Creating the Entrepreneurial University

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INTRODUCTION

This article discusses how the concept of the Community of Practice (CoP) can be useful in developing more entrepreneurial universities. Following a brief introduction, the argument is developed through the exploration of a research-led university in the UK.

BACKGROUND

While the term *entrepreneurial university* is open to a wide range of interpretations, it has been associated with knowledge transfer through the formation of spin-out companies and the exploitation of intellectual property rights by faculty and students of universities. This encourages the transfer of science and technology innovation to the business sector, contributing to economic development at the regional and national levels. The idea of the entrepreneurial university has become increasingly prominent on the UK government's agenda in recent years, as a third mission for higher education, alongside teaching and research (Ost.gov.uk, 2004). For example, as part of the government's desire to foster a new entrepreneurial climate, the Science Enterprise Challenge (SEC) was launched in 1999. This endeavor is based in part on the understanding that it is possible to design entrepreneurship and innovation courses that provide graduates with entrepreneurial skills to enable them to exploit innovative ideas generated during their involvement with their university. In other words, the university becomes a more entrepreneurial environment through:

- teaching enterprise and entrepreneurship to science and technology students;
- making ideas and know-how available to business to support competitiveness and wealth creation; and
- encouraging the growth of new businesses by supporting start-ups, including spin-out companies based on innovative ideas developed by students and faculty within the universities.

Yet, achieving the aims listed above is not straightforward. There are extensive debates around many aspects of this kind of provision, particularly where pedagogy is concerned. Of course, students may set up businesses without ever encountering entrepreneurship courses; or if they do, they may only draw on them to a limited extent in their business activities. However, inherent within entrepreneurship education is the assumption that some students may make significant changes in their career activities at some point, as a result of being influenced by their learning experience. Thus, there is a more overt developmental agenda present in an entrepreneurship course in a typical knowledge-based science/technology module. This presents a challenge to educators that the CoP can help resolve.

AN ACADEMIC FOCUS FOR CoPs

Raising awareness of entrepreneurship for students is relatively straightforward, conforming to academic norms through teaching examples, case studies, exposure to external speakers, and the supervision of student-centered projects. Beyond this, however, a number of authors note the importance of experiential learning to entrepreneurial learning (Deakins & Freel, 1998; Garavan & O'Cinneide, 1994; Gibb, 1987; Gorman, Hanlon & King, 1997; Jack & Anderson, 1999; Rae & Carswell, 2000). Rae and Carswell (2000) note that while this seems to be a reasonable conclusion, there is as yet little research on how successful entrepreneurs have turned their experience into learning, essential knowledge if effective education and training programs are to be developed. Jack and Anderson (1999) argue that there are pedagogic difficulties in teaching the practice of enterprise, in part due to variability within enterprises, in part because entrepreneurship is about process

rather than stasis. Gibb (1996) also argues that the academic focus on understanding and critical analysis contrasts with the reality of the entrepreneur operating with incomplete information under time pressures.

It is not obvious how the experiential aspect of entrepreneurial learning can be built into modular programs of short duration, such as those typically available to technology students for the study of enterprise. Clearly, there is a limit to the amount of experiential learning that could be built into a given program: internships or work experience where a student could participate in day-to-day decision making in an entrepreneurial setting are not an option in this setting. An understanding of the dynamics of CoP can help overcome this difficulty.

Brown and Duguid (1991), Lave and Wenger (1991), and Wenger (1998) have argued for a community-based analysis of learning, which seeks to support a unified view of learning and innovation. They argue that learning is best achieved through supporting access to and membership of the target community of practice, not by explicating abstractions of individual practice. Such communities are reflexive, socially constructed, and emergent, existing outside formal organizational structures. For learners, a position on the periphery of practice is important with access to formal and informal meetings, picking up know-how—information, manner, and technique—from being on the periphery of competent practitioners going about their business.

In a university, a CoP can be identified around the spin-out domain. There is an informal grouping of actors centered on universities generally (though not necessarily members of the university) who are engaged in the spin-out activity, either directly as part of a company or as part of a broad range of supporting activities. This group includes:

- Faculty (academic/academic-related/contract research staff) engaged in spin-out activity;
- Students engaged in spin-out activity (or other small business endeavors designed to supplement funding in the short term);
- Interested academic staff: potential spin-outs, plus business school staff;
- University support staff: technology transfer staff, incubation center staff;
- Senior management of the university;
- Representatives of local support agencies: Business Link in the UK, for example;
- Local technology companies: from SMEs to global corporations;
- Local professional services: financiers, lawyers, business development consultants; and
- Successful entrepreneurs in the local community with strong university linkages.

Given the above, the challenge is to enable students to interact with the innovation community in a meaningful way, given that:

- modular degree courses focus on discrete blocks of understanding, clashing with the interconnected nature of the innovation system overall; and
- the potential for experiential learning through placement, or similar, is very small.

At one level, this could be addressed through the development of networking skills with a particular emphasis in the local context without drawing on the notion of the CoP. Research on the networks, in which entrepreneurs participate, has emerged as an important field of inquiry within entrepreneurship over the last 15 to 20 years (Hoang & Antoncic, 2003) with key contributions from Aldrich and Zimmer (1986); Birley (1985); Chell and Baines (2000); Dyer and Singh (1998); Granovetter (1973); Johannisson (1987); Larson and Starr (1993); Uzzi (1997a, b). A number of authors argue that such interconnectedness means entrepreneurship needs to be understood as a social process, not as an isolated individual activity (Bygrave, 1989; Bygrave & Hofer, 1991; Gartner, 1985).

One criticism of the network literature, however, is that much of it tends to focus on the morphology of aggregation, rather than how such aggregation takes place – there appears to be little discussion of how new (or potentially new) members of the community are assimilated and contribute to emergent properties of the network overall. Although the network approach overall is useful, the CoP approach adds value by shedding light on the learning processes of new community members as they begin to participate in new settings. Although they do not refer specifically to entrepreneurship, Lave and Wenger (1991) and, later, Wenger (1998) argue that developing a practice