

Higher Education Academy Imaginative Curriculum Guide

Enterprise in the Higher Education Curriculum

Dr Pauline Kneale

Purpose

This is one of a series of guides produced by the Imaginative Curriculum Network to stimulate thinking and promote good practice in curriculum design. This Guide focuses on the idea of enterprise in the Higher Education Curriculum.

Audience

This Guide is written primarily for: people who have institutional responsibility for leading developments in teaching and learning; people who lead whole course curriculum design and/or who help other academics to develop the curriculum; people who help other academics to develop their knowledge and skills about curriculum design e.g. Tutors for PG Cert HE teaching and learning courses; LTSN Subject Centres who are growing disciplinary knowledge of teaching and learning practices.

There is a companion guide for **Busy Academics**.

The Author

Pauline is a Senior Lecturer in the Department of Geography at the University of Leeds. She is also a National Teaching Fellow.

Enterprise Learning

Being enterprising involves being proactive, developmental, creative, making things happen and generating ideas in any and every part of life. It is about grasping opportunities and influencing change. Innovating through generating new ideas is an integral part of academic life and as such can be seen as integral to any curriculum. Enterprise learning involves letting staff and students use their potential for creativity and innovation as part of a degree, and to make explicit how the related skills can be used throughout their working, social and sporting lives.

The UK government have placed enterprise in the curricula for students of all ages. In Higher Education (HE) HEFCE (2004) states that 'A key role for universities ... is ... activity to meet the needs of business and the community, contributing to economic and social development both regionally and nationally. We are committed to encouraging and rewarding partnerships between HEIs and business, the transfer of knowledge and expertise, and the development of employment skills'.

Employers express the need for enterprise-aware students and the characteristics and attributes they seek relate to this agenda. Gow and McDonald's (2000) survey of 127 employers and 84 educators in Australia identifies twenty one attributes that encapsulate an employee who is aware of the changing, dynamic nature of the workplace (Figure 1). For curricula designers there is an interesting challenge to create learning opportunities with some of these points among the learning outcomes.

Figure 1 Gow and McDonald (2000) Virtual attributes required to generate an income in 2005: Adaptability to changing work environments

- Create and envision new ways
- View change as opportunity
- Network to create new business
- Demonstrate willingness to *work with* diversity
- Learn in a range of environments
- Trust processes rather than structure
- Posses awareness of the need to develop networks of contacts
- Demonstrate tolerance for ever changing environments
- Respond quickly to change
- Show willingness to take risks
- Explore new ideas and resources
- Identify the best personal learning strategy and style
- Tolerate diverse viewpoints
- Demonstrate motivation
- Strive for continuous self-development
- Work with people from diverse backgrounds
- Take responsibility for career development
- Self-direct behaviour and operate independently
- Market ones-self and one's ideas
- Responsibly challenge existing procedures and ideas
- Learn and perform multiple tasks

Enterprise learning is not a business school activity it is much more universal. It involves both raising awareness of workplace realities and encouraging and developing creativity in students (Schank 1988 ***Norman Schank 1988 was in the Sternberg ref you sent but not reffed there. I cannot see the original. If you can add it then OK or ditch***, Sternberg and Lubart 1996, Sternberg and Williams (1996), Jackson ***Norman can you add a couple of yours, preferably the recent LTSN docs please?***) In my view being effective in this area requires considerable student engagement. The delivery needs to model 21st century practice. Problem based learning, project based learning, inquiry based learning, simulations, interactive case studies and work placements are going to be more effective learning activities than the traditional lecture and seminar. Students can be given the opportunity to work co-operatively in teams, as at work, and be fully enthused and engaged. There is a twin aim for the teacher: to deliver the academic knowledge goals, and to develop the learner's enterprising capabilities. This should be a win-win arrangement encouraging the student to be immersed in the academic materials and to be progressing towards being a self-starting, independent life-long learner. Integration in the curriculum is critical, otherwise enterprise activities are occasional events that are not contextualised by the individual and in danger of being viewed as irrelevant.

The Place of Enterprise in the Curriculum

For HE students from the UK, enterprise and entrepreneurship should be familiar concepts. The enterprise curriculum has been in place in schools for over 10 years (Dti 2004a & b). It is well documented with suggested activities which include involving local business entrepreneurs, the mini enterprise and the City and Guilds Diploma of Vocational Education. Young Enterprise (2004) and Young Enterprise Scotland (2004) are schemes where pupils set up and run their own company usually over a period of about a year. Organisations such as Business in the Community (2004), Enterprise Insight (2004), Network for Teaching Entrepreneurship (2004) and Shell LiveWIRE (2004) are just 4 examples of a much broader network of organisations that work with pupils. In the US they are called Teenpreneurs.

My experience of surveying 230 geography level 1 undergraduates over two years about enterprise and 'setting up your own business', is that over 90% have either been involved in a Young Enterprise company in junior or senior school or their friends were. They are articulate about an enterprising person: '*someone who has original ideas and puts them into practice*'; '*someone who can make a difference by improving on a current situation*'; '*someone who can think for themselves, work in a group and can communicate with group members*'; '*someone who effectively creates awareness about a new idea*'; '*a proactive student who is able to maximise all opportunities available using all available personal talents and own initiative*'.

Amongst this group there was a willingness to engage further with enterprise activities, but *'it has to be different from school', 'We set up a business and it was interesting but not again'*. For some of these students *'I have thought about it and I know I do not want to work on my own'* and *'I do not want the hassle of setting up a business, I would rather work for someone else'* are well founded thought out statements that in some cases have influenced their subject choice at university. *'If I had been interested in that sort of thing I would have done Management Studies at Uni'*.

The cohorts of geographers surveyed here gave me the impression that many of the main ideas behind enterprise and business start ups are well understood, but these are not their primary interest, and that to engage them further 'more of the same' was not going to be appreciated. An audit of enterprise interest across the three White Rose Universities with 467 first and 435 final year students respondents showed more than a third of new students are involved in enterprise activity before coming to university. Exposure to enterprise was even higher; with over half reporting that their school or college had such initiatives. But almost 90% expressed interest in learning more about enterprise and innovation in their degree course - and that expectation is spread across all disciplines, not just in business studies (WRCE 2002).

This leaves the university academic with a real challenge. What can we do to engage and develop our students? Where do we pitch the supporting lectures? How do we engage students who have looked, albeit briefly, at entrepreneurship and chosen a degree subject elsewhere?

This guide aims to give some suggestions but is aimed at the academic in subjects other than management degrees and Business Schools where enterprise can be the focal point of the degree.

A changing workplace

The changing nature of the workplace to one which is people centred, where people (the human capital) are considered to be the driving force and value creators in businesses in the western world is a big idea for students to grasp. Reed (2002) identified three economic ages: agricultural (feudalism), industrial (capitalism), and creative (peoplism). In this new age the value of products will be increasingly based on intangible assets derived from creativity, innovation and knowledge, which come from people.

Reed argues that as knowledge becomes less valued because it is available to all via the web, 'nous' or 'can do' approaches are critical. This comes from self-confidence and working and listening to people. A job for life is unlikely. Employment is much more likely to be variable, to form one part of a diverse varied career which includes activities such as charitable work, family-centred work and career breaks (Hawkins and Winter 1995, Hawkins 2002), but overall people will have more opportunity to be creative, innovative and enterprising. Where can these ideas be contextualised in the curriculum for mathematics, metallurgy and music students?

Running a Business Module

Many University Business schools around the world have modules which give students the opportunity to run a business through the cycle from idea to product to wind up and closure (Allen 2002, Burns 1999, McConnell 2001). Such modules may be taken as options but if staff feel enterprise skills are part of a core set of skills students should acquire the arguably the module is more likely to be appreciated if it is integrated into the core. For example a business skills or career focussed module with degree relevant business applications, circuit board production for Electronic Engineers, Historic Site Guides for History or Archaeology students. A set of learning objectives might include some combination of the following as appropriate:

- Understand the processes involved in producing a business plan for a new business culminating in students producing and presenting a comprehensive business plan
- Understand the financial and marketing tools needed to research and critically evaluate the business idea
- Develop an awareness of the general market opportunities and constraints on a business in the chosen area
- Show in principle how to develop an ...history/ engineering / mathematical... innovation into a feasible company
- Prepare a coherent case for venture capital

- Develop a prototype of the product/worked case study of the service
- Demonstrate and reflect critically on the basic management skills required in the areas of planning, creation, organising, directing and controlling the ... process
- Apply standard management practices (board meeting procedures, action planning, evaluation and appraisal systems);
- Gain experience of developing the business as appropriate to the product.

This last aim is very woolly but an integrated experience for an Earth Science student might look at setting up an oil exploration company, or for an English student developing a Publishing House. The students cannot set up such an operation and run it for half a year in Young Enterprise style. I would argue that their learning will be greater for having looked at relevant processes in an enterprise that is degree relevant, having interviewed personnel in, or listened to presentations from, Oil Company or Publishing House executives and researched the processes, challenges and constraints more maturely. This type of activity can be embedded at any stage from level 1-5 and gives students an insight into workplace activities.

However there is considerable merit in a business venture experience module taken by students from across a University. It gives students the opportunity to work in a team with people drawn from different disciplines and so develop their appreciation of the skills and qualities others can bring, their negotiation and enterprise skills and coping with time management issues.

Expanding beyond such courses Student Business Plan Competitions are a feature of a number of universities in the UK and North America (see for example WRCE 2004a, Quantum Leap 2004, University of Bath 2003). Typically these competitions are underpinned by advice on how to research and write a business plan, have significant prize money that is raised by sponsorship from a local company.

Understanding the nature and role of entrepreneurs and intrapreneurs

The literature here offers a selection of 'how they did it' stories as aspirational models for the budding entrepreneur (Kanter 1992, Malone 2002, Bolton and Thompson 2000, NCE 2002) and a Google search will add many more. The common themes that emerge are of people willing to take risks, to use their personal skills to persuade people to work with them to develop new ideas and products and to share the process to optimise it. Kanter (1992) shows how effective entrepreneurs understand how they can effect change, they realise that they have skills, strategies, tools and tactics. People who innovate effectively can see the need for change and opportunities ahead of the game. They have the skills to bring people together to develop the ideas and the drive and perseverance to push for change.

An awareness of the characteristics of the effective entrepreneur gleaned through these stories can be inspiring or off-putting. '*I don't want to be Richard Branson*' and '*If I had wanted to start a business I would be doing Management Studies*' are reasonable comments but that does not mean such students should be totally shielded from workplace skills. Here the work of Pinchot (1985), Pinchot and Pellman (1999), Pinchot and Company (2003) on intrapreneurship is invaluable. Intrapreneur is a term coined by Macrae (1982) and developed by Pinchot (1985), but the concept is more established. According to Pinchot 'Intrapreneurs are "dreamers who do," those who take hands-on responsibility for creating innovation of any kind within an organization'. Really good organizations see innovation as a core competence in management. All organizations, large and small, from multi million corporations to charity and social groups cannot rely on their past achievements to continue their success in the future. Successful companies and organizations look to develop and to manage change creatively, so that the business grows, renews and develops which can be risky. Amongst the many stories Takahashi (2000) describes the experience of Seamus Blackley who dreamt up the ideas for the X-Box and persuaded his bosses at Microsoft to run with it. Little obstacles like the then-president Steve Ballmer yelling, "You're going to lose the company a lot of money!" followed. In this case Blackley reached a stage where as he said " I let go of my baby" and stayed with the technical team, because he knew he didn't have the skills to run the entire business. So although he started the project and stayed involved he didn't head it up all the way. He also is quoted as saying that 'Microsoft's culture allowed him to speak his mind and then, if he had the best evidence and most reasonable argument, proceed with his plan'. and 'I think I succeeded because I had nothing to lose. I had no baggage'.

Intrapreneurship is about being innovative within a business at any stage and on any scale. It is not necessary to have a world changing idea or to create a totally new product, small changes are just as crucial (Figure 2).

Figure 2 Intrapreneurial activity by a new or young member of a group or company could include:

- Spotting ways to improve a service, saving time or money, or just making life easier.
- Seeing the scope for variations on current products, or a new product.
- Realising that there are other ways the company or group can communicate with and respond to their audience or customers
- Understanding how a job could be done smarter
- Seeing how the quality of a service or product could be enhanced
- Reducing the time it takes to do something
- Finding ways to do background administration more smoothly, is data sought and held in the most efficient way
- Finding ways to enhance the workplace atmosphere / sociability / working day to the advantage of staff and employers.

Case studies around intrapreneurship for use with HE students are available (Kneale 2004), these are designed to increase student awareness of the nature of the workplace and boost their self confidence in being proactive. The Green Networking case was written in response to graduates requests for experience of networking ideas before reaching the workplace. The Intrapreneur's Tactics uses Pinochet and Pellman's (1999) ideas to boost self confidence and awareness of opportunities to be proactive. Student comments indicate the awareness they can gain *'It shows you can make a difference even as a temporary employee, I hadn't thought before about how I could get my ideas across effectively'; 'Being the newest person at work always made me feel unconfident and I can see that putting these ideas in would make me feel more involved and more confident' and 'I hadn't thought about networking at all, but this really showed you can get a lot from being a bit organised, although I'm not usually that way'.*

Figure 3 Potential Learning outcomes that embrace enterprise. A student will:

- Have experience in using a trial and error approach to generating ideas and in modifying ideas in response to their personal evaluation and from comments from others.
- Gain experience of investigating alternatives, communicating ideas and developing solutions within specified constraints.
- Gain experience in identifying opportunities for innovation in ..., creating a reasoned proposal to ..., and develop a monitored production process.
- Understand how a Personal Development Plan helps to identify the skills and experience desirable in the training of a
- Critically reflect on the business and enterprise skills demonstrated through work placement practice.
- Develop an appreciation of the team working and management skills needed to successfully implement the ... project

Key words for enterprise include: creative, determined, energetic, flexible, focussed, good communicator, participative, persistent, proactive, resilient, risk aware, self confident, self aware, tenacious, tolerant, visionary.

Work placement modules, industrial years and sandwich courses are a feature of many degree programmes in all subject areas. The quality can be very varied and the student is often left to find her own way through the experience. Using some of the cases (Kneale 2004) in a preparation programme and an active personal development plan reflection process during the experience can help students to appreciate their experience in greater depth and raise their expectations and self-confidence. Finding, or asking students to search for, placements in relatively new companies and those where innovation is crucial, placements with creative media, arts and advertising, new technology and IT companies, can meet enterprise agendas within current curricula. A significant number of enterprise teaching materials can be obtained through WRCE (2004b).

Valuing extra curricula activities

Enterprise is demonstrated by students beyond the curriculum through voluntary work, the self management and in their part time employment experiences. Capturing this experience so that it is valued by the student and recognised as having value may be a feature of personal development reflection and planning and may be recognised by the university or other bodies. The York Award (2004) programme of transferable skills training and experiential learning is a great example of a well embedded university wide approach. The Millennium Volunteers (2004) and Millennium Volunteers in Scotland (2004) recognise skills in a structured way on a national basis.

Placing enterprise activities in the curriculum is subject to challenges and opportunities. Amongst the challenges is lack of space in the curriculum, the culture of the HEI for maintaining the academic research edge, and the need for stakeholders and champions with the time and energy to drive change. But there are opportunities. Incoming students are interested and experienced, the innovations in learning and teaching in the last ten years have encouraged new teaching styles, these activities can be credit bearing and have win-win benefits in enriching the curricula by making academic matters more personal and real. Figure 3 drafts some learning outcomes that are enterprise oriented. Some of these fit activities already in place. The challenge is to have enterprise-oriented learning outcomes in most modules of a programme.

References and resources

- Allen, K. 2002 *Launching New Ventures: An Entrepreneurial Approach*, 3rd Edition, Boston, Houghton Mifflin.
- Bolton, B. and Thompson, J. 2000 *Entrepreneurs: Talent, Temperament, Technique*, Butterworth-Heinemann, Oxford
- Burns, T. (1999) *Break the Curve: The Entrepreneurs Blueprint for Small Business Success*, New York, International Thompson Business Press.
- Business in the Community (2004) www.bitc.org.uk
- Dti (2004a) Enterprise guide wider curriculum, <http://www.dti.gov.uk/enterprise/wider/>
- Dti (2004b) Good practice in enterprise education, <http://www.dti.gov.uk/enterprise/good1.htm>
- Enterprise Insight (2004) www.enterpriseinsight.co.uk
- Gow, K. and McDonald, P. (2000) Attributes required of graduates for the future of work. *Journal of Vocational Education and Training*, 52, (3) 373-411.
- Hawkins, P (2002) *The Art of Building Windmills: Career Tactics for the 21st Century*, Graduate Into Employment Unit, Liverpool University.
- Hawkins, P. and Winter J. 1995 *Skills for Graduates in the 21st Century*, The Association of Graduate Recruiters, Birmingham
- Hefce (2004) Business and the community, <http://www.hefce.ac.uk/reachout/>
Jackson??
- Kanter, R. M. (1992), *The change masters: corporate entrepreneurs at work*. London, Routledge.
- Kneale, P.E. 2004 Intrapreneurship and other cases. <http://www.geog.leeds.ac.uk/courses/other/>
- Macrae, N. 1982 *Intrapreneurial Now*, The Economist, April 17
- Malone, M.S. 2002 *Betting it all, the entrepreneurs of technology*. New York, John Wiley.

- McConnell, C. 2001 *Change Activist: Make Big Things Happen Fast*, Momentum, Harlow
- Millennium Volunteers (2004) <http://www.millenniumvolunteers.gov.uk/>
- Millennium Volunteers in Scotland (2004) <http://www.mvscotland.org.uk/>
- NCE (National Commission on Entrepreneurship) 2002 *Stories of entrepreneurs*, New York
http://www.ncoe.org/toolkit/stories_index.html
- Network for Teaching Entrepreneurship (2004) www.nfte.org.uk
- Pinchot and Company 2003 <http://www.pinchot.com/>
- Pinchot, G. 1985 *Intrapreneuring : why you don't have to leave the corporation to become an entrepreneur* Harper & Row, New York
- Pinochet, G. and Pellman, R. 1999 *Intrapreneuring in Action*, Berrett-Koehler, San Francisco
- Quantum Leap (2004) University of St Andrews Student Business Plan Competition, <http://www.st-and.ac.uk/sie/projects.php>
- Reed, A. (2002) *Capitalism is dead - Peoplism Rules*, McGraw-Hill, London
Schank 1988 ??
- Shell LiveWIRE (2004) www.shell-livewire.org
- Sternberg R J and Lubart T I (1996). Investing in creativity. *American Psychologist*, 51 (7) 677-688.
- Sternberg R J and Williams W M (1996) *Developing creativity in students*. Alexandria, V A: Association for Supervision and Curriculum development.
- Takahashi, D. 2000 Reinventing the intrapreneur: Corporations are devising new ways to cultivate entrepreneurial efforts. And it's working. *Redherring Magazine*, September,
<http://www.redherring.com/mag/issue82/mag-reinventing-82.html>
- University of Bath (2003) Business Plan Competition 2003
<http://www.bath.ac.uk/bsc/businessplancomp/businessplancompetition.htm>
- WRCE (2002) Audit of Students Views of Enterprise, White Rose Centre for Enterprise
<http://www.wrce.org.uk/audit.htm>
- WRCE (2004a) White Rose Centre for Enterprise - Student Business Plan Competition,
<http://www.wrce.org.uk/buscomp.htm>
- WRCE (2004b) White Rose Centre for Enterprise The Learning and Teaching Hub,
<http://www.shef.ac.uk/lth/strategic/ep>
- York Award (2004) The York Award <http://www.york.ac.uk/admin/ya/>
- Young Enterprise (2004) www.young-enterprise.org.uk
- Young Enterprise Scotland (2004) www.yes.org.uk

Relevant academic journals include: Business Strategy and the Environment, Corporate Citizenship, Corporate Environmental Strategy, Greener Management International, Journal of Environmental Policy and Planning, Journal of Business Venturing