

Customised Learning Development

- An Exploration of Practice

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and John P Murphy



The REAP Project is a Strategic Innovation Fund Project

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Foreword



The collaborative development of targeted specialist courses to meet specific industry needs was a significant aim of the SIF-funded Roadmap for Employment-Academic Partnerships (REAP) project. In order to support the development of flexible, innovative and responsive solutions, this work has explored a number of examples of practice throughout the project consortium. As the REAP project is focused on the employer as a partner in the learning design and delivery stages, the emphasis is on courses which have been tailored or customised for a particular student group in response to an existing or emerging learning need.

The courses presented in this report have been chosen to illustrate the range and extent of partnerships through which courses are developed and they represent just a small portion of the workplace-relevant learning provision of the partner institutions. By exploring these courses and the processes through which they were developed, an outline process flow has been constructed which considers all of the major stages encountered in these partnership structures.

The REAP project team in conjunction with the academic and industry partners have further explored the critical success factors of each instance of customised learning and the roles of each of the major stakeholders in order to develop an outline guide to support new developments.

A handwritten signature in black ink that reads "Michael Delaney." The signature is written in a cursive style and is underlined with a long horizontal stroke.

Michael Delaney,
Vice President for Development,
Cork Institute of Technology.

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1. Introduction

Background and Context

The development of a world-class base of skills has become the key driver of economic growth in the developed world. There is a recognition that future competitive advantages will only emerge through enhancement of workplace skills. Ireland, in particular, is experiencing a significant economic downturn allied to the competitive challenges posed by more open markets.

International and intense competition and technological developments, which are enabling global trading are placing increased pressure for competitiveness and productivity on enterprises. In this kind of climate 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 of markets in Eastern Europe and Asia (especially China and India), globalisation presents both opportunities and challenges.

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 employer's perspective, the focus is on workforce (or professional) development – the upskilling and reskilling of an organisation's employees at a higher level. 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 more competent at managing 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 learning activities based in and around the workplace should be considered.

Higher Education Institutions (HEIs) are expected to be responsive to the needs of the economy and of the labour market, while at the same time affording citizens the right to appropriate levels of education to sustain economies in stable societies. Langworthy and Turner (2003) describe the University role within a complex process requiring forecasting of emerging workplace skills needs and a trend towards lifelong learning in a model of engaged scholarship. The growing interest in the interface between the higher education sector 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 distinct enterprise and labour market focus.

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 for the economy to respond more rapidly to changing skill needs, when compared to 'campus-based learning'. Generally, 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.

The Irish Government currently funds full-time education up to third level, and training primarily aimed at the lower skilled. 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.

Comparisons of education/training of adults show that Ireland lags behind many countries and, in particular, is considerably behind the target of 12.5% of adults engaged in lifelong learning set under the Lisbon Strategy

for Growth and Jobs by the EU in 2000. Lifelong learning is essential for the development of 'human capital', which, in turn, is inextricably linked to personal, social, and economic development. This process of continuing development of the workforce will promote lifelong employability in a context where a 'job for life' is no longer common.

Workforce Learning Needs

Quintini (2011) points to the importance of work-related education and training to alleviate skill mismatch, where it allows the under skilled worker to acquire the competencies they lack and the skilled worker to combat skill obsolescence. In terms of determining the type of education and training sought or desired Toner (2011) asserts that

Employers typically want firm-specific short duration training, whereas employees want skills that are recognised, transferable and provide a decent wage in the external labour market.

Acknowledging this tension between the expectations of the employer and the employee in terms of motivation, Hansson (2008) reports significant benefits for both associated with education and training with an estimated 20-50% of the benefits accrued by the employee with the remainder of the productivity effects going to the employer.

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

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

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

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

Forfás (2007a) also suggests that:

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

Several themes emerge from the above reports:

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

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

Organisations and enterprises seeking to develop their knowledge base and to engage with HEIs, 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. Developments must be informed by an understanding of the sectoral and regional current and emerging learning needs. 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.

In its statement on education and training the National Competitiveness Council (NCC) 2009 clearly identifies the role of HEIs as key drivers of national and regional competitiveness and growth. The need for HEIs to respond more flexibly to the learning and development needs of the business community is identified. Enhanced employability possibilities, and improved personal development opportunities arise through partnership arrangements between HEIs and employers.

The NCC report notes that as employers respond to ever changing markets, the possibility of stable career roles is far less likely with individuals experiencing frequent change in roles during their working lives. This indicates a shorter skills shelf life and an increased need for up skilling and reskilling of the workforce. Increasingly, therefore, the Irish higher education system will be called upon to facilitate the education and development needs of those already in the workforce.

In addressing the difficulties anticipated by the HEIs in responding to the educational needs of those in the workforce, the NCC highlights:

- **Relevance of courses:** greater collaboration is required between education and training providers, employers and the students themselves;
- **Timing of courses:** the provision of workplace based training which is fitted around working hours needs to be more actively promoted;
- **Costs:** addressing the anomaly whereby full-time students can access education without tuition fees while part-time students must pay is seen as important in broadening access;
- **Access to information:** there is a need for a form of adult career guidance whereby learners can access information about courses and programmes relevant to their desired employment outcomes.

The research findings presented by Linehan (2008) demonstrate that higher education systems are being challenged in relation to the learning provision which they offer to a range of part-time learners. This research found that, of 433 different courses considered, over 254 were developed and offered based on a need identified by the higher education provider alone. Over 220 were designed by the HEIs alone and 366 are delivered on campus while only 160 consider the recognition of prior experiential learning at entry. This paints a picture of a Higher Education system which is somewhat inflexible and out of touch with the employers/learners. It contrasts with isolated agile and flexible solutions that are increasingly being developed in response to specific learning needs as part of close working relationships between HEIs and enterprises.

Developing a real partnership interaction between organisations requires effort and has the potential to repay those efforts. The REAP project is based in the concept that there is a continuum of partnership interventions that are possible and which provide benefits for both parties.

Research by Boud and Solomon (2001) suggests six key characteristics for successful education-industry partnerships:

- The partnership must foster learning;
- Learners should be employed by the external organisation;
- The programme should derive from the needs of the workplace and the learner;
- Learners should engage in a process of recognition of current competencies prior to negotiation of the programme of study;
- A significant element of the programme should be through workplace projects;
- The higher education provider should assess the learning outcomes against a trans-disciplinary framework of standards and levels;
- This points to a number of key factors in successful relationships including work-based learning, recognition of prior learning, and negotiation.

Not surprisingly, these characteristics feature strongly in the range of different learning interactions which are explored and presented in the set of case studies in this report. The cases are chosen to represent a range of disciplines, levels, credits, and employment sectors which are served by the partnership learning interaction. The current economic downturn underscores the need for everyone, particularly those with low skill levels and those in vulnerable sectors, to upgrade their skills to maintain employability. The aim is to significantly improve access for unemployed persons to job search, training and education, community and employment programmes, and to maximise opportunities for up-skilling and re-skilling so that people will be better placed to avail of new job opportunities where they become available (Ireland, 2008: 54). In order to facilitate the required up-skilling and re-skilling, a particular focus needs to be placed on efforts to increase participation in lifelong learning by providing opportunities for education and training. The Irish Government recognises the importance of lifelong learning, and its publication of Building Ireland's Smart Economy document (Ireland, 2008) indicated that a number of initiatives are required to support lifelong learning, for example:

- Restructuring the higher education system will be a priority with a new Higher Education Strategy to enhance system-wide performance;
- HEIs will be supported in pursuing new organisational mergers and alliances that can advance performance through more effective concentration of expertise and investment;
- Under the Strategic Innovation Fund, priority will be given to flexible learning initiatives that can be targeted at up-skilling people in the workforce (Ireland, 2008: 13).

The NCC (2009) also underlines that investment in human capital is critical if Ireland is to maintain a healthy and viable economy in the future. The recognition of prior learning affords opportunities to those already in the workforce to engage in lifelong learning in a meaningful sense. One of the most significant underlying elements of a context sensitive learning provision is the requirement that it build on, and not repeat, existing learning. This is most commonly achieved through the recognition of prior learning.

Recognition of Prior Learning (RPL)

In addressing the role that recognition of prior learning can play in facilitating and enabling up skilling, Úna Halligan, Chairperson of the Expert Group on Future Skills Needs states:

RPL is about giving value to the skills and competences people have gained, whether acquired through formal or informal learning. RPL can be used by people to gain access to qualifications where they do not meet the entry criteria on the basis of formal qualifications alone, to gain exemptions from certain modules of qualifications and, in some instances, to gain full awards.

RPL is important in ensuring that education and training resources are utilised effectively, particularly in a time of scarce resources. For individuals, RPL can ensure that learners only receive the education and training that they need and avoid duplication of learning. RPL can help employers to tailor training more effectively and better match employees to tasks. More widely, RPL can play a role in the upskilling objectives of the National Skills Strategy, by ensuring that individuals engage in upskilling at the most appropriate level on the National Framework of Qualifications. In addition, from a labour market activation viewpoint, while many people that are currently unemployed may not have high levels of formal qualifications, they may have developed many skills through work and life experience, which can also be valued and recognised.

(EGFSN, 2011: 1)

Within the Irish education system the general principles for RPL have been set out by the National Qualification Authority of Ireland (NQAI) (2005). They include:

- The recognition of prior learning will give value to all learning no matter how that learning is achieved;
- Recognition of prior learning will be an inclusive approach to learning by the education and training providers and awarding bodies;
- Recognition of prior learning will provide opportunities for access transfer and progression and for the achievement of an award;
- Recognition of prior learning will provide opportunities for learning to participate on an active basis in society in general and within a workplace context.

In working to address the specific learning needs of individuals or enterprises higher education providers should endeavour to recognise and value prior learning. In a report based on practice development in RPL in Irish higher education Sheridan and Linehan (2009) stress the importance of the role that the employer can play in facilitating the recognition of prior learning and in working to support the employee-learner in the process. The employee's existing learning provides a context for the development of a learning plan or pathway which will ensure the opportunity to attain the desired learning and award. Recognising the workplace itself as an important location for learning, many learning pathways developed in partnership with employers will also include elements of work-based learning where some of the desired learning outcomes are planned and attained in a structured and supported way through the work itself.

Work-based Learning

A wide range of terms is used interchangeably for the concept of work-based learning, including: workplace learning, work-related learning, and vocational learning. This leads to some confusion and may undervalue 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 also led to 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).

Learning occurs in many contexts including work, involvement in social and community activities, or learning through life experience. In order to enable an individual to learn throughout life, value should be given to all these forms of learning regardless of source, how it is achieved, or when in life it is achieved. Lifelong learning, therefore, is about making use of personal competencies. Duvekot *et al.* (2007: 9) suggest that:

Everyone should be aware that people are always learning everywhere and, above all, not always in a conscious or self-chosen learning situation. The degree in which individuals and the knowledge society consciously build on this is still strongly underexposed and under-utilised. In the knowledge society, the focus should be on the individual learning process.

Work-based learning has the potential to contribute significantly to employability and situation-specific skills. Many organisations find that a combination of formal learning and contextualised work-based learning provide the optimum solution for their learning needs. As a planned and supported element of a formal award programme work-based learning provides a flexible and context-sensitive set of learning outcomes. Raelin (2008) suggests that there are three critical elements in the work-based learning process:

1. Learning is acquired in the midst of action and dedicated to the task;
2. Knowledge creation and utilisation are collective activities;
3. Learners demonstrate a learning-to-learn aptitude, which frees them to question underlying assumptions of practice.

Work-based learning differs from conventional learning as it requires a conscious reflection on actual experiences and develops the ability to translate and interpret between the practice domain and the theoretical domain. Gallacher and Reeve (2002) suggest that four concepts are regarded as particularly important to understanding work-based learning in higher education:

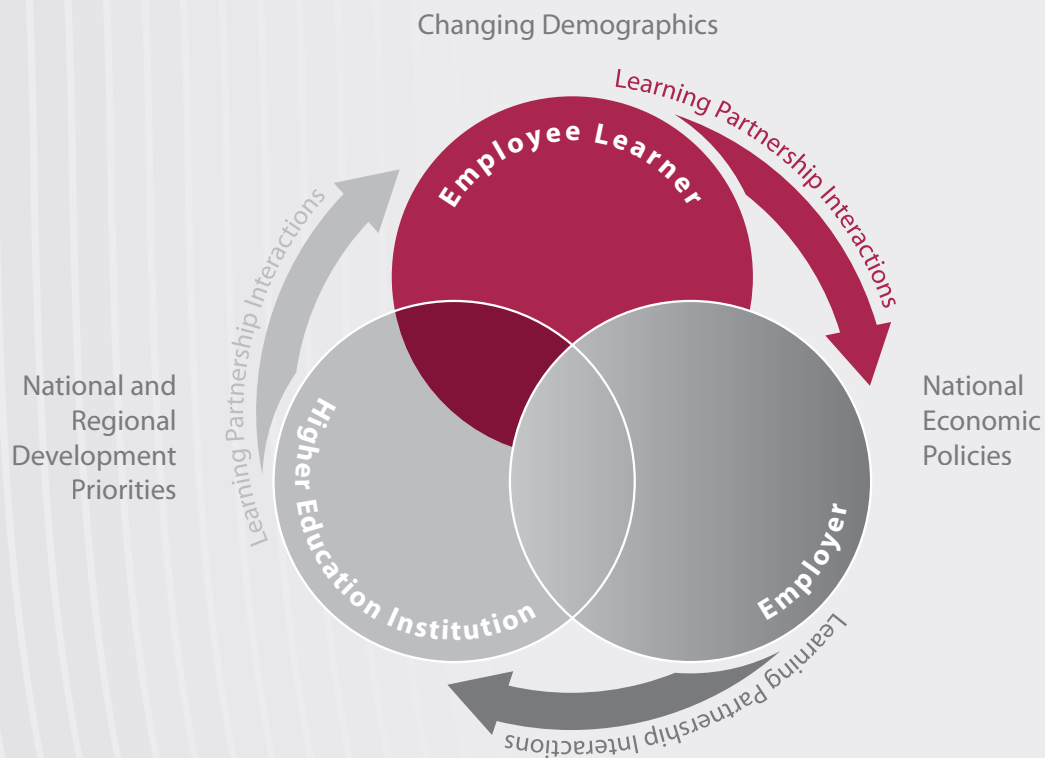
1. Partnership
2. Flexibility
3. Relevance
4. Accreditation

While these elements are a particular feature of the cases presented later in this report it is evident that the partnership between the employer, enterprise or sector and the HEI is the most significant element in the development of customised learning solutions.

Roadmap for Employment-Academic Partnerships (REAP) project

The importance of the interaction between the academic and the enterprise community has been underlined in many recent government publications. The means of encouraging partnership development and overcoming barriers through exploration of specific engagement activities is part of the aims and objectives of the REAP project.

The REAP project is a Strategic Innovation Fund Cycle 2 collaborative project aimed at developing and validating a model and roadmap for partnership and engagement between HEIs and employers and enterprises. This partnership approach is seen as especially relevant in the context of a dynamically changing economic and demographic environment.



The partnership concept is extended beyond that of the learning partnership. By exploring existing examples of good practice throughout the project consortium and identifying enablers and barriers, a toolkit will be developed to facilitate engagement across the spectrum of potential partnership activities. The impact will be twofold - both HEIs and enterprises will be encouraged to seek out opportunities to engage and to identify any barriers to engagement within their systems and processes. Through the REAP project, it is intended that enterprises will view HEIs as key service providers and strategic partners.

Within the range of partnership engagements the REAP work has mainly focused on five different types of interaction:

- Cooperative work placement;
- Specialist targeted course development to meet specific enterprise learning needs;
- Professional postgraduate pathways;
- Academics/researchers contributing within enterprises;
- Opportunities for professional employers/employees to contribute within the academic environment.

The findings to date have shown that successful and sustainable partnerships need “resources, relationships and realistic objectives”. The key HEI enablers include:

- Clear point of contact and good communication;
- Flexible and responsive administrative procedures and processes;
- Integration and valuing of partnership activities at the core of the institution.

The literature on partnership reports barriers in terms of perceived inaccessibility and inflexibility of the HEI in dealing with enterprise needs. However, the experience of successful partnerships, reviewed through the project, has provided ample evidence that these barriers can be overcome.

The exemplars presented in this report are evidence of successful partnership interactions within flexible and adaptive frameworks. These exemplars, along with explorations of the underlying systems and structures are used to develop a generalizable practice guide which is intended to further the development of specific customised learning solutions.

2. Partnerships and Practice

Introduction

In order to determine the stages in the development and implementation of customised learning solutions and to ascertain the factors that contribute to successful partnership interactions a number of specific programmes were analysed in detail. All of the REAP project partners were invited to submit courses for consideration and a small number of specific cases are presented here. These cases were selected to illustrate a broad range of level of learning, discipline, number of credits, and a variety of external partner. In all cases an effort is made to detail the challenges that were encountered and the difficulties presented by the HEI systems as these will present the most valuable learning opportunities.

The variety of cases presented is summarised in the following table:

Institution	Title	Discipline	Duration	NFQ Level	Credit
AIT	PG Dip/MA in Advanced Social Care Practice	Humanities	Varies	9	60
CIT	Lean Six Sigma	Engineering	8 days	7	5
CIT	BSc (Honours) in Nautical Science	Nautical Science	2 semester	8	60
DIT	ITAA Professional Higher Certificate (CPD)	Tourism	1 semester	6	5
DIT	MA in Higher Education: Legal Professional Education and Skills	Education	2 years part-time	9	90
ITTD	Diploma in Enterprise Innovation	Business	2 semester	8	60
NUIG	Commercialisation	Business Information Systems	8 days	9	10
NUIG	Laser Safety in the Workplace	Physics	Varies	NA	NA
UCC	Diploma in Credit Union Studies	Business	1 or 2 years part-time	7	60
WIT	Enterprise and Innovation in Education	Education	1 semester	9	10
WIT	BSc (Honours) in Airline Transport Operations	Business	2 years part-time	8	180

Postgraduate Diploma/MA in Advanced Social Care Practice

Institution:	Athlone Institute of Technology (AIT)
Title:	Postgraduate Diploma/MA in Advanced Social Care Practice
Discipline:	Humanities
Duration:	Varies
Level:	NFQ Level 9 Credits: 60
Partners:	Five professional social care organisations including the Health Service Executive (HSE) and 221 placement agencies

Background

This is a REAP funded innovative academic course development process for postgraduate education, known as 'AIT Postgraduate Steps', that reconfigures the way in which AIT develops academic programmes. The process allows those working in a particular profession to prescribe both the modules offered on academic programmes, and the content of those modules, in order to meet the immediate needs of their profession. The process further allows learners the opportunity to select, from a suite of modules which the profession as a whole considers relevant, those modules that are relevant to their particular professional position. In the past year, the Department of Humanities has successfully applied this process to a multilevel Modular/Postgraduate Diploma/Master of Arts degree in Advanced Social Care.

The immediate aim was to narrow the gap between the needs of an industry or sector and the type of programme that an educational institution offers. The second aim was to provide educational opportunities to people who were excluded either through lifestyle or high programme costs.

AIT established a database of stakeholders in the social care profession who are to be surveyed bi-annually to identify evolving areas of the profession which require continuing professional development. AIT established strategic partnerships with five professional organisations, including the HSE, to provide these modules to their employees.

It is accessible as learners pay per module, classes are offered in the evening and at weekends, and assessments are aligned to the learner's work environment. Crucially, the process is transferable to other disciplines.

This whole course development process for an individual module is completed within a matter of months.

This 'bottom-up' approach to service delivery reflects a new commitment to an active partnership between AIT and industry. The aim is to improve the quality and relevance of learning, linking educational opportunities more closely to current professional needs of employers whilst taking account of individuals' needs at different stages in their working lives. The Postgraduate Diploma/MA in Advanced Social Care Practice is aimed at enhancing core competencies and reflects a growing trend towards learning as a lifelong process.

The Department of Humanities offers a minimum of two modules per academic year. By offering a part-time course, the Postgraduate Diploma/MA in Advanced Social Care Practice extends opportunities for participation in further training for professionals in employment who may not be able to attend a full-time programme.

There is a large target market within Social Care. From the Institute of Technology (IOT) sector alone there are over 1200 graduates per year in Social Care. There are also many related disciplines such as Nursing and Psychology in which members of the social care profession hold qualifications.

The Programme recognises the importance of a flexible mode of delivery offering a series of minor awards that a learner can take as required. Unlike other postgraduate courses which are completed within a specified timeframe, this modular programme of study enables students to complete the MA within their own chosen time frame.

A learner who enrolls has three potential avenues open to them as follows:

1. Completion of 1 module of 10 credits and receiving a minor award (Level 9);
2. Completion of 6 modules leading to an award of a Postgraduate Diploma in Advanced Social Care Practice;
3. Completion of 4 modules as well as the approved modules in "Research Methods" and "Dissertation" leading to a MA in Advanced Social Care Practice.

Since its inception, 32 students have enrolled on the programme - the highest number ever recorded for a postgraduate course offered by the Institute in its first year.

The first module of the Postgraduate Steps Programme ran in January 2010 (11 participants). Students chose to complete this first module to increase their specialisation in the discipline area and/or extend their expertise into an additional work area. The second module commenced in September 2010 and the third module started in January 2011. Additional modules are currently being designed.

Enablers

- A unique quality assurance process was designed to specifically ensure the academic integrity of the Postgraduate Steps Programme. It is working effectively and runs in tandem with the existing rigorous quality assurance processes already in place in AIT.
- Group work and case study techniques are encouraged to promote active learning. Work place learning provides the learner with the opportunity to apply theory, concepts and principles in practice. Projects and case studies provide the learner with an understanding of the practical application of theory in a cross-functional setting.
- Creation and validation of an original quality assurance process is a key milestone. The creation of responsive Social Care modules, the registration of students on these modules and industry buy-in are additional significant milestones in the delivery of this model of education.

Challenges

- The process is different from previous models of delivery in the Institute, it took almost a year of engagement with the quality processes in order to refine the proposal to the satisfaction of all stakeholders.

Benefits and Testimonials

- Learners attest that while this type of education delivery facilitates them to maintain their work/life balance, it also enables them to develop expertise in the areas they are working in, or hope to work in.
- This process of course development and the resulting programme are very cost effective and result in income for the Department.
- The Postgraduate Steps Programme bridges the traditional gap between academia and practice. Thereby, graduates are equipped to work to standards of best practice within the changing contours of Irish society.

Benefits to AIT

- This engagement informs other teaching outside the Postgraduate Steps Programme;
- Further collaborations have developed in areas such as work placements and research projects with new partners;
- Enhanced profile of Social Care programmes in AIT both regionally and nationally;
- In a social care context, the Department proposes to grow this programme through delivery by remote access.
- The transferability to disciplines in Science, Business and Engineering would allow for the development of a real “Smart Economy” workforce where graduates could acquire a new level of knowledge and skills in a timely fashion;
- The programme development process is reconfiguring the way in which academic programmes are developed to meet the needs of industry.

Benefits to Partners

- Assignments based in the workplace;
- Employees retention;
- Non funded employees applying for further learning on Programme;
- Enhanced motivation for learning.

Lean Six Sigma

Institution:	Cork Institute of Technology (CIT)
Title:	Lean Six Sigma
Discipline:	Engineering
Duration:	8 days attendance
Level:	NFQ Level 7 Credits: 5
Partner:	SR Technics Airfoil Services Ltd

Background

SR Technics Airfoil Services Ltd is located in Mahon Industrial Estate in Blackrock, Cork. The company is a heavy engineering works, specialising in the refurbishment of turbine blades and vanes on large commercial airline engines. It is a multinational company and employs approximately 80 staff at the facility in Mahon.

The **C**entre for **A**dvanced **M**anufacturing and **M**anagement **S**ystems (CAMMS) at CIT provides individuals and companies opportunities to study for and obtain professional qualifications in specific areas. It also provides research and consultancy services to a range of industries in the areas such as Plant Layout, Simulation, Project Management and Process Optimisation.

SR Technics has a management strategy committed to up-skilling and reskilling existing employees, mirroring the strategy of company headquarters in Zurich. The company had previously engaged in lean training for production teams and facilitators with CAMMS and identified Six Sigma training as the natural progression. The engagement also stemmed from the desire to secure the jobs in the Cork facility and increase the manufacturing efficiency in the Cork plant.

The ability of CAMMS to deliver courses which have both HETAC and American Society of Quality (ASQ) accreditation was an important factor in the decision of SR Technics to engage with CIT. CAMMS developed a one day 'yellow belt' six sigma course for all SR Technics staff. CAMMS was able to adapt an existing 'green belt' six sigma module to meet the particular requirements of the SR Technics workplace. Supports were available in the development and delivery of the programmes from the CIT Department of Mechanical, Biomedical & Manufacturing.

Specialist targeted courses by their nature may require flexibility in terms of delivery as they seek to satisfy the needs of workplaces. The 'yellow belt' was delivered on site in the SR Technics facility in Mahon. The 'green belt' course was delivered in CIT over a period of weeks for 8 contact days. Project hours, mainly at the company facility, were in addition to these time requirements. The 'green belt' attracted 5 ECTS credits at a Level 7.

The relationship succeeded due to mutual trust and goodwill developed over time. The development process required negotiation between, on the one hand, representatives from CIT including the CAMMS office, staff in CIT, an external trainer/mentor, and on the other hand, management in the local Mahon facility with the support of management in the Zurich office.

SR Technics did not require exclusivity of delivery and welcomed the involvement of 'external' learners which SR Technics saw as enhancing their employees' learning. In addition to this, SR Technics facilitated an external student to work on a SR Technics based project as part of the programme. This student successfully gained employment in SR Technics following the programme.

The course represented significant value for SR Technics particularly because of the European recognition of the HETAC accredited award. The participants were registered with CAMMS and the academic results were reviewed and approved at the module exam boards at semester end. Administratively and academically the course was dealt with in accordance with standard academic and quality procedures within CIT.

By the end of 2010, 80 staff of SR Technics had successfully completed the 'yellow belt' programme and 30 - 40 staff had qualified on the 'green belt' programme. CAMMS has also developed a follow on 'black belt' six sigma course which attracts 30 ECTS credits at Level 8 and is delivered over 20 days. A number of the successful 'green belt' participants have already embarked on this programme.

Enablers

- There was openness in terms of negotiation and communication regarding suggested course content which satisfied the needs of both parties.
- The commitment by SR Technics management both in Cork and in head office in Zurich to up-skilling the workforce in six sigma training.
- The previous successful course delivery by CAMMS with SR Technics enhanced the likelihood of additional successful engagement.
- SR Technics was aware of the direct point of contact within CIT in CAMMS.
- The immediate availability of CIT staff when required for mentoring on projects within SR Technics added to the ability to respond to the needs of the workplace partner.
- Dual HETAC and ASQ accreditation for the course.
- SR Technics had clear objectives for the engagement.
- Realistic expectations on both sides.
- Flexibility in course design, development, and delivery was exceptional.

Challenges

The initial interaction between CAMMS and SR Technics began in 2005 with production teams and facilitators on lean training. These were the original courses which incorporated flexibility in terms of meeting the needs of SR Technics. Any of the major challenges with regard to timetabling, content and cost were resolved in those earlier engagements. The following outlines some of the minor challenges which arose in this CAMMS/SR Technics engagement:

- The timing of the programme in terms of the days of the week it was delivered on to facilitate shift workers and general company business requirements. The absence of employees from the workplace for a total of 8 working days or 56 hours was not an issue.
- The physical delivery of the module was located in CIT, with projects being completed in SR Technics. The yellow belt training to the majority of staff was completed at their facility in Mahon.

Benefits

The critical learning and benefits CAMMS gained from the engagement:

- The value in having a unit dedicated to liaising with industry in programme design, development, delivery, and accreditation.
- A prompt and timely response by a HEI to the needs of a workplace partner to avoid frustration and mistrust.
- The importance of good communication and awareness.

The critical learning and benefits SR Technics gained from the engagement:

- By year end 2010, 80 staff had successfully completed the 'yellow belt' programme;
- 30 – 40 learners had successfully completed the 'green belt' programme;
- A number of successful 'green belt' participants embarked on a Level 8 'black belt' Lean Six Sigma course.

BSc (Honours) in Nautical Science

Institution:	Cork Institute of Technology (CIT)
Title:	BSc (Honours) in Nautical Science
Discipline:	Nautical Science
Duration:	2 semesters
Level:	NFQ Level 8
Partner:	Irish Naval Service

Credits: 60

Background

The Irish Naval Service (INS) is based on Hawbowline Island, Ringaskiddy, Co. Cork. Its principal responsibilities centre on the maritime defence requirements of the Irish State.

The National Maritime College of Ireland (NMCI) is a constituent college of CIT and is located in Ringaskiddy, Co Cork.

NMCI established a Bachelor of Science (Honours) in Nautical Science course, in partnership with the INS, which met the requirements of both the merchant shipping companies and the INS. The INS had previous experience of courses accredited in NMCI, for example BSc in Nautical Science and the BEng in Marine and Plant Technology.

The programme is delivered by a combination of CIT staff and Naval officers based in the NMCI. Four modules included in the programme are specific to the needs of the INS and are compulsory for Naval cadets and officers. These equate to 20 credits of the 60 credit programme. These modules are completed while the learners are on board ships at sea. The dissertation module of 10 credits is also supported by a workplace mentor in collaboration with a member of staff in NMCI. The topic of the dissertation module is chosen by the INS to ensure its relevance to the workplace.

Naval officers who assist in supporting the learner and assessment of learning material completed several workshops in mentoring and assessment of work based learning with CIT staff. This ensured these officers were competent and familiar with the appropriate academic approach to be adopted. The learners also attend workshops on portfolio development and critical reflection to familiarise themselves with the appropriate processes and the boundaries for the successful completion of the work-based learning elements of the programme.

The process required substantial negotiation between the representatives from CIT including the Registrar's office, management and staff of NMCI, and the Naval Officer Training School of the INS. By 2011, 18 learners had successfully completed the BSc (Honours) in Nautical Science and 8 further learners were undertaking the programme.

Enablers

- A track record of successful prior interactions between the NMCI and INS, extending over a period of more than 30 years.
- The commitment of the staff of both NMCI and the INS to a successful outcome.

- The system of modular accumulation of credits which was introduced in CIT/NMCI in recent years, with emphasis on achievement of learning outcomes also facilitated the development of these novel approaches.
- The desire of the INS to achieve formal validation for work based learning.
- The flexibility in course design, development and delivery exhibited by both organisations, NMCI and the INS, enabled the development of workable solutions in terms of assessment and supervision whilst maintaining academic standards.
- The openness in terms of negotiation and communication regarding suggested course content which satisfied the needs of both parties.
- The willingness to try something different in terms of content, delivery, assessment, and tailoring modules for the INS workplace which resulted in the creation of two parallel streams within a single programme.
- The willingness of the INS to commit resources to mentoring and supporting the learners.
- The culture of the INS which meant that once a decision had been made, there was full commitment by all staff and learners to the process.

Challenges

- The diversity of organisation culture. This cultural diversity meant that communication and course development was initially difficult.
- Some resistance to change was experienced.
- The modules specific to the INS which were incorporated into the BSc in Nautical Science also required flexibility in terms of delivery and assessment.
- The principles of validity, reliability and authenticity in the assessment of the work-based assignments were agreed.
- Securing finance for the course was a challenge.
- Systems need to be in place to facilitate flexibility in terms of delivery and assessment. Strict protocols are required between the HEI and the employer.
- The processes of assessment and allocation of marks and the required standards should be clearly understood and agreed prior to any delivery of modules.
- Extra effort was made into ensuring those on work-based learning modules, particularly those supervised and assessed by INS tutors, were not remote from the NMCI systems and structures.

Benefits

- The programme met the academic and professional requirements necessary to qualify and educate Naval Officers to fulfill their duties at sea.
- The NMCI and the Department of Transport have aligned the academic learning associated with the Professional Licence to practice with elements of this award.
- Resulting from this process, Managerial staff developed the necessary skills to envisage, participate in design and implementation of a specialist academic programme.
- A Memorandum of Understanding is now in place to ensure standard operating procedures for the smooth operation of the programme within the partnership arrangement.
- The partnership has contributed to the exploration of other joint academic programmes.

ITAA Travel Professional Higher Certificate

Institution:	Dublin Institute of Technology (DIT)	
Title:	ITAA Professional Higher Certificate (CPD)	
Discipline:	Tourism	
Duration:	1 semesters	
Level:	NFQ Level 6	Credits: 5
Partner:	Irish Travel Agents Association	

Background

The Irish Travel Agents Association (ITAA) is a representative body whose members include specialist tour operators, on-line travel agents and travel agencies in every county in Ireland. Membership is open to businesses that hold a Travel Agent's and/or Tour Operator's licence in Ireland from the Commission for Aviation Regulation. The ITAA wished to establish opportunities for its members to receive accredited training from an Irish institution – beginning with the establishment of a short Continuing Professional Development (CPD) programme with a view to expanding the relationship up to Degree level.

The development of this new programme in association with the School of Hospitality Management and Tourism at the DIT brought together a number of short one day seminars/courses which the Association previously had provided as un-accredited on-the-job training for its membership. This restructuring into a formally accredited module attracting European Credit Transfer System (ECTS) credits provided the impetus for a formalised relationship with the School, and also provided a much more desirable means of up-skilling ITAA membership, with the full support of Skillnets who encouraged this initiative from the outset.

The first step in this process was official recognition of the ITAA as an accredited provider of DIT programmes, through the official accreditation process defined by the Quality Assurance procedures of the Institute.

Having achieved formal recognition, the ITAA as a provider of DIT accredited training, in association with the School of Hospitality Management and Tourism, developed the first programme/module to be delivered via this arrangement. This was to be a single 12 week module, delivered externally, to professional travel personnel through a blended teaching format.

The module content included a range of themes/skills relevant to the sector including: Marketing Communications, Information Technology, Law, Time Management, and a number of 'product' related units. Delivery was by 6 full-day seminar-style sessions supported by on-line tools such as email, discussion boards, personal blogs/portfolios and the uploading of all class-based materials in advance. The module was validated as a CPD Module through the procedures of the DIT – being approved firstly at School Level, then Faculty Board, and finally being approved by Academic Council. Students are registered as fully recognised part-time students in DIT. As the students on this module are primarily full-time workers in the travel industry, delivery of material, and assessment have been considered in detail, to allow for successful completion by participants.

Enablers and Success Factors

- The delivery of the programme in 'block' format, well organised and planned in advance, means unexpected or extended absences of staff for training is not necessary.

- The availability of online learning tools via DIT WebCourses, supported by the Learning, Teaching and Technology Team at the Institute was a further successful element of the module.
- The online blog software which encouraged students to interact on a regular basis with each other, with their tutors, and with the material they learned. Class materials were fully available in advance to all students on the programme.
- The organic development of a relationship between the School of Hospitality Management and Tourism at the DIT and the ITAA.
- The open and flexible dialogue between the two organisations
- The incremental way in which the relationship has developed in a multi-stranded nature. The relationship began with low levels of communication – initially the placement of DIT students with the ITAA for internship purposes on an annual basis.
- Flexibility in course design, delivery mechanisms and assessment within the DIT quality assurance and accreditation process.
- The system of modular accumulation of credits which has been operated in the DIT for a number of years.
- The availability of Skillnets funding.

Challenges

- The official recognition of the ITAA as an accredited provider of DIT programmes.
- The need to ensure that the ITAA could provide sufficient evidence to satisfy the rigours of DIT validation process.
- The credentials of those who would be delivering modules, the quality assurance procedures that would be followed (and ensuring these mapped onto the DIT systems), the teaching facilities, support services, entry requirements into programmes etc.
- DIT needed to assure itself the ITAA offered an ethos and environment for learning and teaching appropriate to higher education and to the particular proposed collaboration.
- Programme design to provide the up-skilling and training required due to increasing pressures on the sector in light of technological changes and the recent economic global and national downturn.
- Ensuring flexibility in delivery and assessment to allow for successful completion by participants and to capture the experience of the participants.

Benefits

- To date almost 30 students have graduated with a Travel Professionals Higher Certificate CPD award.
- This Level 6 module offers an accessible relevant route to further education.
- ITAA and DIT supported and encouraged by Skillnets, have begun the process of developing a 3 year executive degree programme for delivery to the travel and tourism industry.
- In recent months, the relationship between the School and the ITAA has evolved to a position whereby the ITAA has signed up to the DIT Institutional Corporate Partnership Programme.

MA in Higher Education: Professional Legal Education and Skills

Institution:	Dublin Institute of Technology (DIT)
Title:	MA in Higher Education: Professional Legal Education and Skills
Discipline:	Education
Duration:	2 years part-time
Level:	NFQ Level 9
Partner:	Law Society of Ireland
	Credits: 90

Background

The Law Society is the educational, representative and regulatory body of the solicitors' profession in Ireland and exercises statutory functions under the Solicitors Acts 1954 to 2008 in relation to the education, admission, enrolment, discipline and regulation of the solicitors' profession. With 12,000 solicitor members, to whom it also provides services and support, it is governed by an elected Council, which is supported by a full-time executive led by the Director General.

To support training needs, the Law Society operates a Professional Training Network, which includes the Law Society Skillnet and the Law Society Finuas Network. It is the only network in Ireland that meets the diverse and challenging lifelong learning needs of the public and private solicitor enterprise sector and has a membership of 2,231 member firms. In 2010, the network trained 3,082 trainees and delivered 4,765 training days through its suite of over 120 training programmes.

In 2009, the Law Society contacted DIT to discuss the possibility of the Institute providing a targeted short course in learning and teaching for members who were involved in teaching on their professional development courses. As a result, it was agreed to pilot an adaptation of an existing DIT 5 ECTS short programme in learning and teaching with the inclusion of employability skills and legal education related issues. The pilot programme proved particularly successful and precipitated further discussions around the possibility of collaboratively designing a master level programme in this area.

The new MA in Higher Education: Professional Legal Education and Skills is based on an existing DIT MA in Third Level Learning and Teaching but incorporates modifications to reflect Law Society professional development requirements. In order to fine tune these key elements and ensure a close fit between the Masters programme objectives, learning outcomes and assessment, staff from the DIT Learning Teaching and Technology Centre (LTTTC) worked closely with the Law Society on finalising the programme including preparing documentation for programme validation through DIT's quality assurance process.

The result was a new 90 ECTS part-time taught MA programme with learning outcomes set at Level 9 of the National Framework of Qualifications (NFQ) that links directly from the 5 ECTS short course in learning and teaching. Incorporating appropriate elements of theory, practice and research activity the Masters comprises six core modules to be completed prior to a final research project and thesis.

Successful completion of the 5 ECTS short course is a pre-requisite for entry onto the MA in Higher Education: Professional Legal Education and Skills. In addition, participants are required to successfully complete some key profession specific elements.

While some participants were already familiar with aspects of practitioner research and may already have applied the methods of participant research or action research to their own work or practice, the programme aimed to broaden the researcher role to include a critical understanding of the issues in the context of both practice and policy in higher education, professional legal education and skills. This first intake of Law Society participants onto the new MA was in September 2010.

The learning, teaching and assessment strategy on the MA in Higher Education: Professional Legal Education and Skills is designed to ensure a quality learning experience for participants that is enriching, effective and enjoyable. The curriculum was designed so that the learning activities and assessment tasks are aligned with the intended learning outcomes. There is an emphasis on a shift towards methods that encourage the progressive development of independent learners, with attainment standards for personal and transferable skills as well as subject knowledge.

Enablers

- The programme has been tailored to requirements of the Law Society;
- A flexible approach to delivery which is constantly under review;
- A sense of shared ownership of the programme;
- A positive relationship with the Law Society facilitating effective programme development and delivery;
- The use of shared faculties in DIT and the Law Society;
- The opportunity for students on DIT MSc in E-learning to share modules with MA in Higher Education and MA in Higher Education: Professional Legal Education and Skills thus bringing together individuals from academic, legal and industry backgrounds;
- The support of professional learning by linking aspects of the programme to professional practice.

Challenges

- In the current economic climate, students have found it difficult to take time off and consequently, it has now been agreed that for future deliveries of the programme, modules will be scheduled for evenings and weekends to facilitate working professionals.
- An additional consequence of the economic downturn has been a reduction in numbers applying for the programme in recent times. This poses a particular challenge in that the sustainability of the programme is called into question.
- Many of the applicants have a Level 7 qualification in addition to professional exams. In these cases, prospective students were asked to provide appropriate references in support of their applications.

Benefits

- In April 2011, the Law Society Professional Training Network received the Irish Institute of Training & Development award in the Networks and Groups Category;
- The creation of a successful and sustainable partnership with the Law Society;
- The use and tailoring of an existing programme for current and future industry needs;
- Student feedback was very positive in terms of being inclusive and providing support where needed.

Diploma in Enterprise Innovation

Institution:	Institute of Technology Tallaght, Dublin (ITT Dublin)	
Title:	Diploma in Enterprise Innovation	
Discipline:	Business	
Duration:	2 semesters	
Level:	NFQ Level 8	Credits: 60
Partner:	Innova Training and Development	

Background

Innova Training and Development is a dynamic training company which was established in September 2005 that has as its central mission the personal and professional development of its learners. Working with County Enterprise Boards, Area Partnerships, and Institutes of Technology, the company has developed expertise in training potential entrepreneurs across Ireland on how to start, develop and run their own enterprises.

While delivering 'Start Your Own Business' courses in 2009/10 the training company noticed that the education and work experience background of the participants was changing. There were a greater number of professional and more highly experienced individuals attending these courses to explore entrepreneurship as a career path as a result of being made redundant.

Innova required additional expertise and substantial facilities to tender for programmes under the Department of Enterprise and Employment Labour Market Activation initiative in summer 2010.

The ITT Dublin Synergy Centre works with entrepreneurs to build and grow indigenous, knowledge-based businesses. The Centre offers a number of enterprise development programmes (e.g. the Enterprise Launch Programme and Enterprise Platform Programme) which together form the 'Synergy System' – a three-stage process for developing high-technology or knowledge-intensive companies.

Synergy had identified that many applicants did not compete effectively for a place on the programmes, as they did not have a sufficiently developed business idea, or they did not have an awareness of the full range of issues that have to be addressed to get a business off the ground.

In addition, ITT Dublin through its involvement in the Roadmap for Employer Academic Partnership (REAP) had been piloting the use of reflective diaries/e-portfolios as resource to support teaching and learning and provide new models of assessment that meet the needs of the workplace/entrepreneurship and the requirement for academic accreditation.

The rationale for the Enterprise Evolution Programme was to address the lack of preparedness of graduates for an entrepreneurial or self-activating role identified by Innova and the perceived deficiencies in the pool of potential entrepreneurs in Ireland as identified by Synergy and deliver an innovative programme that fostered entrepreneurial development while at the same time met the needs of academic accreditation.

Enablers

- A dedicated development partnership who believed in the project and were prepared to take on the work load to get course accreditation and subsequently to deliver the programme;

- An innovative approach to course delivery and assessment that suited an entrepreneurial type programme. This approach enables academic quality standards to be met while at the same time encouraging innovation, creativity and entrepreneurial development;
- Reflective practice, mentoring, the provision of a dedicated course coordinator and the setting up of a programme team to coordinate and manage the delivery of the course;
- The quality and calibre of the lecturers who developed and delivered the programme;
- The willingness of the development team to be innovative and creative in the design, delivery and assessment of the programme;
- The availability of funding through the Labour Market Activation (LMA) Fund.

Challenges

- The public/private partnership, to which each party came with different expectations and working practices;
- Internal institutional structures and attitudes which created tension and resisted the partnership development;
- The timescale in which the programme had to be developed and delivered;
- Ensuring compliance of a new programme with Quality Assurance processes;
- Advertising and marketing a programme that was being delivered for the first time, which did not have case studies/student experiences to rely upon;
- Recruiting the right profile of participant to the programme.

Benefits, Outcomes and Testimonials

- More than 80 participants have completed the first iteration of the programme, providing genuine opportunities for their personal and professional development as potential entrepreneurs and champions of the Smart Economy;
- Numerous businesses are emerging from the programme of which many are expected to progress onto the Enterprise Platform Programme in the Synergy Centre in IT Tallaght and other support programmes;
- A successful roll-out of innovative learning and assessment methods;
- The development of links with numerous industry speakers (including some high profile entrepreneurs such as John Teeling and Bobby Kerr);
- The confidence and hope the programme brings to previously unemployed graduates and industry professionals is very evident;
- Under Springboard 2011, Enterprise Evolution Programme (EEP) has developed a partnership between ITT Dublin, Dun Laoghaire IADT and Innova Training & Development. The Diploma in Enterprise Innovation is delivered with 100 participants undertaking the programme across both campuses on a part-time basis over the course of the academic year 2011/2012. The new partnership expands both the educational and geographic breadth of the programme.
- The key success factor from a partnership point of view is that the EEP is an excellent example of public private partnership and it has bolstered significantly the links between industry and academia for the ITT Dublin both internally and externally.
- Student Testimonial: *"As an Engineering graduate with a Masters in Project Management, I had acquired a new found interest in business practice. I found the EEP a perfect vehicle to bridge the gap between university and entering the workforce in this smart driven economy and has instilled in me a confidence to one day start and run my own business."*
- Student Testimonial: *"Having started this programme as a result of not being able to find a job, it has given me the ambition and confidence to create my own job and not wait for one to come my way, I would highly recommend the EEP to anyone who wants to seize the chance to create a new opportunity for themselves."*

Commercialisation

Institution:	National University of Ireland, Galway (NUI Galway)
Title:	Commercialisation
Discipline:	Business Information Systems
Duration:	8 days
Level:	NFQ Level 9 Credits: 10
Partners:	Lionra Network, Technology Transfer Office NUI Galway

Background

In September 2006, the Lionra Network secured funding to deliver an Enterprise Development Programme (EDP). NUI Galway was identified as the project manager with the responsibility to ensure that the programme was delivered successfully, on time and within budget. The EDP programme resulted in an innovative and novel regional delivery of an enterprise programme which fulfilled the needs of a diverse range of industry and sectoral participants. The programme was completed in March 2008.

As a result of NUI Galway's involvement in the EDP, a need was identified to provide training for researchers in business skills and market knowledge. A Campus Commercialisation Programme (CCP) was developed by staff at the NUI Galway Technology Transfer Office to meet this specific need – up-skilling researchers on campus.

The LMA Fund was established as part of Budget 2010 to support training and education programmes for the unemployed who needed and wanted to improve their education and skills. The CCP programme was aligned with the objectives of the LMA and consequently the Commercialisation module was developed.

The Commercialisation module was accredited and is now aimed at graduates/researchers with a technical or business background that wish to develop an understanding of the process of commercialisation.

The Commercialisation module is offered as a stand-alone award or as part of the Postgraduate Diploma in Enterprise Management and Postgraduate Diploma in International Business under the Business Information Systems discipline.

The course requires 8 days attendance on campus and is completed within one semester. The delivery format uses a combination of interactive workshops, networking, case studies, one to one mentoring, individual and group exercises, show and tell discussions, and guest speakers, as well as incorporating the traditional lecture format.

This module is linked to the Postgraduate Diploma in Enterprise Management and Postgraduate Diploma in International Business. The first instance of this accredited module was delivered in September 2009.

Enablers

- The module is designed to meet specific needs identified in a survey carried out to determine the needs for researchers and industry in the area of commercialisation;
- The successful reputation of parent course (CCP) within NUI Galway;
- Feedback from previous programmes is embedded into the existing module;

- The module offers wide variety and breadth of topics covered, expert and practitioner presentations, networking within the programme, and external speakers;
- The flexibility and variety in module delivery - More than just “talk and chalk” module – practical, hands on, interactive workshops, show and tell sessions, etc.

Challenges

- Ensuring that the course content is kept up to date and applicable to all participants attending – especially if there is a cross-sectoral mix in attendance;
- Keeping the interest of researchers in this “commercial space”;
- Building an appropriate cost structure and funding mechanism;
- Securing commitment from academic management to ensure that all researchers and principal investigators within NUI Galway attend this module;
- Maintaining ownership of the module delivery within NUI Galway;
- Deciding if this module should be promoted externally to other HEIs.

Benefits

- Allows participants to gain an understanding of the commercial environment and its key players;
- Provides the business acumen for participants and also provides the opportunity to up-skill participants on all aspects of the commercialisation process;
- Develops key skills and competences in areas such as networking, Intellectual Property, funding options for new technologies and market perspectives on their individual skills and technological specialities;
- Potentially acts as a key diagnostic tool for technology ideas;
- Provides a tangible link and introduction to TTO activities to researchers within the University.
- Enhances the University reputation and brand and benefits the University by way of recruitment and retention of researchers;
- The course has proven to be a cross-sectoral success with biomedical, applied optics, Information and Communications Technology (ICT), marine, medicine, renewable energy discipline participants as well as attendees from multinational medical manufacturers. This mix provides a good network for all participants;
- Positive feedback from participants including acceptance of their need to learn more about the commercial space.

Laser Safety in the Workplace

Institution:	National University of Ireland, Galway (NUI Galway)
Title:	Laser Safety in the Workplace
Discipline:	Physics
Duration:	Varies - depending on Industry need
Level:	Not applicable
Partners:	Various companies

Background

The National Centre for Laser Applications (NCLA) is based in the School of Physics in NUI Galway and was established as a centre of excellence in Laser Technology in 1989. The group works very closely with industry through laboratory-based feasibility trials, full R&D services, technology transfer, prototyping, laser safety audits and tailored training courses in laser technology, applications and safety.

In late 2007, the NCLA visited a number of companies listing 18 potential courses that it could run for them. A Training Needs Analysis (TNA) was carried out targeting these manufacturing industries that use laser based processes. As a result of this activity, a considerable number of strong links with industry were established that required similar types of training. From this, a new network was established – BESTNet (Biomedical Engineering and Science Training Network). Within BESTNet there was a partnership of about 60 companies who had identified their training needs in Biomedical, Science, Lasers and Optics. This training was subsidised through the Skillnets organisation which allowed the companies to offer the training to their employees.

The NCLA delivered a number of courses to this network but the primary demand was for Laser Safety in the Workplace. Sometimes the demand from one company was adequate for the NCLA to deliver the course on-site with just their employees. In these cases, modifications and adjustments were made to the courses that catered for their specific needs and eventually the NCLA found that over time the courses became more customised for individual companies.

Enablers

- The ability to tailor a *specific course* to meet the needs of one employer, including the design of practical examples based on the equipment on the company site;
- Physically locating course at employer site – use of on-site equipment as an integral element of their course;
- The high practical content - hands on/working on actual lasers during training;
- The in depth knowledge and skill in laser technology in NCLA;
- The track record of NCLA engaging with industry and designing courses;
- The key input from each employer to satisfy specific up-skilling needs, including equipment, timescales and practical content;
- The availability of funding through Skillnet.

Challenges

- The overall numbers attending did not match the training needs analysis;
- The value of designing tailored courses when the attendance was low;
- The cost of training if subsidy from Skillnets was not available;

- Balancing the increasing demand in industry for accredited programmes with the fact that occasionally the course duration and level were inadequate to warrant accreditation;
- Meeting the needs of smaller companies which do not have enough employees to fill a course.

Benefits

- The development of strong sustainable partnerships between industry and academia;
- The ability to develop a specific practical course to meet the needs of one employer with the flexibility to adapt it to meet the needs of multiple employers;
- An improved recognition by NCLA of what its industry partners want and is improving at designing effective courses to meet their needs;
- Through practice, an improved NCLA response time to requests for customised courses.

Diploma in Credit Union Studies

Institution:	University College Cork (UCC)
Title:	Diploma in Credit Union Studies
Discipline:	Business
Duration:	1 or 2 years part-time
Level:	NFQ Level 7 Credits: 60
Partner:	Irish League of Credit Unions (ILCU)

Background

The Diploma in Credit Union Studies has been offered by UCC since 1991 and is a successful example of industry-academia partnership in the development of tailored education for credit union personnel. The Diploma is designed for those with experience in credit unions, as employees or as volunteers. There have been over 780 graduates to date, equally representing credit union employees and credit union volunteers, including board members and committee members, from both small and large credit unions in urban and rural areas. The Diploma is designed to develop a critical awareness of the distinctive nature of credit union organisations and their role in promoting socio-economic development at community level. It also aims to further develop the knowledge and abilities of credit union personnel, so that at organisational and individual levels, they can organise and manage credit unions more efficiently.

The Diploma in Credit Union Studies was launched as a direct result of a perceived need for a third level qualification for credit union personnel identified in the Planning Committee Report as adopted by the Irish League of Credit Unions (ILCU) at its 1991 Special General Meeting. Established links between the Centre for Co-operative Studies at UCC and the ILCU were built upon to investigate the feasibility of developing a programme of studies. A steering committee comprising of two academic and six industry partners was formed to design and oversee the development of the Diploma. It was agreed by the steering committee that a distance learning approach would best suit the diverse locations of the target audience. This meant that the course materials had to be developed in advance of the programme being offered, unlike more traditional on-campus programmes where materials can be developed week on week. This, of course, incurs significant up-front costs, long before student fees are paid. Consequently, the ILCU agreed to fund the start-up costs of the Diploma programme by way of an interest-free loan. This loan was repaid to the ILCU in full as students enrolled in the programme and fee income was generated. The steering committee also advised on programme content, ensuring that the content was both relevant and timely for credit union personnel, and of an academic standard to merit university accreditation.

The Diploma programme can be taken over one or two years. A blended approach to distance learning has been adopted in order to give students the opportunity to learn at their own pace. This approach to course delivery comprises of text-based modules combined with regional distance learning lectures.

Both assignments and exams require students to apply the theory in the modules to their own practice in credit unions. This helps them to contextualise and evaluate their practice and to explore possible lessons learned for the future.

While it is a compulsory entry requirement for all course applicants to have completed at least two years of employment in a credit union, there is also an exemption on this course for students who have completed the

Advanced Certificate in Credit Union Practice awarded by the University of Ulster. Holders of this award are eligible for exemptions of a total of ten credits, i.e. two modules, from Level One of the Diploma in Credit Union Studies.

Enablers

- The close working relationship and partnership between the ILCU and the Centre for Co-operative Studies at UCC; the chosen method of course delivery; and the commitment of UCC staff to the development of this sub-discipline.
- The ILCU's input to the development of the programme, both in terms of financial assistance and contributions to curriculum development, has been invaluable in ensuring that students are offered a relevant and timely qualification.
- The blended approach to distance learning adopted by this programme has allowed students to experience the best of both approaches: they can conduct a large portion of their learning at their own pace in their own time, but they are also afforded the opportunity to experience cohort learning and engage with other students through the lectures and Summer School which they attend as part of the course.
- The commitment of UCC staff to the development of this sub-discipline has ensured that the Diploma programme has remained relevant over time. Staff are continuously involved in cutting edge research in this field (often financially supported by the ILCU) which allows students to be kept abreast of the most up-to-date developments in their industry.

Challenges

- The difficulty in incorporating flexibility into this course. Although flexibility around different student needs is extremely important to a course of this kind, it is not always easy to be flexible within the confines of a large university organisation.
- Increasing competition in the market for training and education, new regulatory requirements regarding 'Minimum Competency Requirements' for credit unions, increasing acceptance of education technologies, and a spotlight on operational costs in credit unions, all have implications for student recruitment and retention. However, some of these challenges can be turned into opportunities and this is where the focus now lies for the development of the Diploma.

Benefits

- UCC offers a number of progression routes to further studies for Credit Union diploma holders. Firstly, as the Diploma constitutes the first year of the three year Level 8 BSc in Mutual and Credit Union Business, applicants for the BSc who were awarded the Diploma are eligible to proceed directly to Level Two of the degree on successful completion of a brief fifteen credit bridging programme. Upon completion of this degree, students may then progress to Level 9 on the NFQ and apply for the e-learning MBus in Co-operative and Social Enterprise.
- Credit Union personnel have been enabled to think strategically and to contribute more effectively, not only to the Credit Union movement, but also to their wider communities.
- Student uptake on the programme has been very diverse and feedback from students has been extremely positive. As well as gaining a valuable qualification which helps them to progress in their individual career development, the course also offers students an enormous opportunity for networking within the industry, whereby students have found that through the Diploma they have built up a network of contacts in other credit unions that can be drawn upon when help or advice is needed.¹
- The partnership created between the ILCU and UCC in the development and subsequent delivery of this programme has led to numerous benefits for all key stakeholders involved in this engagement.

¹The development of this network has been further supported through the creation of a specifically dedicated website for students of the Diploma which acts as a reference point for students throughout the year. One of its main features is a 'discussion forum', enabling students throughout the country to stay in contact with each other for the duration of the course.

Postgraduate Certificate in Teaching Enterprise and Innovation in Education

Institution:	Waterford Institute of Technology (WIT)		
Title:	Postgraduate Certificate in Teaching Enterprise and Innovation		
Discipline:	Education		
Duration:	1 semester		
Level:	NFQ Level 9	Credits:	10
Partner:	Celtic Enterprises Ltd		

Background

Institutes of Technology are called upon to play a pivotal role in the development of an enterprise culture through entrepreneurship education and producing graduate entrepreneurs, who will be capable of using their knowledge and applying it to start up and grow their own businesses. Whilst HEIs play a key role in the supply entrepreneurial talent to develop new businesses, entrepreneurship education should not be the preserve of the higher education sector. Ideally, entrepreneurship competence should be acquired through lifelong learning, with entrepreneurial skills being developed at primary, second, third and fourth level.

In 2003, Celtic Enterprises Ireland (CEI) Ltd was established as a non-profit organisation to develop and deliver enterprise education in primary, second-level, and further education. They did this by visiting schools to support, motivate and advise students wishing to set up their own business. Whilst the second-level curriculum includes a number of business-related subjects e.g. Business Studies, Accounting, and Economics, these do not necessarily provide students with the practical skills required to set up their own businesses. Celtic Enterprises conducted research amongst teachers which highlighted both their need and appetite for learning about *Enterprise and Innovation*. Whilst teachers appreciated the value of promoting and teaching entrepreneurship, they lacked confidence in their own ability to teach Enterprise and Innovation without having appropriate training. Celtic Enterprises secured INTERREG funding to develop accredited training for teachers and collaborated with WIT's School of Education to develop a 10-credit, Level 9 module in Enterprise and Innovation for the continuing professional development of teachers.

This module aims to provide teachers with the knowledge and skills for effective entrepreneurship education. Initially, it was aimed at second level teachers and Celtic Enterprises was responsible for recruiting teachers. During the module, teachers explored good practice in entrepreneurship education, identified pedagogical approaches to effectively engage students. Moreover, they were encouraged to reflect on their role as enterprise teachers and their teaching philosophy. The module had a strong emphasis on action learning with the teachers encouraged to test new approaches to teaching enterprise and reflect and report on their effectiveness. On successful completion of the course, teachers developed a portfolio of teaching resources/materials, which they could use with their own students.

Enablers

- The use of creative and collaborative teaching methodologies;
- Teachers responded well to the concepts of Innovation and Creativity and understood how implicit they are in the broad definition of entrepreneurship;
- Teachers embraced their role in promoting enterprise;
- The 2011 iteration of the module was delivered to teachers across the spectrum of education;

- On successful completion of this module, participants gained 10 Level 9 credits and could progress to study the MA in Management in Education, MA in Teaching and Learning in FE & HE, the MA in Education (WIT), or relevant postgraduate courses at other HEIs.

Challenges

- Initially, the module was restricted to second-level teachers;
- Primary school teachers were sceptical of their role in promoting or teaching enterprise;
- There is no standard, one-size-fits-all definition of enterprise thus it can be interpreted differently by different teachers;
- The teachers lacked confidence in their own ability to teach enterprise thus the lecturers focused on building their confidence and self-efficacy in entrepreneurship education;
- The need for flexibility in design and delivery to facilitate a variety of participant backgrounds and the continuing professional development needs of teachers in the disciplines of Enterprise and Innovation.

Benefits

- In the first year, 31 teachers completed the Postgraduate Certificate Programme in Teaching Enterprise & Innovation;
- Teachers gained a theoretical and practical understanding of the importance of entrepreneurship to the Irish and EU economies;
- Teachers developed a network of enterprise teachers with whom to share good practice, teaching approaches and ideas;
- Teachers developed a portfolio of teaching resources/materials to enhance their teaching of the subject;
- This programme will inform enterprise/entrepreneurship lecturers in WIT how to progress the teaching Enterprise and Innovation in primary, second-level, and further education.
- The programme highlights both the opportunities and key challenges for integrating entrepreneurship across the spectrum of education.

BSc (Honours) in Airline Transport Operations

Institution:	Waterford Institute of Technology (WIT)
Title:	BSc (Honours) in Airline Transport Operations
Discipline:	Education and Professional Development
Duration:	2 years part-time
Level:	NFQ Level 8 Credits: 180
Partner:	Pilot Training College of Ireland (PTC)

Background

Arising from a collaborative agreement between the School of Education and Professional Development in WIT and the Pilot Training College of Ireland at Waterford Regional Airport a distance learning BSc (Honours) in Airline Transport Operations was developed. This programme built on an existing degree course that led to a dual qualification of (i) third level accredited qualification in airline transport operations and (ii) a commercial pilot's licence. The distance learning method of delivery was developed as an alternative method of study, aimed at providing flexibility to fit changing lifestyles and meet the needs of career airline pilots to balance career development objectives with a busy work life. Pilots from a number of airlines wishing to pursue a managerial career within the airline industry and seeking the opportunity to further their managerial career should they choose to give up flying or work in other areas of the aviation industry have embarked upon this programme. This challenged educators and curriculum developers to bridge the gaps between academia and industry, particularly in view of the rapid changes due to the arrival of new technologies.

The Pilot Training College is a Joint Aviation Authority (JAA) Flight Training Organisation approved by the Irish Aviation Authority for the purpose of carrying out Commercial Pilot Training. The Pilot Training College of Ireland operates to a Quality System based on IAA/JAA Regulations. It ensures full pre-flight and post-flight briefings for every exercise. Trainees receive full guidance on training expectations and ongoing progress reports. Initial training is critical to setting the values and practices that a pilot will carry throughout his or her career in aviation. The highest standards of training and testing are crucial to establishing a strong foundation of skill and understanding. Through the Flight Instructor and Flight Examiner programmes, which provide the basis of all its flight-training, it aims to produce well-motivated and dedicated pilots who will maintain the safety standards set by the regulatory authority.

The majority of the course is delivered by distance learning. This is supplemented by face-to-face sessions at dedicated times throughout the two years of this programme. The e-Learning resources consist of online forums, reading lists, and online material and links. Students can also directly communicate with lecturers and enter discussions with other students using Moodle.

The overall aims of the BSc (Honours) in Airline Transport Operations are:

- (i) to provide the students with an in-depth knowledge of the international air transport industry;
- (ii) to develop their specialised skills, knowledge and competence to pilot a commercial aircraft;
- (iii) to provide the graduates with the capability to work effectively as professional managers within the aviation industry.

Due to the technical nature of a pilot's work, 110 credits of the overall programme are achieved by undertaking the various technical aspects of becoming a pilot. It is this basis, that the School of Education has launched a blended learning version of the BSc (Honours) in Airline Transport Operations.

Existing pilots are afforded the opportunity to augment their existing pilot's licence by undertaking a further 70 credits of study. Pilots who hold a current JAA Airline Transport Pilots Licence (ATPL), frozen or unfrozen, and who have successfully completed a Multi-Crew Cooperation Course (MCC) receive credit towards the BSc (Honours) in Airline Transport Operations. Building on the expertise in delivering the programme since 2008, this two year part-time course has been designed to develop comprehensive business knowledge and skills relevant to the aviation industry.

Enablers

- Blended Learning;
- Use of a Learning Management system, Moodle;
- Development of a framework to deploy learning to address the diverse lifelong learning needs of air transport workers.

Challenges

- Getting the best from the available resources to deliver the programme;
- Ensuring that CPD programme meets the objectives of participants in the context of the resources available;
- Ensuring that adequate opportunities are created to facilitate capturing experiential learning opportunities.

Benefits

- There are 14 pilots from six countries throughout Europe who commenced the programme in February 2010;
- The course has been successful in facilitating pilots' career progression through distance learning.

Conclusion

The cases presented here illustrate a variety and range of learning solutions designed in partnership to meet specific learning needs. They vary from short focused interventions to much longer full awards on the framework from Level 6 to Level 9. Depending on the details of the particular learning need it is apparent that some of these interventions will have a reasonably short currency and others will exist for a longer timeframe. In all cases the courses grow from a mutual understanding and a relationship between the Higher Education Institution and the external partner(s). They involve a variety of funding mechanisms and they illustrate the importance of agility in terms of meeting learning needs in a responsive and flexible way.

These cases and a variety provide the starting point for an analysis of the processes, procedures, challenges and opportunities in developing customised learning solutions. An exploration of the similarities and differences experienced across the partner institutions was conducted in order to extract guidelines to support the development of more flexible and agile responses to learning needs. These are summarised in the following chapter.

3. Good Practice Guidelines

Introduction

The REAP project consortium recognises that a partnership approach to learning is important in providing agile and flexible learning solutions for a wide range of enterprise and community partners. Rapid changes in society, workplaces and technology mean that responsive approaches to continuing education and professional developments are more essential than ever. According to Langworthy and Turner (2003) these changes mean that

...there will be less emphasis on a single lifetime career, a greater importance of lifelong learning and an increased reliance on diverse sources of learning and knowledge...

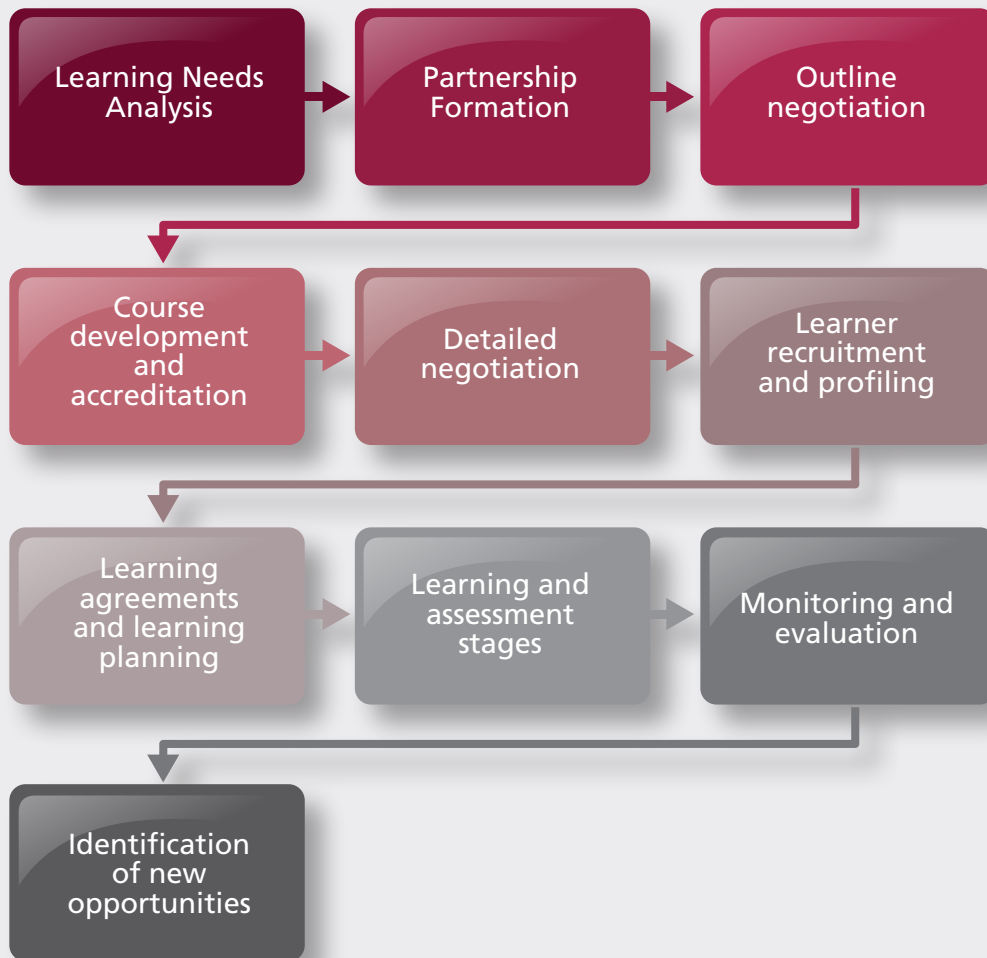
Many HEIs have built long-term partnerships with organisations over time and have developed innovative and context-sensitive targeted courses to meet specific education and training needs. Through the detailed exploration of practice and the identification of critical success factors for all parties, this work seeks to support good practice and to promote a partnership approach to learning which recognises and values the contributions of all parties to the design and support of the learning process.

Several illustrative cases have been presented in Chapter 2 of this work. In addition to these, an exploration of a wider range of course offerings was undertaken throughout the project consortium. The REAP project partners, having shared the practical experiences in the different institutions, worked together to identify themes and transferable guides for practice. Some of the initial work considered the timeline or series of milestones that occur between the initial identification of the learning need and the satisfactory resolution. Despite the range and variety of programme types and levels, it is interesting to note that the identification of similar stages was possible in all cases.

General Stages in Customised Learning Developments

The overall stages identified in the development of Specialist Courses in partnership were:

- Exploratory Learning Needs Analysis – identification of the workplace learning need;
- Formation of the partnership and identification of the various participants;
- Initial negotiation stages;
- Development and accreditation of the course;
- Further negotiation stages including numbers of students, learning, and assessment modes;
- Recruitment of learners including an exploration of the existing formal and informal learning of the target students;
- Learning Agreements at both organisation and student level;
- Delivery and assessment of course;
- Monitoring and evaluation;
- Identification of next steps in the learning partnership evolution.



Main Steps in Customised Course Development

These stages will not necessarily occur in exactly this order and often stages will be revisited in the process as more information becomes available to all partners but this provides a good general outline for the process. It is evident that some of these stages will be quite lengthy and that for various reasons the development process may stop or be discontinued at various points along the way.

Enablers and Barriers

Following detailed consideration of examples of customised learning development shared by the REAP project partners in consultation with external partners, some key enablers which support the development of innovative courses in response to identified needs, as well as some of the main barriers which act to impede such developments were further explored. While this is not an exhaustive listing it was important in informing the development of the guidelines for good practice to support the structures.

Enablers

- Existing relationship and good mutual understanding;
- Clear points of contact and commitment to the vision and the process;
- Clear decision structures in each organisation;
- Identifiable learning need;
- Flexible approaches to learning and assessment;
- Availability of funding;
- Existing exemplars.

Barriers

- Unrealistic expectations of time, effort, cost involved;
- Cultural conflicts including skill vs education dilemma;
- Lack of awareness of HEI capability and capacity;
- Inaccurate learning needs analysis, over-projection by company of the level of need;
- Lack of infrastructure/systems within the institution for registration and invoicing of non-standard students;
- Lack of infrastructure at college level for costing/pricing;
- Challenges associated with resourcing new initiatives;
- Rigidity of HEI contracts and the lack of clear recognition or reward for HEI staff
- Inflexibility of processes in relation to non-standard students and the place and pace of the learning and assessment processes;
- Relevance and currency of HEI course content and lack of recognition of learning gained outside of HEI.

Benefits

It was clearly recognised that the development of relevant and responsive solutions to work place learning needs has significant benefits at a national economic level as well as the level of the various participants. All of the REAP project partners reported that these initiatives were key in the development of improved partnerships and enhanced mutual understanding and respect between the academic and the industry partner.

For the HEI partner the benefits identified could be summarised as:

- Increased student numbers and the associated income stream;
- Increased diversity of learners;
- Organisational learning and staff development;
- Enhanced relevance and currency of the undergraduate and postgraduate programmes;
- Other opportunities for engagements and access to expertise and resources.

For the industry partner the benefits include:

- Improved employee knowledge, skills and competence;
- Enhanced employee satisfaction and improved retention;

- Profile as a learning organisation;
- Improved productivity and work practices;
- Other opportunities for engagements and access to expertise and resources.

Challenges

Many of the HEIs reported challenges associated with resourcing flexible initiatives, particularly with the current significant constraints on hiring. There was also a considerable spread of practice in relation to the level of involvement of the external partner in the learning process. In some cases this depended on the discipline. In new and emerging technologies it was reported that often the most up-to-date and relevant expertise resided within the external enterprise or industry partner and that it was appropriate to engage practice experts as partners in the delivery and assessment of learning. This provided an additional challenge in terms of the ability of the systems to cope with these 'adjunct faculty' members and to provide them with the appropriate training and supports.

Structures and process within the HEIs to invoice enterprise partners in a timely and responsive manner presented difficulties in some cases. Where these processes failed or were inadequate there was a significant impact on the learners as they were unable to complete registration processes or gain access to a range of HEI services. Often these difficulties in dealing with external partners on a 'business-to-business' footing were addressed by the formation of a separate 'unit' within the HEI to separate these interactions from the main registration or finance functions.

Where HEI staff were involved in interactions with organisations and enterprises and were willing to develop and deliver negotiated courses in flexible and partnership modes, they often expressed frustration at the lack of support and recognition for the work. There were also some difficulties experienced in fitting what are often short, intensive, off-campus courses into rigid semesterised timetables within the HEI system.

Guidelines for Good Practice for all Partners

The REAP team collated and analysed a number of partnership developments of customised courses. The courses were chosen to span a range of disciplines, levels, credits and durations to provide as broad a basis as possible from which to extract transferable learning. From this work the following guidelines have emerged. These are intended to facilitate the development of such courses by providing a framework for improved communication and collaboration between all parties in the process.

They recognise the key part played by the HEIs, the employers and the students in ensuring the success of the initiatives and are broken down to address the main stages in the process. While they will not always be applicable to every case they should provide a valuable supporting blueprint.



Indicative Analysis of Stages

Planning Stages

In the planning stages, the process of negotiation and joint course development often requires a number of phases to clarify learning and development needs and to balance the needs of the learner, the employer and the higher education provider. The reported experience is one of a cyclical approach wherein clarifying learning needs is often impacted by identification and profiling of the learner leading to an agreed top level goal.

The outcome of the planning stages will be enhanced mutual understanding and an outline Memorandum of Understanding (MOU) which will provide a positive backdrop for future development work.

Organising Stages

As the outcome of the process will be a learning pathway which is sensitive to the learners' existing knowledge and experience and informed by the employer's anticipated business model, the development and accreditation stages for the course will be undertaken in a partnership mode. It is at this stage of the process that the flexibility parameters listed below will be embedded into the course design:

- ✓ Inclusion of practice-based learning and work-based mode of learning;
- ✓ Facilitation of the recognition of prior learning including experiential learning;
- ✓ Identification and provision of HEI staff development activities required to support the initiative;
- ✓ Timetabling of the course and the delivery to include flexibility in terms of location and multiple access points to course lectures, tutorials, practical elements;
- ✓ Alignment of delivery and assessment schedule with company calendar.

The outcome of the organising stages will be an approved course, agreement on finance and resourcing issues and identified learners.

Implementation Stages

Developing flexible and responsive courses includes taking account of learners' diverse portfolios and will require some level of individual learning planning. Successful implementation of the course depends on clear communication channels incorporating all stakeholders in the processes. Clear structures to address any unforeseen difficulties or challenges will include honesty and openness in the partnership processes.

Evaluation Stages

Structures to collate and analyse the experiences of all partners, the learners, employers, and HEI staff, should be formally established in order to ensure a cycle of continuous improvement in the design, development and delivery of customised courses. Looking at the experience from the perspective of the development of the partnership between the HEI and the employer ensures that new opportunities for engagement interactions can be explored. Many of the HEIs in evaluating their customised courses reported that they were able to identify further 'markets' for their courses and to target and recruit additional learners and new partnerships.

Conclusion

The cases presented here provide a clear evidence base for a partnership approach to learning which values the employer and the workplace in the design and support of the learning process. This approach challenges the higher education provider to move beyond the traditional and into flexible and learner-led educational frameworks within a robust quality-assured structure.

Achieving this depends on a number of elements of the 'toolkit' for flexible learning. As this learning is aimed at learners in the workplace it should be structured to recognise and value what the learner already knows, regardless of where or how the learning was gained. It should be designed to take advantage of the availability of the workplace itself as a rich learning environment and to include the employer as a key learning partner.

While there are many challenges for both HEIs and employers, there is considerable benefit to be gained from the sharing of experiences and expertise. The guidelines presented in the Appendices will help to improve the practice development and to structure approaches building on existing practice. In this way incremental improvement can be achieved efficiently and shared across the entire sector.

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Appendix A:

Individual Profiling and Learning Planning Guide

Contents

Current Employment and Employment History

Education and Training Completed

Personal Career and Learning Progression Goals

Skills and Competences Assessment

Reflection on Future Direction

Current Employment and Employment History

Please complete or tick (✓) the appropriate box.

Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female																				
Age Range	<input type="checkbox"/> Under 20 <input type="checkbox"/> 21-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> 41-50 <input type="checkbox"/> 51-60 <input type="checkbox"/> Over 60																				
Current or most recent employer																					
Commencement date																					
Job title/role																					
Department/Function																					
Previous job titles/roles with current employer	<table border="1"><thead><tr><th>Title</th><th>From</th><th>To</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>	Title	From	To																	
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Employer	Position Held	From	To																		

Education and Training Completed

**Intermediate/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 benefitted you in your job? Please be as specific as possible.

Additional comments

Personal Career and 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 do you need to achieve your one 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 five years from now?

Y

N

If yes please specify

Current post

Higher level

Transfer into a new post

Transfer into a related post

Other – specify:

What do you need to achieve your five 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:

Skills and Competences Assessments

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 general or transferable skills relevant to you that you would like to enhance, please add in the blank cells provided and indicate your current and desired proficiency levels.

Skills	1	2	3	4	5	1	2	3	4	5

If there are any discipline specific skills relevant to you that you would like to enhance, please add in the cells provided below and indicate your current and desired proficiency levels.

Discipline Specific Skills	1	2	3	4	5	1	2	3	4	5

Reflection on Future Directions

Having considered your current skills and your aspirations which of these actions would be most appropriate?

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

Appendix B:

Outline Memorandum of Understanding – Customised Course Development

Outline Course Proposal

NFQ Level	_____
Number of academic credits	_____
Estimated duration	Minimum _____ Optimum _____
Proposed commencement date	_____

Overall Course Outcomes

This course is intended to:

1. _____
2. _____
3. _____
4. _____
5. _____

Operational

Estimate of student numbers	_____
Course entry requirements	_____
Delivery methods/location	_____
Estimated contact time	_____
Estimated costs	_____

Representatives

Employer Details

Organisation name	
Address	
Representative	Title
Department	
Address	
Tel:	email
Alternate contact name	Title
Tel:	email

Academic Contact Details

Higher Education Institution	
Representative	Title
Department	
Address	
Tel:	email
Alternate contact name	Title
Tel:	email

Signatures

Employer representative	Date
Alternate contact name	Date
Higher Education Institution representative	Date
Alternate contact name	Date

Appendix C:

Course Evaluation Templates

Course Evaluation Template - Student

Name _____ Title _____
Company _____ Tel: _____
email _____

May we use your comments for the purpose of promoting our course Yes No

The overall content of the course Excellent V. Good Good Fair Poor

The overall performance of the lecturer Excellent V. Good Good Fair Poor

The course content will be useful in my job Most of the time Often Seldom Never

The pace of instruction for the course Just right Too fast Too slow

What I liked most about the course is:

What I liked least about the course is:

On which topics should more time be spent?

On which topics should less time be spent?

To make future courses better you should:

Additional comments:

Course Evaluation Template - Employer

Name _____ Title _____
Company _____ Tel: _____
email _____

May we use your comments for the purpose of promoting our course Yes No

The overall content of the course Excellent V. Good Good Fair Poor

The match with the company learning needs Excellent V. Good Good Fair Poor

The process of course development Excellent V. Good Good Fair Poor

The communication with the company Excellent V. Good Good Fair Poor

The course content will be useful in the organisation Most of the time Often Seldom Never

Positive outcomes of the course and the course development process

Recommendations for improvement of the course development process

Recommendations for improvement of the implementation and delivery process

Recommendations for future courses

Additional comments:

Appendix D:

REAP Working Group Membership

Representative

Kieran Doyle
John P Murphy
Gerard O'Donovan
Irene Sheridan
David Kirk
Dr Terry Maguire
Michelle Bradley
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Dr Joan Buckley
Lyndsey El Amoud
John O'Connor
Paula Power

Organisation

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Cork Institute of Technology
Cork Institute of Technology
Cork Institute of Technology
Dublin Institute of Technology
Institute of Technology, Tallaght, Dublin (Chair)
National University of Ireland Galway
National University of Ireland Galway
University College Cork
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