

ENTREPRENEURSHIP EDUCATION: EMBEDDING PRACTITIONER EXPERIENCE

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ABSTRACT

The QAA Framework for Higher Education Qualifications (England) in General Business and Management states that 'Preparation for business should be taken to mean the development of a range of specific business knowledge and skills, together with the improved self-awareness and personal development appropriate to graduate careers in business with the potential for management positions and to employability in general. This includes the encouragement of positive and critical attitudes towards change and enterprise, so as to reflect the dynamism and vibrancy of the business environment'

In a report recently produced by the National Council for Graduate Entrepreneurship (NCGE), the National Endowment for Science, Technology and the Arts (NESTA) and the Council for Industry and Higher Education (CIHE) concluded that 'Entrepreneurship education is currently taught primarily through modules in business school courses and extra-curricular activities. HEIs need to enhance the perception and relevance of entrepreneurship education, so students and staff recognise the value of its combination of innovation, creativity, collaboration and risk-taking skills to a wide range of disciplines'.

This paper focuses on a ground breaking programme specifically designed to address these criticisms of the way in which enterprise and entrepreneurship is taught in universities. There are a huge number of programmes on offer across within European Higher Education with the words 'enterprise' and 'entrepreneurship' in the title, but what makes the BA (Hons) Enterprise and Entrepreneurial Management unique is the close involvement of entrepreneurs right from the outset, including course design, module content and delivery. This is achieved through an 'entrepreneur in residence' network, with Walter Herriot, Managing Director of St John's Innovation Centre, Cambridge, one of the world's leading incubation centres, as Director. This enables leading entrepreneurs to be embedded in fabric of the programme through playing a very active role in the continued development of the curriculum, content, and delivery of the pathway. Additionally, each student is allocated an entrepreneur as mentor for the duration of the three year programme.

This paper will firstly explore the key issues raised by the policy community and others calling into question the appropriateness of the way in which enterprise and entrepreneurship is taught. It will then look at the way in which UK universities are responding to these comments. The paper concludes with a case study of an academic programme developed and delivered jointly by academics and practitioners.

The Context

Over the last ten years, there has been an increasing level of academic and policy interest in the role of higher education institutions as agents of economic and social development, through not only their research and teaching activities but also their engagement with individuals and businesses in the wider local and regional economy. For example, a recent report from the Council for Industry and Higher Education, the National Council for Graduate Entrepreneurship and NESTA in the United Kingdom notes that „HEIs have increasingly become more involved in regional economic and social development (through closer business, industry and third sector collaborations ...) and activities such as the commercialisation of intellectual property“ (NESTA, 2008, p. 10).

Across a range of developed market economies, there have been a number of policy statements which have outlined ways in which the outreach or „third leg“ activities of higher education institutions can be enhanced and supported. In the United Kingdom, for example, the Innovation White Paper (DIUS, 2008a), the Enterprise Strategy (BERR, 2008) and the Employer Engagement Reforms (DIUS, 2008b) all outline different scenarios for higher education institutions supporting the development of the capabilities and skills of individuals and businesses to survive and thrive. This policy narrative has manifested itself in programmes of support and funding stream including the Higher Education Reach Out into the Business and Community Fund, the Science and Enterprise Challenge Fund and the Higher Education Innovation Fund. As a result, HEIs have introduced a range of activities and initiatives to support students and staff in engaging with their community and vice-versa. Incubation spaces, technology transfer offices, business planning competitions and business development programmes are now common across the HEI landscape.

One key element of focus within such activities has been the development of enterprising students and graduates through enterprise education. Evidence from economies such as the United States highlights the potential contribution of enterprising students to competitiveness and productivity, particularly through facilitating organisational change and business start-up. Hannon et al. (2004) report on statistics from the United States that demonstrates that business start-ups by graduates accounts for between 6 and 8 per cent of national GDP. In addition, there is evidence of mis-match between the supply of graduates and the skills required by employers. Research undertaken by CIHE demonstrates a gap between perceived importance and levels of satisfaction in terms of commercial awareness and communication skills. Archer and Davison (2008, p. 8) note that:

It appears that while many graduates hold satisfactory qualifications, they are lacking in the key 'soft' skills and qualities that employers increasingly need in a more customer focused world.

There has been a relatively recent proliferation of enterprise education offerings in higher education institutions in economies such as the UK, as a way of providing students with an awareness of the abilities, behaviours and skills required to compete within different employability contexts (Hartshorn and Sear, 2005).

In parallel to such activity, the academic literature on enterprise education in higher education has mushroomed. Given the relatively newness of activity, there are a number of studies which have focused on mapping the extent and nature of enterprise education offerings. Recent surveys by EFER (2004) and NCGE (2007) highlight that:

- Levels of student engagement vary across different contexts and whilst there is evidence of growth, current levels are approximately 10 to 20 per cent of students in an institution
- The majority of growth in enterprise education activity has occurred over the last five years. The research by EFER identified 69 centres of Entrepreneurship across Europe
- The majority of enterprise education is provided through business schools, with limited examples of other departments and faculties proactively engaging with such activity
- There are a variety of entrepreneurship-related activities and services, such as business plan writing competitions, mentoring and coaching programmes, student placements, incubation and managed workspace and advisory and information services
- Classroom based lectures tend to be the predominate teaching method, although there is recognition of the need for experiential learning in practice
- Extra curricular entrepreneurship education provision tends to be underpinned by using public sector funding, introducing a degree of reliance on external stakeholders for the continuation of activity.

These studies have also identified that higher education institutions have adopted different approaches or models to the delivery of such enterprise education activity. These approaches can be classified into two key groupings: focused and dispersed (Gibb, 2005). In the former, a specific centre or unit (e.g. a Centre for Enterprise) is provided with the responsibility for the co-ordination and delivery of enterprise education activity across the University. With the dispersed model, activity is embedded within specific departments and faculties. These approaches are associated with different challenges and opportunities. For example, a focused approach may encounter difficulties in developing ownership of specific enterprise education activity within specific departments or faculties and different reward structures for staff in central units may create tensions with other members of staff.

Other challenges which may influence the delivery of enterprise education activity in higher education institutions include:

- A constantly changing policy environment which supports innovation, as opposed to the continual delivery of successful activity

- A reliance on funding from public sector sources which may hinder longer-term planning and delivery
- The coupling of enterprise with business start-up which may hinder embedding of enterprise education in other departments and faculties
- A lack of evidence as to the effectiveness of different approaches and activities to supporting enterprise education

As noted above, there has been a focus on traditional teaching and learning pedagogies, such as lectures and case studies, which may hinder engagement with „opportunities for live learning in which entrepreneurial practice and experience may be introduced“ (NESTA, 2008, p. 11). Indeed, there is a lack of insights as to how external practitioners, such as entrepreneurs and enterprising people from different contexts can be embedded within the development and delivery of enterprise education offerings.

The state of play within the UK Higher Education sector

The European Commission Green Paper On Entrepreneurship (2008) states that within university entrepreneurship training should not only be for MBA students it should also be available for students in other fields. However, with a few notable exceptions this has not happened within the U.K. Higher Education (H.I.) sector. Indeed even within Business schools the whole enterprise agenda has been undervalued resulting in an uneven offering across the sector where in the main enterprise as a subject remains on the periphery offered either as an option elective or at best bolted on to the pervading corporate model of education to create a degree programme that has enterprise/entrepreneurship the title, but with little change in the content and none in teaching methodology.

There has in business schools been an attempt to define the subject area for example is teaching for enterprise or about entrepreneurship. These words are often seen as synonymous, however entrepreneurship is in essence about starting a new venture. Enterprises is the whole concept of how students need to think in a completely different way to face the challenge of work in the 21st century.

Not everyone will want to start a business, but all students need to be enterprising both for success in the work place and to add value to society. Therefore business schools need to change the way they both structure and deliver enterprise education. They have not thus far taught enterprise skills except where they are seen as relevant to understanding new venture creation, thus making it appear that this “special few” who are entrepreneurial have or need such a capability. Indeed most of such entrepreneurial programmes are formulaic in structure and traditionalist in methodology, which only serves to underpin the view that entrepreneurs are different to the rest of mainstream business. This has been and still is a very dangerous weakness in the understanding shown by Business Schools about the enterprise agenda and it’s importance to their collective futures.

There has then to be a major cultural change in the way UK Business Schools operate if they are to face these changes that are coming. Acceptance that

there needs to be a move to a model of integrated learning with more student management of the process and a wide and more innovative use of technology is essential. Business schools in the UK have to move rapidly from an educational orthodoxy based on separate disciplines being taught in silos and managing the learning process by an arcane approach to teaching and learning that is reliant on didactic teaching approach and the production of ever more obtuse work books to an educational methodology that embraces the concept of enterprise and integrated business skills thus placing them at the centre of the curriculum and not on the periphery.

Further there has to be a much deeper understanding that such activities as creativity, problem solving, understanding innovation, risk management and culture change coupled with decision making and confidence building which in turn leads to self reliance, open minded respect for evidence and a willingness to take on responsibility, are the absolute core issues of the enterprise concept.

In order to achieve this change Business schools need to interact more with the entrepreneurial world by bringing successful enterprising people into the development and delivery process. This is something again which U K Business schools have not embraced due to a culture of academic insulation that if not changed will render them increasingly non competitive.

Embedding Practitioner Experience: A case Study – BA (Hons) in Enterprise and Entrepreneurial Management

Background to the course

The objective behind the development of this course was to address many of the issues identified above through establishing a benchmark programme in the area of enterprise and entrepreneurial management. It provides the students with conceptual and theoretical insights into enterprise, innovation and entrepreneurial management, as well as the practical abilities and skills to apply this understanding within a range of different business, community and organisational contexts.

It has been developed by the Centre for International Business (CIB) within the Ashcroft International Business School (AIBS), Anglia Ruskin University, Cambridge, UK. CIB has a well established reputation for its work in the area of enterprise and entrepreneurial management within the region and at a national and international level. CIB recently acted as expert consultant to the 44-country OECD-APEC study titled "Removing Barriers to SME Access to International Markets" which made policy recommendations to the 44 governments included in the study, the European Commission and the World Trade Organisation (WTO).

With regard to curriculum design, CIB worked in close conjunction with Walter Herriot, who as Managing Director, built St. John's Innovation Centre, Cambridge into a world leader in Business Incubation. The joint development team of academics and entrepreneurs allows the course to bring together theory and practice in a coherent academic programme of academic study.

The extensive academic and entrepreneurial networks of the development team allowed practitioners to be involved from the outset. An „entrepreneur in residence“ network was established, with Walter Herriot as Director, to ensure that leading entrepreneurs were closely embedded in the fabric of the course from the start, playing a very active role in the continued development of the curriculum, content, and delivery of the academic programme. In this way the course aims to blend theory and practice to provide graduates of the programme with the skills, attitudes and aptitude required if they are to thrive in a highly complex, fast changing business environment.

The ‘entrepreneurs in residence’ network

The „entrepreneur in residence“ network represents a central pillar underpinning the course. The entrepreneurs play a central role and their activities can be summarised as follows:

- Provide advice to the development team with regard to the design of the overall course
- Work in collaboration with academic staff to develop the individual modules.
- Contribute to the delivery of the pathway through an agreed mix of guest sessions, advice on appropriate module content, observing student presentations and assisting in the assessment process.
- Agree to be allocated to an individual student and act as mentor to that student until the time of graduation.
- Act as advocates for the programme within the regional business community.
- Encourage entrepreneurial firms to provide placement opportunities for the students through the Learning in Residence module.
- Provide experiential learning opportunities for the students within their own enterprises.

It is important to stress that the aim in developing the „entrepreneur in residence“ network is to embed enterprise and the experiences of entrepreneurs within the academic programme and as such the above list is indicative rather than prescriptive. The key however is the intention to build a sustainable set of relationships capable of embedding the world of enterprise and entrepreneurial management into the course.

A key role of the entrepreneur is one of mentoring the students. In addition to the Personal Tutor appointed under the University Personal Tutoring system, each student on the course will be allocated a member of the „entrepreneur in residence“ network who will act as their personal mentor for the duration of the academic programme. The Personal Tutor and the entrepreneur will then work closely together to support the ongoing learning needs of the student. This creates a very strong link between the Personal Tutor system and the „entrepreneur in residence“ network whilst at the same time providing the student with a very powerful learning support structure. This will have particular value in supporting the student during the „Learning in Residence“ placement period.

Before briefly describing the academic programme, below is a brief profile of some of the entrepreneurs involved in the course.



Walter Herriot

Director of the Entrepreneur in Residence Network
Managing Director, St. John's Innovation Centre

Walter Herriot built St John's Innovation Centre into one of the most successful business incubators in the world. Regarded as one of the founders of the Cambridge Phenomenon, Walter is Chair of the Cambridge Chamber of Commerce, Chairs both the EEDA Enterprise Hubs in the East of England and Enterprise East and is a member of the steering committee of the Greater Cambridge Partnership. A former Cambridge Evening News "Businessman of the Year", in 1999 Walter was awarded an OBE for services to enterprise.



Billy Boyle

Co-founder / Director Owlstone Ltd

Billy Boyle is co-founder and director of Owlstone which develops and commercialises MEMS chemical sensors for industrial and military use. Founded in 2004, Owlstone currently employs 30 people, has raised \$10M in the USA and has won a \$3.7M contract from the US Department of Defence. Billy is first and co-author on numerous conference and journal papers, has presented at a number of prestigious international conferences and is co-inventor of 19 patents.



Ludo Chapman

Managing Director Grant Instruments Ltd

Ludo Chapman is Managing Director of Grant Instruments Limited, a 53 year old company specialising in the design and manufacture of scientific and data logging equipment. Ludo joined Grant after many years running a successful software training company, which he grew into a £1m turnover business with clients such as British Gas, Pearl Assurance and Addenbrokes Hospital. Ludo is an active member of the CBI, working on the CBI small business council.



Charles Cotton

Director UK-based Library House, Cambridge Enterprise and Wigadoo

Charles Cotton has been at the forefront of successive waves of technology innovation – computing, broadband communications, information services, digital mapping and location based services, and Web 2.0. He is a director of UK-based Library House, Cambridge Enterprise and Wigadoo, a director of US-based Solarflare Communications, Feeva Technology and Terabitz. He is a Supervisory Board member of Tele Atlas, the Euronext Amsterdam listed supplier of digital maps, and active investor in, and adviser to, venture capital firms and is a business angel.



Iain Cruickshank

Managing Director

Iain Cruickshank for many years managed multi-million pound building and construction projects, while building a property portfolio with a current value of £4M. In the early 1990's he established elecheck, an electrical safety testing company which now employs 80 staff with a further 50-60 contract/consultancy staff. With a turnover of £5M the firm services the requirements of over 2,500 organisations. In addition, Iain has invested over £500k in AIM listed companies and start-ups and still holds a considerable shareholding in a variety of businesses in excess of £1M in value.



Julie Horne

Business leader, consultant and coach

Julie Horne is an experienced business leader, consultant, and coach with broad experience in a variety of business and public sectors. In 1989 she founded Oakland Innovation Ltd to provide information and consulting services to support service and product innovation in science and technology based companies and universities. This business was successfully sold in 2006 and Julie now provides business consulting and coaching to senior executives in the corporate, SME and public sectors. Typical assignments include business mentoring; leadership and management development; and organisational development.



Bev Hurley

Chief Executive YTKO

Bev Hurley's career spans inner city regeneration in London, a corporate career with a global north American mining company, and the growing of three successful companies, in healthcare packaging, the creative industries, and her own management consultancy. She was appointed Chief Executive of YTKO in 1999, an economic development and business consultancy which has helped hundreds of businesses to start, raise funding, and get to market. Bev is on the board of EEDA, a Member of the East of England Science and Industry Council and the SME Advisory Committee of the Industry and Parliament Trust



Amy Mokady

Entrepreneur

Amy Mokady is a serial entrepreneur who has held senior sales, marketing and business development roles in start-ups and multinational companies. She was a co-founder and marketing director of STNC Ltd., which was acquired by Microsoft in 1999. Following roles working at the forefront of the mobile industry at Microsoft, QUALCOMM and Hutchison 3G, more recent start-ups include Pogo Mobile Solutions, Light Blue Optics and Mo.Jo. Amy is also a Director and mentor of several early-stage technology start-ups, a Director of the Greater Cambridge Partnership, and a Board Member of the Cambridge Angels.



Micah John Styles

Managing Director CLR Global Group

Micah is founder and Managing Director of the CLR Global Group, a visionary Group of specialist international recruitment consultancy companies, which has been operating on a truly global scale since 2001. A „Born Global“ entrepreneurial business, the CLR Global Group have operations in Qatar, China, Brazil and Mauritius. Prior to founding the CLR Global Group Micah worked in senior finance positions in Media companies in the UK and South Africa and currently directs his commercial endeavours and oversees his worldwide interests from his home in the South of France.



Steve Westcott

Founding Director Melbourn Scientific

Steve Westcott is founding director of Melbourn Scientific, a company that provides analytical chemistry and formulation support to the global Pharmaceutical, Biotech, Healthcare and Biopharmaceutical Industries. Having previously held senior positions at GSK (formerly Glaxo) in Ware, Steve is a Fellow of Royal Society of Chemistry. Established in 1999, Melbourn Scientific has grown year on year and under Steve's direction is now clearly established as one of the premier labs for Pharmaceutical Analysis in Europe. In 2006 the firm moved into 20,000sq ft of space and now has a staff of around 60 employees.

The academic programme

With regard to the coverage of key academic areas for the subject, the majority of existing enterprise and entrepreneurship degree programmes are either highly practical in nature or „knowledge“ based. This course takes the approach of marrying these two together through developing an enterprising skills set alongside the practical application of those skills. Schools and Colleges increasingly report that „enterprise clubs“, „run your own business“ schemes and other programmes tend to capture the attention of those students alienated from more traditional subjects and who are likely to drift away from education. Having been persuaded to stay within the education system, upon entering University these students again typically encounter traditional functional subjects such as finance, HRM. For many students this is perfectly appropriate, but for the type of student likely to be attracted to the proposed pathway this is insufficient, their interest is again lost and they tend either to drift out of the educational system or to badly underperform due to lack of interest or motivation.

This course, through a highly innovative and radical approach to curriculum design and delivery aims to capture the passion and imagination of this neglected group of students. At the outset, the students are introduced to the concept of enterprise through two innovative modules „Foundations of Enterprise“ which provides an understanding of enterprise as a discipline and „Enterprise in Action“ which allows for the initial development of core enterprising abilities and skills.

The „Enterprise in Action“ module, as the name suggests, is a very practical, hands on module. To this end, the development team worked in partnership with Virgin Money to provide the students with an opportunity to work on a real business opportunity. Virgin Money had for some time been exploring the potential market for Pet Insurance. Virgin Money provided the students with their

market intelligence and provided a dedicated liaison person and the students were required to prepare an outline business plan for the market potential and the best route to market. This plan was then presented to the senior management at Virgin Money in their boardroom at the conclusion of the module.

In the second semester the students are placed within an entrepreneurial business, not on a traditional student placement where low level tasks are often undertaken, but to provide exposure to the trading realities facing the entrepreneurial enterpriser and to offer opportunities for personal skills development through such mechanisms as mentoring and shadowing. This is the first stage in the students' outside journey and is called „Learning in Residence“.

The „Learning in Residence“ module plays a central role in the teaching and learning strategy of the course. This is not a standard student placement opportunity, but rather represents the first stage on the students' external journey. The aims of this module are to:

- Provide exposure to the trading realities and challenges facing the entrepreneurial business;
- Provide insights into managing in a complex environment;
- Offer opportunity for personal skills development through informal mentoring and shadowing;
- Create opportunities for problem solving, creative thinking, the development of networks and strategic awareness.

Keith Hermann, Deputy Director of the National Council for Education and Entrepreneurship, has described the „Learning in Residence“ module as *„a fabulous invention and although there are numerous schemes which encourage work-based learning for students via placements, the design of this element of the programme is fundamental to its success.“*

Consistent with the highly innovative nature of this course, an innovative approach is taken to the learning and teaching methods used to achieve the learning outcomes. Teaching will be undertaken in blocks often away from the University within entrepreneurial businesses and other locations. For example, Paul Bourne, Artistic Director of Menagerie Theatre Company, Managing Director of Ensemble Training and Visiting Fellow in Management Training at the Centre for International Business, AIBS will take the students to a theatre to take part in the creative process of developing a piece of theatre from scratch.

Within a wider context, the course address a number of policy and practice agendas at a regional, national and international level, not least the emphasis of Governments to embed enterprise in education institutions and prepare students for a highly dynamic and uncertain labour market (Davies Review, 2002; Leitch Review, 2006).

Some thoughts in conclusion

This paper has identified a number of policy initiatives aimed at promoting the development of skills and capabilities required by graduates if they are to survive and thrive within the modern fast paced, highly competitive entrepreneurial

environment. Evidence of the contribution made by enterprising students to competitiveness and production, particularly through facilitating organisational change and business start-up has been cited. However, the key issue underpinning this paper is that within the UK, higher education institutions have demonstrated relatively few offerings able to provide students with an awareness of the abilities, behaviours and skills required to compete within different employability contexts.

In recent years there has been growing interest in the area of enterprise education, resulting in a huge increase in the academic literature in the area. This body of work appears to suggest that within UK HEIs there largely remains a focus on traditional teaching methods and learning pedagogies such as lectures and case studies. In the paper we note that there is a lack of insights as to how practitioners can be embedded within the development and delivery of enterprise education offerings.

The case study presented here is one of many examples of good practice to be found within the Higher Education sector both within the UK and throughout mainland Europe. Such programmes, however, that embed practitioners into the teaching of enterprise and entrepreneurship appear to be the exception rather than the rule. This paper contends that there are significant weaknesses in the way UK Business Schools in general approach the teaching of enterprise and entrepreneurship.

We would argue that UK Business Schools need to move from a model of educational orthodoxy to a more integrated based approach which interacts in a much more meaningful way with the entrepreneurial world. One of the ways this can be achieved is by bringing successful enterprising people into the development and delivery process. The case study above provides an example of how this can be done efficiently and effectively.

References

1. Archer, W. and Davison, J. (2008) *Graduate Employability: What Do Employers Think and Want?* Council for Industry and Higher Education, London.
2. Department of Business, Enterprise and Regulatory Reform (2008) *Enterprise: Unlocking the UK Talent*, The Stationery Office, London.
3. Department for Innovation, Universities and Skills (2008a) *Innovation Nation*, The Stationery Office, London.
4. Department for Innovation, Universities and Skills (2008b) *Higher Education at Work: High Skills: High Value*, Department for Innovation, Universities and Skills, London.
5. Department for Innovation, Universities and Skills (2006) *UK Skills: Prosperity for all in the global economy – world class skills*, London.
6. Gibb, A.A. (2005) *Towards the Entrepreneurial University*, Policy Paper No. 3, NCGE, Birmingham.

7. Hannon, P. (2004) *Making the Journey from Student to Entrepreneur: A Review of Existing Research into Graduate Entrepreneurship*. Final Report for the National Council for Graduate Entrepreneurship, Institute of Small Business Affairs Consortium, Birmingham.
8. Hannon, P. (2007) "Enterprise for All? The Fragility of Enterprise Provision across England HEIs", *Journal of Small Business and Enterprise Development*, 14, 2, pp. 183-210.
9. Hartshorn, C. and Sear, L. (2005) "Employability and Enterprise: Evidence from the North East", *Urban Studies*, 42, 2, pp. 271-283.
10. Learning and Skills Development Agency (2002) *The Howard Davies review of Enterprise and the Economy in Education*, London.
11. NESTA (2008) *Developing Entrepreneurial Graduates: Putting Entrepreneurship at the Centre of Higher Education*, NESTA, National Council for Graduate Entrepreneurship and Council for Industry and Higher Education, London.
12. National Council for Graduate Entrepreneurship (2007) *Enterprise and Entrepreneurship in Higher Education*, National Council for Graduate Entrepreneurship, Birmingham.