECD	Organisation for Economic Cooperation and Development
PDP	Personal Development Plan
PMDS	Performance Management Development System
SIF	Strategic Innovation Fund
SME	Small to Medium-sized Enterprise
TCH	Thomas Crosbie Holdings

Appendix F

Working Group Membership

Chairperson	Organisation
Dr Jen Harvey	Dublin Institute of Technology

Representative

Mr Kieran Doyle	Athlone Institute of Technology
Dr Marian Fitzgibbon	Athlone Institute of Technology
Dr Margaret Linehan	Cork Institute of Technology
Ms Audrey Jennings	Dublin Institute of Technology
Mr Anton Barrett	Dundalk Institute of Technology
Mr John Andy Bonar	Letterkenny Institute of Technology
Mr Oran Doherty	Letterkenny Institute of Technology
Mr Frank Carter	Sligo Institute of Technology
Dr Mary McCarthy	University College Cork
Ms Elaine Cahill	University College Cork

Overall Project Coordinator

Ms Irene Sheridan	Cork Institute of Technology

Project Administrators

Ms Helen Flynn	Cork Institute of Technology
Ms Vera Barrett	Cork Institute of Technology


education
in employment