Developing enterprise skills in students: problem-based learning and a student-led course conference

Sue Smith

Introduction

Enterprise education includes the development of skills such as innovation within a subject area, creative thinking, project management and delivery skills and ideas generation. There is clear overlap between the definitions and scope of enterprise and employability skills (Higher Education Academy, 2006). Skills such as problem-solving, initiative, creativity, flexibility and a 'can do' attitude can enhance an individual's employability as well as contributing to their potential for more entrepreneurial approaches to their future lives, learning and careers (NESTA, 2008). Indeed, enterprising individuals tend to exhibit particular sets of behaviours, attributes and skills that have value beyond the traditional narrow view of business entrepreneurship (Gibb, 2005).

Enterprise skills within the health field can also be applied by students in their future business start-ups, community projects, social enterprise and intrapreneurship or innovation within their future health or social care employment, but are equally applicable in a new graduate's daily working life.

This case study explores how a problem-based learning (PBL) approach used for core course learning can be used to support, complement and develop students' enterprise skills during the planning of a course conference for students in the health professions. Enterprise learning simply means that to a greater degree students use initiative, resourcefulness and other problem-solving skills in the way they learn. PBL can be regarded as a valuable pedagogic approach to help the students develop enterprise skills.

After outlining the rationale for using PBL and how it dovetails with embedding enterprise education for employability (Higher Education Academy, 2006; Yorke & Knight, 2004), the case study describes how engaging students in the planning and organisation of an academic conference achieves the learning outcomes and objectives of the module and capitalises on developing their broader enterprise skills.

The evaluation of this activity suggests that the introduction of this student-led conference was a success, with students benefiting from an applied, dynamic learning experience which supported the skills essential for future employability such as time management, team working, communication skills, creativity, problem-solving and a 'can do' attitude. These skills are important for health and social care graduates who may go on to work in the NHS or for local councils and care providers. These broader skills can also complement purer 'entrepreneurial' skills for graduates who may become self-employed or work in smaller organsisations.

Enterprising students can generate enterprise skills through activities such as event management (like this one) and this can contribute to skills which enhance their employability on graduation and in the longer term. The model of student-led course conferences has now been adopted, modified and developed by other Faculties as a useful way of developing enterprise skills in students.

Background

Currently, global and UK society is facing profound and social structural changes. Globalisation, the rise of emerging economies and societal challenges such as environmental sustainability and an ageing UK population, necessitate innovative responses not only to deal with the challenges but to create opportunities from them (Department for Innovation, Universities and Skills, 2008). Public sector jobs and professions are changing too. Health and social care sectors, so long part of institutional monolithic culture, are adapting to a more creative culture, and staff need to address more flexible ways of thinking and working (Department of Health, 2008). There are now opportunities for individuals working in the NHS to link into the social enterprise agenda and develop leadership and communication skills (via the NHS Leadership Qualities framework). *Agenda for Change* (Department of Health, 2004) resulted in NHS staff having to design new ways of working and establish and re-evaluate extended roles while learning to work more flexibly. Preparing pre-qualification students for skills to cope with working in this kind of changing context is essential.

In the health and social care setting, physiotherapists (PTs) and occupational therapists (OTs) are better equipped to cope if they can use skills such as resource management, creativity, independence and self-motivation. These overt entrepreneurial or intrapreneurial skills equip students not only with better prospects for employability but also skills for their future lifelong learning (NESTA, 2008).

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Currently, the economic downturn and increasing freezing of vacancies in the NHS has led to a reduction in graduate confidence and to employers becoming more choosy in their potential employee selection as competition for jobs increases. Graduates now have to be more proactive and flexible in their career choices or choice to be self-employed. Undoubtedly, some graduates (not just in health but in all subject areas) still plan to take time out before embarking on full employment by travelling or returning to study, and it appears clear that employers will not penalise an individual for doing so if the skills and experiences they learn during a gap period have made them a better prospect (AGR, 2008).

At the time the student-led conference began in 2007, the employment position in the NHS for newly qualified physiotherapy and occupational therapy graduates was poor owing to financial restraints and a national post-freezing policy (Chartered Society of Physiotherapy, 2007). Since 2007, the situation has slightly improved for new graduates entering the health professions, but health and social care graduates still need to be flexible in their job choices, optimise their chances of getting an interview and improve their employability skills to be attractive to employers (Hogarth et al, 2006).

The courses and the learning approach: how they enhance enterprise

Learning based on the progressive traditions of education – for example, ownership, individual experience, reflection and co-operation – offers students the most opportunities for using initiative, problem-solving, flexibility, negotiation and other enterprising skills. It appears that students who are engaged in enterprising activities such as authentic problem-solving and dynamic real-life activities and undertake a more applied and relevant curriculum and are more satisfied with their learning experience. (Kearney, 2003).

Both the OT and PT Pre-Registration Masters courses at Leeds Metropolitan University adopt problem-based learning as their educational approach. The PBL approach is known to foster curiosity, improved time management, self-esteem and improved collaborative and partnership skills (Roderick and Carusetta, 2006). Indeed, Barrows (1986) has addressed PBL's virtues as a broad learning

approach to develop effective reasoning and self-direction, benefit lifelong learning, impact on motivation and help students deal with doubt and uncertainty. There is a natural synergy between this and developing enterprise skills in students. For initiative, resourcefulness, planning, problem-solving and resilience are empowering and as Kearney (2003) notes:

> "Whether we call these things enterprise or key competencies, personal qualities or life skills – their development is important."

PBL is a useful pedagogic approach to help support the learning of enterprise skills in students. The PBL approach nurtures enterprising attributes almost as a by-product of learning because enterprise attributes are better learnt when constantly practised in a range of different contexts over time.

The MSc Physiotherapy and MSc Occupational Therapy (Pre-Registration) courses were developed in 2005. These courses were innovative in that they were fast-track professional courses utilising PBL as their core learning approach. They were the first in the Faculty of Health at Leeds Metropolitan University to do so. There is a large element of skill sharing, shared teaching and partnership across both courses, and enterprise as a curricular concept was included in the process of the courses' development and philosophy. The key locus of the students' learning is skill sharing within a small group to ensure that a clear solution to a problem is achieved within an identified time frame. The group members with a facilitator have to learn how to rely on each other, optimise their skills and be organised to communicate effectively to achieve the deadline (Azer, 2005).

Duch, Groh & Allen (2001) have illustrated this clearly by exploring how PBL uses "complex, real-world problems... to motivate students to identify and research the concepts and principles they need to know to work through those problems."

The module, the conference and the process

Contributing to Professional Knowledge is a module worth 60 M-level credit points. This module is the fundamental research and critical analysis thread of both the MSc Physiotherapy and Occupational Therapy (Pre-Registration) courses, embedding a sense of inquiry,

evidence-based practice and realism into the students' learning experience. It is in this module that the course conference is embedded as a culmination and final celebration of the students' dissertation research, analysis and inquiry work. The module starts on day one of both the courses and ends at the conference on the last day two years later. The module assessment is by means of the student's Masters-level dissertation but the module's content and learning outcomes also encompass research skills, ethical enquiry, the value of evidence-based practice and disseminating research in the practice setting. The students' dissertations creatively explore existing health practice and students are asked to suggest innovative ways for practice change. The skills of 'being enterprising' are at the centre of this approach, the students develop the art of working within an organisation (e.g. the NHS) to effect change and develop new ideas, procedures or products by innovating practice, thus enhancing the 'business' and activity of the organisation.

A component of the summative assessment of the module involves each student participating in the co-ordination of the conference process. The conference is generated, planned, organised, executed and evaluated by the students. For example, students submit their dissertations for peer review, invite keynote speakers and have key roles in the organising committee and in the event management on the day. Tutors facilitate the process and manage any conflict if needed. 'Running a successful conference' is the 'problem' that the students have to 'solve'. The time-limited output equates to the successful execution of the conference and its evaluation.

In the first year the course conference planning team used development funds from the Institute for Enterprise to pump-prime the new conference as no Faculty of Health funding was available. In 2009 and 2010, as the model has gathered strength and the process has become more refined the Faculty of Health value the event so much that they now fund it and it is one of their key showcase events. Course leaders from other Faculties have attended so that they can observe the event and understand the philosophy in order to roll out the same system into other parts of the University.

The conference takes place in January and the conference organising committee is formed about seven months previously from student volunteers. They take responsibility for organising planning meetings, liaising with porters, catering staff, compiling the guest list and planning the programme and the format of the event. As well as organising the conference, the students also present their projects, showcase work they have completed, present reflections on their international placements and organise workshops to disseminate their Masters research work. The conference's main focus underpins the module learning outcomes, which focus specifically on innovation to change health practice, innovation in service delivery and using research to underpin decisions for change. Presentations and posters have been diverse and innovative. For example, topics have included new ideas about treating rock climbing injuries, insights into binge drinking and evidence-based strategies for dealing with the homeless. Students used creative methodologies to refine ideas about rehabilitation, health care and the wider society. The conferences are attended by other students, health practitioners, managers and University staff.

Early in the MSc Physiotherapy and Occupational Therapy (Pre-Registration) courses, students spend time discussing issues relating to the conference and event planning with structured meetings and 'conversations' in the form of a problem-based learning scenarios and reflection facilitated by a tutor. The process, organisation and reflection of the student meetings are conducted using the same format as the weekly PBL tutorials. The aim is for the students to equate the event management with a learning process and not just a stand-alone, detached activity.

The students are first presented with a problem (trigger) which asks them to co-ordinate the conference. Students discuss their initial reactions, explore what they know already about the issue from their own previous experience and/or learning, and then look for possible solutions in their group by using current knowledge, further investigation and action.

The same initial problem (trigger) is revisited by the students after the conference to allow them to reflect, using a standard theoretical reflective framework (Gibbs, 1988; Johns, 2000), on how their group and peers worked on the trigger and their analysis of the situation in retrospect. The students are able to reflect on their 'pure' enterprising skills (e.g. their planning, creativity, idea generation, risk taking) alongside their professional and team-working skills.

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The consideration of professional behaviours is emphasised and university-based work on professionally accredited courses should underpin the values that need to be embedded for effective work in the real practice setting. Therefore, emphasis is placed by the tutors on the setting of ground rules and the overt, structured, active analysis of four types of professional behaviour – respect, communication, responsibility and self-awareness – and how these can be enhanced through peer interaction.

Examples of how individuals and working groups acted during the planning and execution of the conference are used to illustrate this. For example, students who were not on the planning committee were requested by the committee to submit their dissertation abstracts for the programme by a deadline. Many students did not do this. These students were then asked to reflect on their reasons for not submitting and asked to empathise with the position of the conference planning committee who were frustrated at their peers' seemingly uninterested attitude and diluted commitment to the event. Likewise, the students on the planning team were also asked to reflect on proactive strategies that could have enhanced student engagement with this process.

Evaluation

Students' enterprise skills such as resource management, communication, creativity and vision are evaluated via focus groups and as part of the module evaluation. Students discussed their project management skill development, team-working skills, how participating in the student conference contributed to developing their enterprising skills, and whether their current behaviour and thinking have been influenced.

The students who participated in the organising committee then participated in another focus group. These students reported high levels of confidence both during the planning phase and immediately after the conference, explained the value of being able to plan a conference and include it in their CV, and described enhanced coping skills gained from having to deal with the different agencies who contributed to the event.

All students undertaking the module and participating in the conference reported improved communication skills, empathy skills and understanding of how to work effectively in groups. Both the student planners and

the student participants felt that the PBL approach used throughout the course and relating to this specific conference was a learning approach that naturally supported the development of enterprise skills.

Future developments

An audit by the Leeds Met Employability Office in December 2008 revealed gaps in the provision of employability skills for students within course structure and content. Despite some excellent examples of embedded employability and enterprise skills in courses, key areas for improvement were noted. Overt articulation and visibility of "hidden skills in course documents, mapped skills at the time of new course approvals, named staff to track issues and a consistent pan-University approach to PDP and work experience" were identified as crucial for producing graduates who are fit for purpose for the wider world of work.

Whether graduates move into creative jobs, into the public or private sectors, become self-employed or volunteers, the fostering of generic enterprise and entrepreneurial skills are vital in these changing times. There is plenty for Leeds Met to do to catalyse this for its graduates.

Staff in the Faculty of Health have continued to work closely with the Institute for Enterprise to further develop enterprise skills in their students through embedded curricular change. The Institute, at cross-Faculty level, has also sought to develop events in Faculty curricula which can help students to grow their enterprising skills.

This activity supports one of the key recommendations proposed in the NESTA (2008) report which identifies the role of the academic tutor as an important vehicle for dissemination. This report, on entrepreneurial and enterprise education in higher education, also emphasises the need for universities to encourage students to experiment, discover new ways of thinking and participate in curricular challenges which provide opportunities for teamwork, in order to develop the enterprising capabilities so valuable to health care and wider society today.

Conclusion

This student-run conference gets bigger and better. The venue is larger, there are more guests, a new academic team is running the programme but still use the PBL approach, and student plans include changing the structure of the conference programme and opening it up to more external colleagues and partners.

Giving students the opportunity to engage in this way contextualises the theory and consolidates the learning approach of PBL by adding an extra dimension to learning. This, in itself, can provide a trigger for innovative ideas

In this context, Leeds Met can be a key agent in developing innovative and employable individuals through enterprise education. The student-led conference is just one example of many activities through which enterprise skills can be contextualised in their real-life studies and linked to the enterprising skills required to support their students' lifelong learning, career development and chances of employment.

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