

ENTERPRISING TERTIARY LEVEL STUDENTS

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INTRODUCTION

Ireland is a small open economy, which is dependent on international trade. Ireland has transformed itself from a traditional dependence on agriculture and then manufacturing to a knowledge-based, high value-added, service-led economy. Education is an important component of such a knowledge-based economy, playing a vital role in its transformation over the past number of decades and contributing to future economic success by helping to foster a culture that is conducive to innovation and enterprise. The Irish government has begun to focus on the development of smaller domestic firms as a source of future growth, which makes sense given the relevance of enterprise to the Irish economy. Encouraging enterprise education is therefore high on the agenda of the Irish government as entrepreneurs are catalysts of growth, generating capital, innovation and skills. The objective of this paper is to describe the range of entrepreneurship education programmes in operation at the University of Limerick. Particular focus is placed on how these programmes are delivered outside the Kemmy Business School to non-business students.

The Evolution of an Enterprise Culture in Ireland

Small and medium-sized enterprises (SMEs)¹ have played a key role in the generation of an enterprise culture in Ireland in recent decades; however Ireland has not always been an encouraging environment for the establishment of such enterprises. Prior to the early 1980's the Irish government's policy was mainly focused on attracting Foreign Direct Investment (FDI) as a means to encourage new business development and those with the initiative to establish their own enterprise had to emigrate to receive the assistance they needed (Business 2000). However, government attitudes changed dramatically once they realised that FDI was not secure in terms of investment as Multi National Corporations (MNC's) closed their subsidiaries in Ireland. Thus government focus shifted to developing SME's as a key source for the development of an enterprise environment and employment in Ireland. Nowadays the government recognises the importance of SME's and their contribution to economic growth, social cohesion, regional and local development and the increasing importance of enterprise education at all educational levels (i.e. primary, secondary and tertiary level) to enhance the development of enterprise in Ireland.

According to Enterprise Ireland (2004) the small firm sector has made a substantial contribution to the economic and social infrastructure of Ireland on a national and regional basis. This contribution was evident in 2003 where it was estimated that the number of small firms in Ireland was approximately 186,114, an increase of 16,114 over a three-year period since 2000 (Revenue Commissioners 2003). More recently, the Small Business Forum (2006) suggested that there were approximately 250,000 small firms in Ireland in 2006 (inclusive of both manufacturing and service firms). Furthermore these firms accounted for more than 99% of all enterprises in Ireland and contributed to 68.4% of private sector employment.

¹The SME definition encompasses three components: micro enterprises (less than 10 employees); small enterprises (10 but less than 50 employees) and medium-sized enterprises (50 but less than 250 employees).

According to the Small Business Forum (2006) employment in this small firm sector increased by 79% over the period 1995-2005. These figures therefore highlight the importance of the small firm sector to the Irish economy.

ENTREPRENEURSHIP AND ENTERPRISE

Enterprise and entrepreneurship are terms that are used interchangeably and it is vital to recognize the distinction between them (Birdthistle, 2008). The concept 'enterprise' can be interpreted to mean encouraging individuals to become entrepreneurs and to provide them with the necessary skills to make a business successful (Mason, 2000). In essence, 'enterprise' is about spotting opportunities, creating new ideas and having the confidence and capabilities to turn these ideas into working realities (Nixon, 2004 as cited in HEA, n.d.). Whereas 'entrepreneurship' is an activity, which leads to the creation and management of a new organisation, designed to pursue a unique, innovative opportunity (Hindle and Rushworth, 2000). Fundamentally, it is about using enterprise to create new business, new businesses and 'can-do' organisations and services (Nixon, 2004 as cited in HEA, n.d.). For the purpose of this paper the two terms are used interchangeably.

Enterprise Education

The universal aim of enterprise education is to help young people develop skills and attributes that allow them to be innovative and to identify, initiate and successfully manage personal and work opportunities, including working for themselves, which results in entrepreneurs being created. Furthermore, enterprise education is about helping young people make things happen, being creative and finding opportunities for themselves. It develops young peoples' entrepreneurial skills, attributes and an awareness of how their community, including business and industry, works (Birdthistle, 2008). Garavan *et al.* (1995) define enterprise education as the process or series of activities which aims to enable an individual to assimilate and develop knowledge, skills, values and understanding that are not simply related to a narrow field of activity, but which allow a broad range of problems to be defined, analysed and solved. Enterprise education can be further defined as:

"...learning directed towards developing in young people those skills, competencies, understandings and attributes which equip them to be innovative, and to identify, create, initiate, and successfully manage personal, community, business and work opportunities, including working for themselves (Gilbert, 2004, pp. 285).

A review of the literature on enterprise education points to the dearth of rigorous studies that have examined the impact of enterprise related educational initiatives with young people (Anderson *et al.*, 2003; Kolvereid and Moen, 1997). A small number of studies across different cultures have shown that the introduction of enterprise in education does appear to make a difference to attitudes and entrepreneurial start-up rates (Kolvereid and Moen, 1997; Rosa and Fletcher, 1998). This has been confirmed more recently with Australian enterprise education programmes reported by Peterman and Kennedy (2003).

In order to foster entrepreneurship, it has been increasingly common to provide specialised courses in tertiary institutions and enterprise education has been promoted to encourage entrepreneurial behaviour (Peterman and Kennedy, 2003). Reviews of the literature on entrepreneurship and enterprise education (Dainow, 1986; Gorman *et al.*, 1997) and of particular entrepreneurship support programmes (McMullan *et al.*, 2002) provide some evidence that these programmes are successful in encouraging entrepreneurs to start businesses, or improve the performance of businesses. Therefore, enterprise education should be offered and available to all students. The development of enterprising skills in young people is important preparation for work and life. Enterprise education seeks to foster in students the relevant skills and values which will assist them to integrate different perspectives on schooling and opportunities beyond, such as:

- creativity, innovation and self-reliance;
- the ability to generate, recognise and seize opportunities;
- greater appreciation of the need for lifelong learning; and
- personal development that will help them to be more adaptable.

The effective interaction between schools, business, industry and community is a key element in enterprise education. The active support and engagement of businesses and communities provides students with the opportunity to put into practice the skills and values they have learned through their enterprise education activities. Therefore the focus and objectives of enterprise education programmes should involve the acquisition of a broader set of life long skills and not simply training for business start up (Martin, 2004; DfES, 2002; Audretsch, 2002) and in developing enterprise capacity (DfES, 2002; 2003; NCIHE, 1997). Enterprise education should contribute to the development of a range of skills, including the ability to innovate and to provide leadership, which pays dividends for the individual and the economy in any employment context. It should instil an interest and the potential to start a new business (Galloway and Brown, 2002). In summary, Galloway *et al.* (2005; pg.1) suggested that educators “have an obligation to meet students’ expectations with regard to preparation for the economy in which they will operate.

Teaching enterprise requires a different pedagogical approach to other subjects. The best way to teach this is through experiential learning and not didactically as most other subjects are taught (Weaver, 1999). Experiential learning involves continuous exposure to and reflection on practical encounters. Given that the entrepreneurship lecturer is a key part of the learning environment as their pedagogical style and their own attitude to enterprise will have a significant impact on the learning outcomes of the programme. Traditional lecture driven teaching methodologies are less relevant to entrepreneurship courses, as they may inhibit the development of entrepreneurial skills and characteristics (Kirby, 2002: pg 1). In entrepreneurship education, the role of the educationalist moves from the traditional “sage on the stage” to becoming a “guide on the side” (Hannon, 2005: pg 1). The educationalist needs to adopt the role of coach, mentor, and challenger and have the ability to provide feedback in a constructive and relevant manner (Hynes and Richardson 2008: pg 1).

As well as creating an enterprising environment, Gibb (1993) states that the real challenge for educational institutions is to acquire staff with an orientation towards an enterprising mode of learning, and a capability to teach it. The lecturer plays a crucial role in the overall effectiveness of any enterprise programme. Gibb (1993) observes that the lecturer/instructor needs to encourage an ‘enterprising’ style of learning as opposed to the more traditional ‘didactic’ teaching approach. Teaching enterprise via the formal didactic processes will ultimately not result in the simulation of the ‘knowing how’. Gibb (1993) additionally noted that the lecturer needs to act as more of a guide and a partner in the learning process as opposed to a dictator who delivers knowledge to a largely passive audience. Moreover, lecturers need to recognise and understand the different ways that people learn and lecturers should aim to facilitate this process.

Table 1. Didactic and Enterprising Learning Modes.

| DIDACTIC | ENTERPRISING |
|--|---|
| Learning from teacher alone | Learning from each other |
| Passive role as listener | Learning by doing |
| Learning from written texts | Learning from debate and exchange |
| Learning from ‘expert’ | Learning by discovery (under guidance) |
| Learning from feedback from one key person (the teacher) | Learning from the reactions of many people |
| Learning in a well organised time-tabled environment | Learning in a flexible informal environment |
| Learning without the pressure of immediate goals | Learning under pressure to achieve goals |
| Copying from others discouraged | Learning by borrowing from others |
| Mistakes feared | Mistakes learned from |
| Learning by notes | Learning by problem solving |

Source: (Gibb, 1993)

As can be seen in Table 1, if lecturers are to effectively teach enterprise then they need to make the transition from *didactic* to *enterprising teaching modes*. This may involve a perceived loss of power and control as the lecturer becomes a facilitator and is no longer the centre of attention in the classroom.

The adoption of enterprising teaching modes should emphasise active learning, problem based learning and discovery teaching. Active learning places greater emphasis on the students exploring their own skill, competencies and general self-awareness. In a problem-based learning and discovery environment, either on their own or in teams, students assume responsibility for solving problems which mirror real work experiences. Essentially the combination of these approaches provides students with personal and career development. Furthermore, role models, guest speakers and case studies can encourage skills development such as self-efficacy confidence, initiative, and problem-solving skills. However, the adoption of such methods is resource driven and requires the educationalist to have the confidence skills and competencies to accomplish this.

Research by Hytti and O’Gorman (2004) in a comparative study of entrepreneurship courses across a number of countries (Ireland being one), found that the

trainers lacked the skills and information required about entrepreneurship to provide students with the necessary skills and knowledge for entrepreneurship education. They recommended the need for in-career training to support and address the needs of the trainers to ensure they are better equipped. A further suggestion proposed by Hynes and Richardson (2008) was the recommendation for team teaching or joint input on course design and development by subject specific experts in the more technical/legal aspects required for the entrepreneurship courses.

To date the review of the literature provides an understanding of the importance of enterprise education as a means of providing graduates with a range of lifelong enterprising skills to equip them to engage in a more enterprising manner into the world of work either as an employee and or and an entrepreneurs. Additionally, the research has highlighted that enterprise education programmes are an important means of creating an enterprising graduate. Furthermore it was revealed that the introduction of such programmes poses challenges for educationalists in terms of programme design and delivery and for the need for the educators to have the ability to move from the traditional teaching modes of develop to a facilitator role incorporating in the main experiential learning delivery methods. This may not be easily achieved. The following presents the case study of the University of Limerick as an example of how the Kemmy Business School has successfully implemented a range of entrepreneurship programmes.

Enterprise at the University of Limerick

The University of Limerick (UL) is an independent, internationally focused university with over 10,500 students and 1,200 staff. It is a young, energetic and enterprising university with a proud record of innovation in education and excellence in research and scholarship (University of Limerick, 2006). Its mission is to promote and advance learning and knowledge through teaching, research and scholarship in an environment, which encourages innovation and upholds the principles of free enquiry and expression. Within the University of Limerick lies the Kemmy Business School, which is home to over 2,500 students, 100 faculty and staff spread across four departments. The entrepreneurship faculty reside within the Department of Management and Marketing in the Kemmy Business School.

The first entrepreneurship initiative was introduced at the University of Limerick in 1983. The programmes introduced since then have been designed to develop and transfer knowledge about the enterprise process, and to encourage students to examine entrepreneurship as a viable career option. Programmes operate at both undergraduate and graduate levels. They range from structured courses consisting of lectures, assignments, case studies and readings to innovative integrated programmes where students actively participate in the small business sector, develop business plans and are exposed to prominent entrepreneurs, both national and international. As indicated by Table 2 below, student numbers taking entrepreneurship modules increases year on year.

Table 2. Entrepreneurship modules and student numbers.

| Year | Entrepreneurship ² (core module) | Enterprise Formation | Enterprise Development | Business Consulting |
|--------------------|--|--|--|--|
| 2007- 2008 | 291 | 124 | 83 | 156 |
| 2006- 2007 | 283 | 117 | 78 | 119 |
| 2005- 2006 | 313 | 106 | 72 | 152 |
| 2004- 2005 | 281 | 114 | 50 | 138 |
| 2003- 2004 | 238 | 109 | 33 | 98 |
| 2002- 2003 | 270 | 108 | 36 | 114 |
| 2001- 2002 | 197 | 91 | 45 | 107 |
| 2000- 2001 | 210 | 107 | 36 | 97 |
| Disciplines | Bachelor of Business Studies (BBS) BBS with German BBS with Japanese BBS with French Irish Music and Dance Language & Cultural Studies Erasmus students Study Abroad students | Bachelor of Business Studies (BBS) Project Management Wood Science & Technology BBS with French Computer Systems Equine Science Erasmus Study Abroad | Bachelor of Business Studies (BBS) BBS with German BBS with French Project Management Equine Science Erasmus Study Aboard | Bachelor of Business Studies (BBS) BBS with German Project Management Wood Science & Technology Public Administration Equine Science Erasmus |

Furthermore, Table 2 indicates the interdisciplinary nature of the entrepreneurship modules who server a range of degree programmes such as BA in Public Administration, BSc in Wood Science and Technology, BSc in Equine Science, BSc in Computer Systems and BSc in Electronics. Additionally, entrepreneurship modules are taken by Erasmus and study abroad students, and each year these students are facilitated by the entrepreneurship faculty. Anecdotal responses from students from these non-business related degree programmes give the following reasons why they choose entrepreneurship modules:

² In 2007-2008 Entrepreneurship is renamed to Entrepreneurship and Innovation and is offered in Year 2 instead of Year 3.

- *“We can take control of our learning”.*
- *“It is an opportunity to meet and interact with the outside community i.e. support agencies; real entrepreneurs; small business owners”.*
- *“It’s an opportunity to work in groups”.*
- *“The course work is totally different to what we normally encounter i.e. 100% reports, project management, presentations”.*
- *“This is the only opportunity for us to give presentations and write formal reports”.*

The following section describes the range of entrepreneurship programmes offered through the Kemmy Business School at the University of Limerick at undergraduate level.

Entrepreneurship and Innovation as a Core Module

As part of the [revised] Bachelor of Business Studies degree, which commenced in 2006/7, all students have the opportunity of taking "Entrepreneurship and Innovation" as a core component of Year 2 of the four year programme. In the past the core module was offered in Year 3. This programme is designed to encourage students' entrepreneurial behavior through the introduction of the principles of entrepreneurship, the process of creativity and innovation, and the impact of this process on the success of new enterprise creation. As such its key objectives are to examine the nature and development of entrepreneurship and the general behavioral characteristics of entrepreneurs; to explore the strategic importance of innovation, creativity and new product/service development processes in business; to introduce students to the entrepreneurial process and the principal techniques and concepts necessary in the launch of a new venture; and to understand the critical role of the entrepreneur and intrapreneur in the process of innovation. See Appendix I for a copy of the course outline.

Entrepreneurship Minor Stream

As part of business and non-business degree programmes at the university, students are offered an 'Entrepreneurship' minor option. This multiple integrated programme covers a period of four semesters during years 3 and 4 of study (see Table 3). The objectives of the programme are:

- To provide participants with an insight into the role of the entrepreneur and the entrepreneurial process.
- To develop the core skills and attributes necessary for entrepreneurship, such as creative problem solving; diagnostic skills, communication and project management.
- To induce enterprising behaviour.
- To focus participants' business vision so that they think strategically and can generate and manage business opportunities and
- To assist personal development through freedom and opportunity to practice entrepreneurship.

Table 3. Structure of Entrepreneurship Minor Stream.

| |
|-------------------------------------|
| Structure of Minor Stream |
| Year 3 |
| Semester 5 – Enterprise Formation |
| Semester 6 – Co-operative Placement |
| Year 4 |
| Semester 7 – Enterprise Development |
| Semester 8 – Business Consulting |

Enterprise Formation

The course on ‘Enterprise Formation’ offers perspectives dealing with models of entrepreneurship, enterprise culture, the entrepreneurial process and an analysis of birth, growth and development phases of a new business. It has three key objectives: first, to develop students’ understanding of the entrepreneurial process and the role of small firms in economic development. Second, to identify and evaluate external and internal factors that impact on business start-up and third, to facilitate students in developing a range of diagnostic, analytical and decision-making skills necessary for the formulation, development and evaluation of a business start-up.

This module consists of five parts. Part One of the module commences by facilitating an understanding of entrepreneurship, preparation for the entrepreneurial journey; recognition and creation of opportunities and concludes with the development of a business model. Part two examines entrepreneurship and the economy, examining the role of the entrepreneurial firm in economic development and the measurement of global entrepreneurship. Part three examines the industry, the market and start-up resources. This leads into part four which examines the business plan; legal options, the incorporation of ethics and social responsibility; the development of an entrepreneurial organisation; the development of an entrepreneurial marketing plan and concludes with funding a start-up venture. Part five concludes the module by examining the issues of business development and growth. (Appendix II includes a copy of the guidelines for the assignment for this module along with the course outline).

Enterprise Development

The course on ‘Enterprise Development’ is concerned with the practical application of the knowledge acquired in ‘Enterprise Formation’. It requires multidisciplinary teams of students (marketing, finance, personnel, engineering and science) to prepare a business plan for a manufacturing or internationally traded service area. Teams are required to conduct a thorough market analysis in order to evaluate the opportunity identified, to design and develop a prototype of their product, and to formulate a comprehensive business strategy including funding requirements and financial projections. The module is run in tandem with the national Enterprise Ireland Student Enterprise Awards and other competitions introduced to encourage young entrepreneurs.

This module includes the following topics, creativity, innovation, idea generation, evaluation of business opportunities, business formation process, feasibility study,

the business plan, industry analysis, competitive strategy, secondary and primary research, identifying target markets, product/service development, manufacturing/operations, forecasting demand, intellectual property, market/sales strategy, legal forms of organisation, Board of Directors, sources of finance, debt versus equity, financial projections, cash flow, profit and loss, balance sheets, visual and oral presentation of the business plan. Appendix III includes a copy of the guidelines for the assignment for this module along with the course outline.

Business Consulting

In their final semester, students progress to undertake formal business consulting assignments. The course involves teams of four to five students from different disciplines consulting with a small company in the region. Preparation of feasibility studies, strategic marketing plans, market research reports, industry analysis and the implementation of financial control systems represent typical assignments. The consulting process involves both functional and management skills as the students work independently of any syllabus for most of the semester. Students define their terms of reference with their client company and determine the quality and format of the report. Each student group is allocated a project supervisor who is a member of the entrepreneurship faculty. Formal presentations to the client company and other interested invited parties take place at the end of the course. The module involves a project management task structure for learning under conditions of uncertainty and an enterprising teaching mode. Appendix IV includes a copy of the course outline and the necessary deliverables for the completion of the module.

DISCUSSION

The entrepreneurship minor stream has proved highly popular, attracting business, engineering, science and arts students. In addition to the 'hands-on' minor option described above, taken on an 'elective' basis, all students on the full-time Bachelor of Business Studies (BBS) programme must complete a core module - 'Entrepreneurship and Innovation'. The course incorporates an 'Entrepreneurship Forum' and special seminars on entrepreneurship topics, with invited expert speakers, to complement the lectures and tutorials. As with all the entrepreneurship courses offered by the Kemmy Business School, students are given the opportunity to combine academic with practical aspects of entrepreneurship. Apart from studying theoretical concepts and constructs, all students assemble into interdisciplinary teams to conceive their own business enterprises and develop formal business plans for the prospective new ventures. Student feedback indicates that a number of benefits are experienced from participation on such programmes. These include the acquisition of an integrated knowledge and understanding of what is involved in starting and managing a business. Additionally, the students gain a new set of skills and competencies, which result in personal development. For instance greater communication skills, confidence, decision making skills, risk taking abilities, presentation skills, and negotiation skills. These skills are very important when embarking on a career or when establishing their own business.

Several career options exist for graduates with enterprising skills. Starting a new venture is only one possibility among entrepreneurial career choices. A graduate can seek employment in a newly established firm in which the activities and structures are evolving and the dynamism of the entrepreneur can be used. Another option exists within established firms in which entrepreneurial activity is required for renewal and change. As an 'intrapreneur' within an established setting, an individual may pursue new ideas creating new products and services. Small business development agencies, institutions that support small businesses such as banks and financial institutions, franchises and family businesses also offer career choices for graduates with an entrepreneurship education.

The way in which entrepreneurship modules are taught at the University of Limerick indicates the adoption of an experiential, enterprising learning mode. Experiential learning is encouraged through the continuous exposure to real life entrepreneurs by having them come into the classroom and give seminars on being an entrepreneur and through the use of applicable case study material i.e. entrepreneurship faculty write their own case studies for use in tutorials. Lecturers also encourage students to reflect on their learning through having project management as part of their assessment methods. Enterprising learning modes are used to teach entrepreneurship at the University of Limerick. Faculty have adopted this method through attending training programmes like the Entrepreneurship Colloquium on Participant-Centered Learning at Harvard Business School and the International Teachers Programme. These programmes have enabled faculty to easily fall into a facilitator role and encourage students to learn from each other and learn by discovery under their supervision. Furthermore, faculty are able to create an informal flexible environment even when there are over 260 students in the classroom through the adoption of an enterprising pedagogical approach.

CONCLUSION

The Irish education system is generally well regarded and is believed to produce good-quality graduates at higher level that compare well with international standards. Concentrated entrepreneurship programmes such as that offered at the University of Limerick engender interest and motivation among young people to explore and perhaps become involved in business ownership. While many believe that entrepreneurship cannot be taught, its philosophy should at least motivate young people to explore the career opportunities it offers. For those on whom entrepreneurship education exerts an influence, they can be expected to go into society as well educated and informed as possible. If the seeds of enterprise are planted during education, its effects will be even more noticeable in the future.

However the ongoing achievement of this has implications for educational institutions and in a broader context for policy makers who influence type of programmes on offer and the resources allocated to support such programmes. A number of issues need to be addressed:

- For instance, for educators given the extra time that is required to design, deliver and assess such programmes it is important that both recognition and support is provided to motivate staff. This has implications for institutional policy to address how these type of entrepreneurship initiatives are

resourced acknowledged and rewarded within the often-inflexible educational institution hierarchy.

- What type of training and development is provided to lecturers to provide them with the skills and knowledge to engage on the experiential delivery mode?
- How can faculty create and maintain linkages with important external stakeholders such as the entrepreneurs and agencies involved with the development of entrepreneurs?
- Where can funding be sourced to assist in the implementation of such programmes?

Once these issues are addressed, then the introduction and ongoing implementation of entrepreneurship programmes can be embedded as part of the curriculum of all disciplines and not just limited to the business discipline as is frequently the case.

REFERENCES

Anderson, M., Galloway, L., Brown, W., and Wilson, L. 2003. Skills Development for the Modern Economy. Accepted for the 23rd Institute for Small Business Administration Conference, Guildford, November.

Audretsch D. B. 2002. Entrepreneurship: A Survey of the Literature. Prepared for the European Commission, Enterprise Directorate General, Research (CEPR), London; July.

Birdthistle, N. 2008. An Examination of Tertiary Students' Desire to Found a Business. *Education + Learning Journal*, Vol. 50, Nr. 7, pp. 552-567.

Business 2000. (2002) AIB Enterprise and Entrepreneurship [online], Available http://www.business2000.ie/images/pdfs/aib_6th_ed_pdf [accessed 10th March 2005].

Dainow, R. 1986. Training and Education of Entrepreneurs: The Current State of the Literature. *Journal of Small Business and Entrepreneurship*, Vol. 3, Iss. 4, pp. 10-23.

DfES. 2002. Howard Review of Enterprise and the Economy in Education [online], available: <http://www.dfes.gov.uk/ebnet/DR/DR.cfm> [accessed 14 May 2006].

DFES. 2003. The Future of Higher Education. [online] available: <http://www.dfes.gov.uk/hegateway/uploads/White%20Pape.pdf> [accessed 9 August 2006].

Galloway, L. and Brown, W. 2002. Entrepreneurship Education at University: A Driver in the Creation of High Growth Firms. *Education and Training*, Vol. 44, Nr. 8/9, pp. 398-408.

Galloway, L., Anderson, M., Brown, W., and Whittam, G. 2005. The Impact of Entrepreneurship Education in Higher Education; Report for Business Education Support Team, Oxford, May, Heriot-Watt University, Edinburgh.

Garavan, T., Costine, P., and Heraty, N. 1995. Training and Development in Ireland, Context, Policy and Practice, Oak Tree Press: Dublin.

Gibb, A. 1993. The Enterprise Culture and Education. International Small Business Journal, Vol. 11, Nr. 3, pp. 11 – 32.

Gilbert, R. 2004. Studying Society and Environment: A Guide for Teachers, Thomson Learning Nelson: Australia.

Gorman, G., Hanlon, D., and King, W. 1997. Some Research Perspectives on Entrepreneurial Education, Enterprise Education and Education for Small Business Management: A 10 Year Review' International Small Business Journal, Vol. 15, Nr. 3, pp. 56-77.

Hannon, P. 2005. Graduate Entrepreneurship in the UK: Defining a Research and Education Policy Framework, 28th National Institute for Small Business & Entrepreneurship Conference, November.

HEA (n.d.), available at: www.heacademy.ac.uk/951.htm

Hindle, K. and Rushworth, S. 2000. in Lundstrom, A. and Stevenson, L. (Eds), Entrepreneurship Policy for the Future, Special Edition, SME Forum, Swedish Foundation for Small Business Research, Stockholm, 2001.

Hynes, B and Richardson, I. 2008. An Entrepreneurial Mindset: Getting the Process Right for Information and Communication Technology Students, in Information Communication Technologies: Concepts, Methodologies, Tools, and Applications. Eds. Klinger, K and V. Slyke, 2008 Pages. 3207 -3228

Hytti, U. and O'Gorman, C. 2004. What is Enterprise Education? An Analysis of the Objectives and Methods of Enterprise Education Programmes in Four European Countries. Education and Training, Vol. 46, Iss. 1, pp. 11-23.

Kirby, D.A. 2002. Entrepreneurship Education: Can Business Schools Meet the Challenge? International Council for Small Business ICSB 2002-079 47th World Conference San Juan, Puerto Rico June 16-19,

Kolvereid, L. and Moen, Ø. 1997. Entrepreneurship among Business Graduates: Does a Major in Entrepreneurship Make a Difference? Journal of European Industrial Training, Vol. 21, Iss. 4, pp. 154-160.

Martin, L.M. 2004. Developing An International Entrepreneurship Programme; A Work In Progress. IEEE Conference, University of Wolverhampton, June 11.

Mason, C. (2000), "An audit of enterprise in the curriculum", in Hartshorn, C. (Ed.), A Report to the Centre for Scientific Enterprise, The Foundation for SME Development, University of Durham, Durham.

McMullan, W.E., Chrisman, J.J., and Vesper, K.H. 2002. Lessons from Successful Innovations in Entrepreneurial Support Programming, in Chrisman, J.J., Holbrook, J.A.D., and Chua, J.H. (eds.) *Innovation and Entrepreneurship in Western Canada: From Family Businesses to Multinationals*, Calgary, Alberta: University of Calgary Press.

NCIHE 1997. Higher Education in the Learning Society, (The Dearing Report), [online] available: <http://www.leeds.ac.uk/educol/ncihe/> [accessed 10 July 2006].

Peterman, N.E. and Kennedy, J. 2003. Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory & Practice*, Winter, pp. 129-144.

Revenue Commissioners 2003. Revenue Commissioners Annual Report 2003, [online], Available <http://www.revenue.ie/> [accessed 10th August 2007].

Small Business Forum 2006. Small Business is Big Business, [online] available: <http://www.forfas.ie/sbf/index.html> [accessed 10 May 2006].

University of Limerick 2006. A Profile of the University of Limerick [online], Available <http://www.ul.ie/main/visitors/aboutul.shtml> [accessed 11th August 2007]

Weaver, R. 1999. Society, Educational Systems and Entrepreneurship. *Industry and Higher Education*, December, pp. 376 – 381.

Appendix I

Module Title: **Entrepreneurship and Innovation**

Introduction

The aim of the module is to help students to develop an entrepreneurial mindset that includes creativity, innovation and diagnostic abilities. The course focuses on entrepreneurship and innovation for new start-up businesses as well as entrepreneurial behaviour within larger organisations. Key objectives are to introduce students to the theory and practice of entrepreneurial creativity and innovation and to provide an understanding of the nature of entrepreneurship, the characteristics of the entrepreneur, the intrapreneur and the role of the socio-cultural and economic environment in fashioning innovative entrepreneurship. In addition the module examines technical entrepreneurship and the process of managing innovation. On completion of this module students will have an increased understanding of entrepreneurship, entrepreneurs, intrapreneurs and the significance of innovation. In addition they will have an awareness of creativity and creative behaviour and the conditions influencing innovative practices.

Module Objectives & Aims

1. To introduce students to the theory and practice of entrepreneurial creativity and innovation,
2. To examine the nature and development of entrepreneurship and the understanding of the characteristics of the entrepreneur and the intrapreneur,
3. To understand the role of the socio-cultural and business environment in fashioning innovative entrepreneurship and managing innovation,
4. To introduce students to the entrepreneurial process and the principal techniques and concepts necessary in new venture creation.

Prime Texts

Wickham, P. A. 2004 Strategic: Entrepreneurship: A Decision-making approach to New Venture Creation and Management, 3rd ed., Essex, England: Pearson Education Ltd.

Trott, P. 2005. Innovation Management and New Product Development, 3rd Edition. Financial Times, Prentice Hall.

Additional Reading

Burns, P. 2001. Entrepreneurship and Small Business, London, England: Palgrave.

Tidd, J., Bessant, J., and Pavitt, K. 2001. Managing Innovation. 2nd ed., Sussex, England: John Wiley and Sons Ltd.

European Commission 1995. European Green Paper on Innovation, December. Com (95) 688.

European Commission, 2003. European Green Paper on Entrepreneurship, January

Enterprise Strategy Group 2004. Ahead of the Curve: Ireland's Place in the Global Economy, July.

Assessment:

| | |
|------------------|-----|
| Assignment | 40% |
| End of term exam | 60% |

Assignment: Choose either (1) or (2)

(1) You must prepare a 2,500 to 3,000 word paper that describes and analyses the career of the individual entrepreneur who is known to you. The choice of a subject is yours but the following guides should be observed. The paper must be based on personal interview although it may be supplemented from recording sources. The entrepreneur may be a relative, friend, or someone you have contacted specifically for this exercise. The entrepreneur must be someone who has started a business or who has bought one, which somebody else started not somebody who has inherited a business or become a manager of a business started by somebody else. The paper must give an outline of the subject's career and/or whatever businesses were involved, and must focus in particular on the personality of the entrepreneur and his or her own perception of why they started their own business. You must provide a contact telephone number for your entrepreneur in order to aid verification.

Alternatively:

- (2) You must prepare a 2,500 - 3,000 word essay on one of the following topics.
- Government policy pertaining to encouraging innovation in Ireland/Europe.
 - SMEs – an analysis of their contribution to regional, national and international economies
 - The Personal Characteristics of New Firm Founders
 - Innovation in Indigenous SMEs in Ireland
 - Marketing an SME in the Current Irish Socio-Economic Environment

Suggested Interview Schedule for Interview with an Entrepreneur

The Business Background

1. Can you define your business for me?
2. What industry sector are you trading in?
3. What products/services are you selling?
4. Who are your customers?
5. What is the legal structure of your business? Has this changed since start-up?
6. Have you been involved in more than one start-up?
7. Does your company trade internationally?
8. What are the biggest problems you currently face in your business?

Personal Background

9. Would you please tell me about yourself before you started your first venture?
10. Were your parents, relatives or close friends entrepreneurial? If yes then in what form did this entrepreneurial activity take?
11. Did you have any other role models?
12. What was your education experience? In hindsight was it helpful in starting your business? If yes then in what specific ways was this education helpful?
13. What was your previous work experience? Were any particular experiences valuable in starting your business?
14. In particular, did you have any sales, marketing or financial experience? How important was it, or the lack of it in starting your business?

Start-up Process

15. How did you spot the business opportunity?
16. What were your goals when starting-up your business? What was your lifestyle and personal situation like at the time?
17. How did you fit these together with the demands of running a business?
18. How did you evaluate the opportunity in terms of the critical elements of success such as the competition, the marketplace, the likelihood of new entrants etc.?
19. Did you find or have partners?
20. What kind of planning did you do at start-up?
21. Did you have a start-up business plan of any kind? If yes please tell me about it.
22. How much time was there between the conception of the idea to the first day of trading?
23. What kind of financing did you have?
24. How did you manage short-term financing of the venture (i.e. bartering, borrowing, overdrafts, credit control etc.)?
25. How many hours a day did you spend working at the business during the start-up phase?
26. How long did it take to reach a positive cash flow and break even sales volume?
27. What were the problems that you faced during the start-up stage?
28. What outside help did you get in terms of business and legal advisors? How did you develop these networks and how long did it take?
29. What did you perceive to be your greatest strengths at this time?
30. What did you perceive to be your greatest weaknesses at this time?
31. What was your most triumphant moment?
32. What was your worst moment?
33. What was the national economy like when you started your business?

The Business Now

34. What became your most difficult problems as you began to grow?
35. When you looked for key people as partners, advisors or employees were there any particular personal attributes you were especially seeking? How did you find the right people?
36. Are there any attributes amongst partners/employees that would definitely try to avoid?
37. Have things become more or less predictable since you started your business?
38. Do you spend more or less time with your business now?
39. What managerial skills have you had to develop since beginning your business?
40. In terms of the future of your firm, do you plan to grow the firm, maintain it at its current size or sell?
41. Have your goals for the business changed?
42. Has your family situation changed?
43. What do you now perceive to be your major strengths and weaknesses now?

General Questions

44. What do you consider to be your most valuable asset as a person – the thing that enabled you to 'make it'?
45. If you had to do it over again, would you? What would you do differently?
46. Looking back, what do you consider to have been the most critical skills and attitudes to getting the venture to where it is today? What will be the critical factors in the next five years?
47. Some people say that there is a lot of stress involved in being an entrepreneur? What is your experience?
48. What have been the biggest rewards and the biggest risks in your entrepreneurial experience?
49. In your opinion, what kind of person does it take to be an entrepreneur?
50. What advice would you give an aspiring entrepreneur? What is the most important lesson you could pass on from your experience?
51. Conduct a PEST analysis of the Entrepreneurs business
52. Based on your understanding of the entrepreneur and his/her business, carry out a SWOT analysis.

Appendix II

Enterprise Formation

Module Title:

Introduction

Increased international competition, changing demographics and technological advance continue to shape the business environment where greater economic uncertainty and environmental complexity create opportunities as well as constraints for new business start-ups. The challenge in starting a business is how to capitalize on emerging opportunities while minimizing the potential threats to ensure long-term viability and sustainability of the business. This challenge requires that entrepreneurs adopt an iterative approach to integrating external environmental examination with internal business planning and development tasks.

Module Objectives & Aims

1. To develop students' understanding of the entrepreneurial process and the role of small firms in economic development
2. To identify and evaluate external and internal factors that impact on business start-up
3. To facilitate students in developing a range of diagnostic, analytical and decision-making skills necessary for the formulation, development and evaluation of a business start-up.

Prime Text

Cooney, T.M. and Hills, S. 2002. *New Venture Creation in Ireland*, Oak Tree Press

Additional Texts

O'Kane, B. 2004. *Starting a Business in Ireland - A Comprehensive Guide and Directory*, Oak Tree Press, or @ www.startingabusinessinireland.com

Recommended Sources of Information

Students are encouraged to read applied publications such as *Irish Entrepreneur*, *Business Plus*, *Business Sections of Newspaper* and to look for insights in those publications that relate to the various topics covered in the module.

Assessment Structure:

| | |
|----------------------|------------------------|
| 4 x 5% | 20% (Group Grade) |
| Final Report | 20% (Group Grade) |
| End-of Semester Exam | 60% (Individual Grade) |

Term Assignment

The assignment is to be undertaken in teams of 4 students.

Part one (20%): Your role is to develop FOUR Opportunity Start-Ups (new service / product) compiling a report for each new idea. Each report should not exceed TWO A4 pages. All four ideas must be completely new to the world. Each report you submit will have a description of product / service; Source of new idea; Reason for choice; Feasibility; Industry sector; Target market; and Geographic location

Part two (20%): As a group you must select one idea from your chosen four and evaluate this in terms of creation and length of the opportunity; real and perceived value of the idea; risks and returns of the proposed idea; opportunity versus personal skills and goals; utilisation of skills and capabilities; market analysis and acceptance; competitive analysis; level of technology change or use; availability of materials and production costs; and likelihood of success. This final report should not exceed 3,500 words. It should be practical in nature, applying theoretical framework where appropriate and should lead the group to a conclusion concerning the viability of the proposed product or service. The completed assignment must be submitted by week 10. It constitutes 20% of the overall grade.

Course Content

Part One: Entrepreneurial Opportunity

Understanding Entrepreneurship
Preparing for the Entrepreneurial Journey
Recognising and Creating Opportunity
Develop a Business Model

Part Two: Entrepreneurship and the Economy

Role of the Entrepreneurial Firm in Economic Development
Measuring Global Entrepreneurship

Part Three: Feasibility

Analysing the Industry and Market
Analysing Start-up Resources

Part Four: Moving from an Idea to an Entrepreneurial Firm

The Business Plan
Analysing Legal Options, Risks and Benefits
Incorporating Ethics and Social Responsibility
Designing an Entrepreneurial Organisation
Developing an Entrepreneurial Marketing Plan
Funding a Start-up Venture

Part Five: Business Development & Growth

Planning for Growth
Planning for Change

Course Overview

Appendix III

Module Title: Enterprise Development

Introduction:

This module requires multidisciplinary teams of students (marketing, finance, personnel, engineering and science) to prepare a business plan for a manufacturing or internationally traded service area. Teams are required to conduct a thorough market analysis in order to evaluate the opportunity identified, to design and develop a prototype of their product, and to formulate a comprehensive business strategy including funding requirements and financial projections.

Module Objectives:

1. To understand the components of a business plan.
2. To be able to work in a team and project manage the tasks necessary to complete the business plan.
3. To be able to assemble the necessary components of a business plan.
4. To develop students' report writing skills and to improve students analytical, communication and presentation skills
5. To be confident in presenting the business plan to a panel of experts.

Module Content:

Topic 1 Idea Generation

Creativity
Innovation
Idea generation

Topic 2 Recognising Opportunities

Evaluation of business opportunities
Business formation process
Feasibility study analysis

Topic 3 Business Plan Components

Components of the business plan
Industry analysis
Competitive strategy
Secondary and primary research
Identifying target markets
Product/service development
Manufacturing/ operations
Forecasting demand
Market/sales strategy

Topic 4 Legal Issues

Intellectual property
Legal forms of organisation
Composing the Board of Directors
Exit strategies
Buying and selling businesses

Topic 5 Financing
Sources of finance
Debt versus equity
Financial projections
Cash flow
Profit and loss
Balance sheets
Ratio Analysis

Topic 6 Making a Presentation
Visual and oral presentation of the business plan.
Making a 10 minute pitch
How do deal with questions

Assessment

100% business plan and presentation (group grade)

Each group must develop a Business Plan that meets the following criteria:

- *To be a viable new business idea or business expansion idea.*
- Should assume an active role in the proposed business idea.
- The following areas must be addressed – the product or service, target market, the marketing strategy: price, place/distribution, promotion – production, financial projections, sources of funds, and other relevant information to demonstrate feasibility.
- A complete business plan must be drawn up with a design of the product/service to be produced.
- Identify the start-up costs for your proposed business idea and indicate the sources of funding. For the purpose of the exercise, initial capital available is considered to be €90,000.
- Where investment is needed – the plan should indicate the return on investment.
- Submitted plans must be the work of the individual concerned, however, you are expected to seek the assistance and advice from the tutor and experts in the field.
- The guideline length of your completed plan is 25 pages (maximum) and appendix.
- Projects must show some degree of innovation, must be feasible and marketable.

Appendix IV

Module Title: **Business Consulting**

Teaching Objectives:

1. To introduce students to the principles and processes of management consultancy.
2. Recognise the importance of sound analytical thinking when approaching business opportunities and challenges.
3. To provide students with an opportunity to conduct desk research and primary research.
4. To develop an understanding of the value of effective communication in a business situation.
5. To develop students' report writing skills and to improve students analytical, communication and presentation skills
6. To recognise his or her own business skill profile, identify strengths and opportunities for development and to develop confidence in promoting his or her own business ideas.

Module Structure:

The module is structured as follows: Students are formed into groups. Students meet with the project supervisor with a view to drafting a research proposal, which will form the basis of agreement between both parties (the consulting group and the project supervisor). The research proposal plus a covering letter is given to the project supervisor, with a follow up meeting by the students to discuss any queries. Any modifications to the research proposal will be made at this stage. The student team conducts project research. A final written report is submitted and presented to the project supervisor, the client and invited faculty.

Assignment:

| | |
|------------------------------------|------------------------|
| Project management and project log | 30% - Individual grade |
| Final Project report | 60% - Group grade |
| Presentation | 10% - Individual grade |

Module Schedule³

Week 1: **Course Introduction**

The nature of management consulting and the skills of the consultant

Read: Stumpf, S.A. 1999. Phases of Professional Development in Consulting. Career Development International, Vol. 4, Iss. 7, pp. 392-399.

Read: Markham, C. 2005. Developing Consulting Skills. Consulting to Management, Vol. 16, Iss. 4, pp. 33-37.

Week 2: **The consulting process and types of management consulting projects**

How consulting adds value and the project proposal and the project log

³ At the discretion of the lecturer this module schedule may be altered.

Read: Bloch, B. 1999. How They Put the 'Con' in Consulting. *Managerial Auditing Journal*, Vol. 14, Iss. 3, pp. 115-117.

Week 3: Consulting project planning and the consultant setting goals

Analysing decision-making in the client business and consulting and organisational development

Read: Benson, S.S., Chandon, W.J., and Nadler, G. 2005. The Art of Creating Smart Questions. *Consulting to Management*, Vol. 16, Iss. 4, pp. 19-23.

Read: Adamson, I. 2000. Management Consulting Meets a Potential Client for the First Time: the Pre-Entry Phase of Consultancy in SMEs and the Issues of Qualitative Research Methodology. *Qualitative Market Research: An International Journal*, Vol. 3, Iss. 1, pp. 17-26.

Week 4: Evaluating business opportunities and using surveymon-key.com

Read: Beam, C. 2005. Turn Quantitative Data into Meaningful Information. *Consulting for Management*, Vol. 16, Iss. 2, pp. 35-38.

Week 5: Auditing the client business's capabilities and creative approaches to analysis

Auditing the business environment

Read: Fullerton, J. and West, M.A. 1996. Consultant and Client Working Together? *Journal of Managerial Psychology*, Vol. 11, Iss. 6, pp. 40-49.

Week 6: Marketing plans

Read: Pophal, L. 2000. Marketing Plans Work, *Communication World*, Vol. 17, Iss. 7, pp. 22-24.

Week 7: The decision context and managing project shocks

Rapport-building skills and time management

Submit Draft Report

Week 8: Team-working skills and leadership skills

Presenting your ideas and communication skills

Week 9: Report writing and communication skills

Read: Sullivan, V. 2004. Five Tips to Make Speaking Engagements Pay Off. *Consulting to Management*, Vol. 15, Iss. 4, pp. 12-13.

Week 10: Presentation skills

Read: Harper, J. 2004. Presentation Skills. *Industrial and Commercial Training*, Vol. 36, Iss. 2, pp. 125-127.

Read: Sherman, R. 2002. 10 Presentation Skills Top Executives Live by. *Business Credit*, June, pp. 46-47.

Week 11: Learning from success Submit Final Report

Week 12 – 13 Presentations to client and faculty

Recommended text:

Wickham, P.A. 2004. Management Consulting, 2nd Edition, Pearson Education Publications.

Bryman, A. and Bell, E. 2004. Business Research Methods, Oxford Press University.

FINAL PROJECT REPORT

The final report relates your analysis and recommendations to the business. Length and format will vary but it is typically 40 – 60 pages long with a one-page management summary which makes a strong impact.

| Grade | Achievement |
|-------|---|
| A1-A2 | Present a final presentation which develops logical and valid conclusions based on extensive, reliable and properly interpreted information. The analysis will be clear and based on a well-defined, appropriate and properly used conceptual framework. Key actions to be taken by the business will be clearly defined. Presentation will be professional and attention catching with ideas communicated in an impactful manner. |
| B1-B2 | Present a final presentation which develops logical and valid conclusions based on well-researched, reliable and competently interpreted information. Analysis will be based on a well-defined and appropriate analytical framework. The conclusions will lead to the business being able to take positive actions, though these might not be as explicit as those that would earn an A grade. Presentation will be professional with an effective communication technique used. |
| B3-C1 | Present a final presentation which develops generally valid conclusions. These will be grounded on effectively researched information but this may not be as extensive as that which would justify an A-B grade. Analysis will be competent though it might not draw on the kind of conceptual insights that would justify an A-B grade. Presentation will, on the whole, be professional. The business will be able to take positive actions as a result of the report but these actions may not be clearly defined by the report. |
| C2-C3 | Present a final presentation which draws some useful conclusions but it will not be clear that these are based on wide-ranging or particularly reliable background research. Analysis will, on the whole, be competent but it may not be based on a clear conceptual framework. The actions that the business should take as a result of the report will not be clear. |
| D1-D2 | Present a final presentation which does not develop any useful conclusions. This is likely to be because insufficient background research has been undertaken and/or meaningful analysis has not been undertaken. The business will not be able to undertake any specific actions as a result of the project. |
| F | Make no submission |

PROJECT DIARY

The project diary represents an opportunity for you to relate your personal experiences on the project, the kind of thinking used, the analysis undertaking, the active learning adopted and how you used the programme to develop a personal leadership and motivational style towards the rest of the group. This is an **individual** grade and holds a 30 percent weighting.

| Grade | Achievement |
|---------|---|
| A1-A2 | Present a diary which clearly defines all the major steps in the project, what the specific objectives of each step were, how the objectives were defined and how they were achieved. The diary will demonstrate reflection on how the team is operating and the group dynamics operating. The diary will have evidence of action learning techniques being adopted and will relate the analysis that was carried out. The diary will also make reference to the development of personal leadership and group motivational style. |
| B1 – B2 | Present a diary which clearly defines all the major steps in the project, what the specific objectives of each step were, how the objectives were defined and how they were achieved. The diary will demonstrate reflection on how the team is operating and the group dynamics operating. The diary may also have evidence of action learning techniques being adopted and relate the analysis that was carried out. The diary will, however, lack the kind of reflection on personal leadership and group motivational style being developed that would justify an A grade. |
| B3 – C1 | Present a diary which clearly defines all the major steps in the project, what the specific objectives of each step were, how the objectives were defined and how they were achieved. The diary will demonstrate reflection on how the team is functioning and the group dynamics operating. Evidence on action learning, group dynamics and leadership style will, however, be too limited to justify an A-B grade. |
| C2 – C3 | Present a diary which is a simple list of the main tasks, how they were defined and what was achieved. There will be no evidence of analysis or reflection on action learning, group dynamics, leadership or motivation. |
| D1-D2 | Present a diary that merely lists the tasks carried out. |
| F | Make no submission |