Developing the enterprise curriculum

Building on rock, not sand

Colin Jones

Abstract: *Entrepreneurship education is the process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge and skills to act on them. It includes instruction in opportunity recognition, commercializing a concept, marshalling resources in the face of risk and initiating a business venture. It also includes instruction in traditional business disciplines such as management, marketing, information systems and finance. This paper describes the design and introduction of a new programme in entrepreneurship at the University of Tasmania. Rather than adopt a traditional business school (passive learning) approach, this programme largely reverses the method and responsibility of learning through the process of student-centred learning. This method of learning represents a challenging departure from traditional mainstream teaching practices. In considering the benefits achievable from this teaching method, the paper also addresses the difficulties involved in transferring increased responsibility to students to manage their futures.*

Keywords: *entrepreneurship education; student-centred learning; teaching methods*

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The growing literature on entrepreneurship education tends to argue that a different learning environment is required to support the study of entrepreneurship within a university setting (see, for example, Gibb, 2002). Essentially, a teaching style that is action-oriented encourages experiential learning, problem solving, project-based learning and creativity and supports peer evaluation. It is thought that such a process best provides the mix of enterprising skills and behaviours required to create and manage a small business. However, the departure from a traditional lecturer-centred, passive learning approach is all the more difficult when instruction in traditional business disciplines such as management, marketing, information systems and finance also contributes to the development of entrepreneurship knowledge.

This paper describes the process of designing and introducing a new programme in entrepreneurship at the University of Tasmania in 2002 and its subsequent development. The paper is set out as follows. First, the local and global importance of entrepreneurial education is discussed. Second, a review of the extant literature provides support for the chosen curriculum. Third, the choices of teaching and delivery strategies that support a

contemporary approach to entrepreneurship education are outlined. Finally, the outcomes to date are discussed, with an emphasis on highlighting the emergent and co-development nature of the current curriculum that has evolved from our initial starting point.

The emerging importance of entrepreneurial education

On 29 January 2001, the Australian Federal Government released its long-awaited *Innovations Statement – Backing Australia's Ability*. The programme provides A\$2.9 billion over five years to promote innovation in Australia. It consists of three key elements: strengthening our ability to generate ideas and undertake research, accelerating the commercial application of these ideas, and developing and retaining skills. One of the initiatives includes 2,000 additional university places to foster a culture of enterprise and innovation.

New entrepreneurship programmes have been emerging at business schools in Australia and overseas. In the USA, they have been launched at such prestigious institutions as Harvard, Stanford, Northwestern and the University of Chicago. In 1999 170 US universities offered courses in entrepreneurship: three years earlier, less than half of those courses existed (Lord, 1999). Similarly, a growing number of Australian universities are offering entrepreneurship programmes in response to developments in overseas universities and accelerated by the Australian Federal Government's *Innovations Statement*.

The rise of these programmes has also been fuelled by unprecedented student demand as students look for a style of business education that will provide them with the transferable skills (Cooper *et al*, 2004) they need to succeed in an increasingly divergent business environment. In the not too distant past, business schools might have nodded in the direction of entrepreneurship by offering an elective. Students today are demanding integrated programmes that teach practical skills for starting and expanding business enterprises (Farrell, 1994). Traditional business education programmes, though well attended, have come under criticism for failing to be relevant to the needs of the changing business environment.

For example, entrepreneurial education emphasizes imagination, creativity and risk-taking in business whereas traditional business schools tend to overemphasize quantitative and corporate techniques at the expense of more creative skills (Porter, 1994). Traditional business school programmes emphasize the large established corporation over the small or start-up venture, and nurture the follower and steward over the

leader, creator and risk taker (Chia, 1996). However, entrepreneurial education has firmly established a beachhead in academia as a result of a shift in academic thinking about the value of the field. It is now recognized that entrepreneurship is an important educational innovation that provides the impetus to learning about learning (Charney and Libecap, 2003). Interest in entrepreneurship as a field of research and teaching has been fuelled by the growing demand for entrepreneurship courses by business students.

Entrepreneurial educators have been questioned for attempting to teach what, until recently, has been considered unteachable. It has long been the conventional wisdom that some people are born entrepreneurs and will succeed with or without education, while no amount of education will provide business success for those who lack the 'entrepreneurial spirit'. Experience internationally demonstrates that people are entering business schools to learn about entrepreneurship, and there is a growing acceptance that elements of entrepreneurship can be taught and learned (Gottlieb and Ross, 1997). However, a growing body of research and opinion on the value of entrepreneurial education is emerging (see, for example, Gibb, 2002; Matlay and Mitra, 2002; Adcroft *et al*, 2004), which cautions against entrepreneurship education being treated as just another additional teaching area in business schools. Entrepreneurial education is an opportunity to address some of the contemporary needs of business education in ways that the traditional system does not (Mitra, 2002).

Choosing a curriculum

While what is taught about entrepreneurship in universities varies, there are areas of general agreement. An excellent overview of the developing nature of the curriculum in entrepreneurship education is provided by Brown (2000), who cites several recent contributors (including Noll, 1993; Kourilsky, 1995; Gottlieb and Ross, 1997; Bechard and Toulouse, 1998; Roach, 1999). She also notes that there is no universally accepted definition of 'entrepreneur' or 'entrepreneurship', but there is general agreement that entrepreneurship needs to be defined more broadly than business management because it includes creativity, risk taking and innovation. These traits are not normally nurtured in a traditional business school environment (Noll, 1993). Kourilsky (1995) defines entrepreneurial education as opportunity recognition, the marshalling of resources in the presence of risk and building a business venture. Bechard and Toulouse (1998) define entrepreneurial education as a collection of formalized teachings that informs, trains and educates anyone interested in

business creation or small business development. They point out that entrepreneurial education focuses on bringing together and carrying out a new combination of business elements, while education for small business ownership focuses on the skills needed to reproduce or acquire an existing business. Entrepreneurial education has also been defined in terms of creativity and innovation applied to social, governmental and business arenas (Gottleib and Ross, 1997).

Entrepreneurial education can be viewed broadly in terms of the skills that can be taught and the characteristics that can be engendered in individuals which will enable them to develop new and innovative plans. It focuses on the expertise used to conceive and commercialize a business opportunity. The skills taught in traditional business education programmes are also needed by entrepreneurs, but that curriculum generally addresses important functions of running a business rather than the elements of creating one. As such, the nature of the contract between university and student is generally about knowledge and not personal development (Gibb, 2002).

Kourilsky (1995) places curriculum components into three groups: opportunity recognition, the marshalling and commitment of resources and the creation of an operating business organization. Opportunity recognition involves the identification of unfulfilled needs in the marketplace and the creation of ideas for services or products that meet them. Opportunity recognition requires observation of the market, insight into customer needs, invention and innovation. Marshalling resources involves a willingness to take risks as well as skills in securing outside investment. The creation of an operating business organization to deliver the product or service includes financial, marketing and management skills.

Gottleib and Ross (1997) explain that in the Harvard Business School's entrepreneurial courses there is a focus on three main concepts: evaluating opportunities, securing resources, and growing and sustaining the enterprise. Also, Roach (1999) lists the following objectives for her entrepreneurial course at North Georgia Technical Institute: knowledge of the characteristics of an entrepreneur; the ability to recognize business opportunities; the basic skills and knowledge needed to create an effective feasibility plan for a business venture; the ability to identify the various business entry strategies available to entrepreneurs; and an understanding of the skills required and the means available to collect the market information necessary for the evaluation of a new business concept.

The three categories suggested by Kourilsky (1995) and those employed at the Harvard Business School are similar in their intention to teach the skills necessary to

Table 1. Personal and enterprise development objectives.

Personal development
Concept of entrepreneurship
Characteristics of an entrepreneur
Value of entrepreneurship
Creativity and innovation skills
Entrepreneurial and ethical self-assessment
Networking, negotiating and deal making

Enterprise development
Identifying and evaluating opportunities
Commercializing a concept
Developing entry strategies
Constructing a business plan
Finding capital
Initiating the business
Growing the business
Harvesting strategies

create a new business enterprise. Noll (1993), however, includes a focus on the behavioural characteristics of entrepreneurs characteristics that can be applied to entrepreneurial enterprises whether they operate in business, government or non-profit sectors. Brown (2000) notes that Noll (1993) and Roach (1999) suggest that the starting point should be to define entrepreneur and entrepreneurship, with the following curriculum goals:

- first, learn to develop ideas by recognizing business opportunities, researching customer insights, conducting a self-assessment of personal creativity, conducting a feasibility study and identifying various business entry strategies;
- second, prepare to start a business by assessing personal resources and financial status, researching and evaluating the risks necessary to get started, writing a working business plan and approaching others for money and other resources;
- finally, build a viable business by learning to allocate resources, using various marketing strategies and managing money and personnel.

Drawing from the literature and a survey of 128 university entrepreneurship programmes worldwide by Vesper and Gartner (2001), the objectives listed in Table 1 were adopted as the basis for building a curriculum structure at the University of Tasmania. They consist of two sets of objectives operating in parallel. The first set focuses on students' personal development. It puts entrepreneurship into perspective and asks them to consider the role of an entrepreneur compared with their own skills and behaviours. The second set of objectives focuses on the knowledge and

Table 2. Course structure of the Entrepreneurship major.

Semester	Year 1	Year 2	Year 3
1		Organizational Behaviour	Business Logistics
1		Foundations of Entrepreneurship*	Entrepreneurship and Innovation*
2		Financial Management	Project Evaluation and Planning*
2	Principles of Marketing	Entrepreneurship and Creativity*	Strategic Management or Electronic Marketing

* New units.

skills that are used to develop an enterprise, from initial opportunity recognition to final harvesting.

The next step was to determine the best way to package a curriculum structure programme to achieve maximum penetration at minimum cost. The alternatives included a stand-alone degree, a major within the existing Bachelor of Commerce degree, or a cluster of free-standing electives. Another consideration was that commerce students generally want a qualification that leads to recognition for employment in fields such as accounting, information systems or marketing. Entrepreneurship does not offer any form of professional recognition and, therefore, might struggle to achieve significant enrolments. After a great deal of debate, an Entrepreneurship major within the Bachelor of Commerce degree was chosen because it represented a curriculum structure that was familiar to everyone. It already had established articulation arrangements with other degrees and a variety of other institutions, including technical and further education (TAFE) programmes that were clearly understood. From an efficiency perspective, it incorporated a number of existing Commerce units, so that only four needed to be developed specifically for the new major. Thus the major was introduced wherever the Bachelor of Commerce already operated, including the combined degrees with Law, Arts, Information Systems and Science. This significantly increased accessibility and enhanced the viability of enrolments. The view was that students were more likely to be attracted to entrepreneurship if they could select it as a second major. This was an advantage over free-standing electives because it would appeal to the students' sense of credentialism. Moreover, it represented an exciting companion for their first major instead of forcing them to make a mutually exclusive choice.

The Bachelor of Commerce is a 24-unit degree studied full-time over three years. The first year consists of six compulsory core units plus two nominated electives that lead into the various majors. Students then go on to complete an eight-unit sequence in one of the majors. The remaining eight units may be taken as electives, but most students use them to complete a second major. The curriculum structure presented in

Table 2 was adopted for the major in Entrepreneurship, incorporating the objectives previously identified.

As noted above, only four new units were required to mount the Entrepreneurship major. The first two are offered in Year 2, based on the personal development objectives, and the second two are offered in Year 3 based the enterprise development objectives. The first new unit is called 'Foundations of Entrepreneurship'. It provides an introduction that focuses on the nature of entrepreneurship and its role in business. Topics include the entrepreneurial perspective in individuals, entrepreneurial schools of thought, ethical and social responsibility, sources of information and assistance, assessing and evaluating opportunities, strategic planning for emerging ventures and managing growth.

The second unit, 'Entrepreneurship and Creativity' covers a range of creative problem solving methods, including problem definition techniques, idea generation methods and the evaluation and implementation of creative ideas. The objective is not to 'teach' creativity but to assist students to develop whatever creative capacity they bring to the unit. Topics initially included problem redefinition, mind mapping, morphological analysis, brainstorming, lateral thinking and idea evaluation.

The third unit, 'Entrepreneurship and Innovation', concentrates firmly on the process of commercialization using the resource-based view of entrepreneurship. Topics include intellectual property, identifying key resources and capabilities, feasibility analysis, entry strategies, developing a business plan, securing venture capital and networking. Finally, 'Project Evaluation and Planning' is a project-based capstone unit for the Entrepreneurship major. Students are expected to make practical use of everything they have learned in a structured opportunity to research, develop and present a business plan in accordance with the standards expected by a venture capitalist.

The University of Tasmania and the Tasmanian state government entered into a Partnership Agreement in November 2000 which acknowledged the important role higher education plays in the social and economic development of the community. Tangible evidence of the Partnership was the recommendation by the

Tasmanian State Innovations Advisory Board for a grant of A$200,000 to develop and introduce the new Entrepreneurship major. The decision to mount the programme was clearly galvanized by the offer of external support, and the university approved the Entrepreneurship major at the end of 2001 for 2002 enrolments. Despite the limited opportunity to promote it, the initial enrolment of 96 students was very respectable for a small university. We were also fortunate to have Edward de Bono in Tasmania for one week during the commencement of the 'Creativity' unit. His presence and participation in a variety of public forums (as well as his provision of a workshop for enrolled students) provided a great deal of exposure for the establishment of entrepreneurial education at the University of Tasmania.

Choosing a teaching and delivery strategy

Before discussing the process associated with delivering the four new units outlined above, this section first provides a brief account of the teaching strategy adopted. Inasmuch as there is no unified theory of entrepreneurship, the first step in developing a teaching strategy was to try to identify a conceptual framework. Essentially, the literature on entrepreneurship reflects various schools of thought. Kuratko and Hodgetts (2001) suggest these can be condensed into three macro schools of thought (environmental, financial and displacement) and three micro schools of thought (traits, venture opportunity and strategic formulation). Each school of thought makes a significant contribution to our understanding of entrepreneurship, but none represents a framework within which to operationalize this knowledge. They are largely descriptive in nature and generally take the perspective of the detached academic as opposed to the practising entrepreneur. Why not teach students to think like entrepreneurs by designing a teaching strategy based on the entrepreneurial process itself?

The framework that initially underpinned our teaching strategy was one aligned to the 'resource-based view of the firm' adapted from the strategic management literature (Barney, 1991; Barney *et al*, 2001). It was an intuitively appealing framework because it offered the means for teaching entrepreneurial practice. Dollinger (2003) characterizes the resource-based approach to entrepreneurship through four activities: first, the efficient acquisition of strategically relevant resources and capabilities; second, the transformation of such resources and skills into a product or service; third, the deployment and implementation of an entrepreneurial strategy; and finally the selling of a product or service to maximize

returns. Echoing previous resource-based theorists, he states that a sustainable competitive advantage is created when the entrepreneur controls and employs key resources and capabilities that are valuable, rare, hard to copy and non-substitutable. That is, they exploit an opportunity using resources not available to other competitors, resources that cannot be duplicated or substituted.

From this perspective, there was a need for a taxonomy for identifying and evaluating key strategic resources and capabilities. Dollinger (2003) recognizes six categories of resources and capabilities – physical, reputational, organizational, financial, intellectual/human and technological – which he refers to as the PROFIT factors. Thus, the resource-based view of the firm provides an operational framework for the study of entrepreneurship, particularly when it is combined with the entrepreneur's key intellectual capabilities for creativity, risk taking and innovation. It is a framework for identifying and evaluating opportunities, commercializing a concept, developing an entry strategy, constructing a business plan, finding capital, launching the business, growing the business and harvesting strategies. It is a teaching strategy modelled on the entrepreneurial process itself.

Having established a conceptual framework for studying entrepreneurship, the next step was to design a matching delivery programme. The delivery programme was based on the model called 'student-centred learning' in which students have a great deal of autonomy over how they learn, when they learn and where they learn. Unlike traditional teaching strategies, it is not a passive experience, but rather a deeper learning process. It includes collaborative activities, goal-driven tasks, intellectual discovery, activities that heighten thinking and activities that provide practice in learning skills. A combination of new technology and traditional resources was used to provide students with a rich variety of learning experiences. The objective is to create an environment in which students would be encouraged to engage actively with the entrepreneurial process rather than simply read about it.

Essentially, the needs of the learner ultimately shaped the nature of the delivery process. In turn, the learning process ultimately determined whether the students were engaged in entrepreneurial-type learning behaviours. Given the stated personal development objectives, the chosen delivery process was designed to fully empower the students. It sought to surrender control of the contact time (between lecturer and student) to the student. With the exception of 'Project Evaluation and Planning', the new units used case studies and student presentations to encourage exposure to problem solving and a wide range of entrepreneurial

behaviours. Students were aware that their fellow students assessed the actual behaviours and skills used not only to prepare for the case but also for its presentation. As such, the presentations sought to encourage 'opportunity seeking, taking independent initiatives, actively seeking to achieve goals, coping with and enjoying uncertainty, taking risky actions in uncertain environments, solving problems creatively, commitment to making things happen, flexibly responding to challenges and persuading others' (Caird, 1993, cited in Gibb, 1996, p 313). Initially, interaction with external (workplace) environments in which students could be immersed in an even deeper learning process (Cooper *et al*, 2004) was not incorporated due to a lack of resources.

Therefore the delivery process (that is, student-centred learning) provided exposure to entrepreneurial behaviours and skills, while the peer assessment provided the direct feedback through which students learned by doing. It is argued (Gibb, 1996) that the interaction of the above-mentioned factors should provide the stimuli for the development of entrepreneurial behaviours, skills and attributes. Thus, while the curriculum determined the Entrepreneurship major's parameters and scope (enterprise development), it was the delivery process that enabled the students' personal development in line with the future requirements for starting and running a small enterprise. Given that in practice innovative and opportunistic behaviours will not always be forthcoming on demand, peer assessment was spread over six fortnightly workshops and a group assignment.

The class met once a fortnight for three hours supplemented by independent group collaboration outside of class. Conventional lectures and tutorials were replaced by workshops with WebCT used as an interactive platform for delivering parts of the programme online (for example, discussion boards and chat rooms). The purpose of this mixed-mode learning format was to enable students to exercise a significant degree of flexibility over how they learned and to make the learning process as creative and innovative as the subject matter itself. In the workshops, students operated in small groups presenting, discussing and debating the cases and issues under examination.

Peer evaluation is a key element in the teaching programme. It shifts the learning and assessment focus from lecturer-centred to student-centred. A fundamental premise that underpins student involvement in assessment is that taking part in the process is something for which they are uniquely qualified. The students already knew what assessment was all about, they brought a student's perspective to the assessment process and they were personally aware of the

performance of each member of their own group as well as of the other groups in the class. Peer evaluation ratings were used to monitor, evaluate and reward both individual and group performance. Internal peer evaluation focused on the individual's contribution and performance within his or her group and on the development of communication, coordination and planning skills that reinforce collaborative behaviour. External peer evaluation focused on group performance during workshop presentations. A student's overall result was a function of individual internal peer evaluation and external peer evaluation of his or her group.

Emerging outcomes

The most obvious observation is that our experiences so far reinforce our commitment to this style of teaching because it positively shapes students' belief in their ability to take control of the future. The programme has achieved many commendable outcomes. First, and most importantly, many past students have established successful businesses. Those students who were already engaged in some form of enterprise during involvement in the programme have consistently provided feedback that it has contributed to the further development of their enterprises. Also, the programme has developed a reputation among employers as one that produces truly creative, innovative and capable graduates who demonstrate advanced graduate attributes (such as communication and problem solving skills). Second, the style of teaching developed in the programme has gained national recognition as the first specialized enterprise education programme to be associated with the Australian University Teaching Awards.

The nature and direction of the programme's development has been well documented in various academic journals and at conferences (see, for example, Jones, 2003, 2005a, 2005b, 2005c, 2006a, 2006b, 2006c, 2006d, 2006e, 2006f, 2006g; Jones and English, 2004; English and Jones, 2003). Two important factors are evident in the personal reflection of the programme's designers. First, the programme's initial philosophical independence (from that of the traditional approach to business school education) has provided a channel through which to organize the new initiatives. Second, the different cohorts of students have become co-architects of the curriculum and its subsequent implementation. The degree to which students understand and support the programme's educational philosophy seems to have been largely responsible for the successful implementation of so many new initiatives.
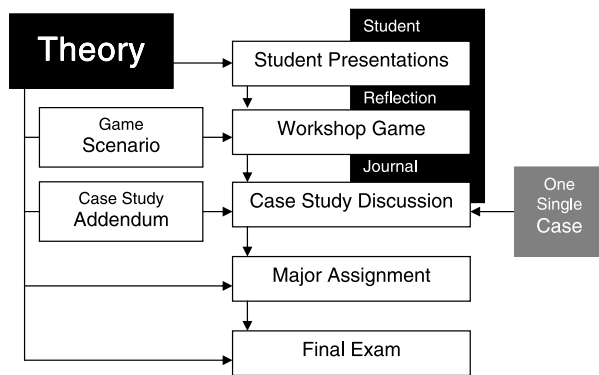
Figure 1. The *hic et nunc* framework.

The inclusion of Whitehead's (1929) idea that students should learn in their *here and now* has led to the development of the distinctive *hic et nunc* teaching and learning framework (Jones, 2006a). Drawing its name from the literal Latin translation of the term 'here and now', the *hic et nunc* framework encourages and enables each individual student to learn in his or her here and now (Whitehead, 1929), accommodating the development of different interpretations of the required learning topics. A key factor in the learning process has been the provision for continuous student reflection (Tyler, 1949) related to the repeated learning activities that occur during the fortnightly workshops. Over time, the learning activities have evolved to include games, case study discussion, workshop presentations and reflective diaries that are all tied to the topics introduced cumulatively throughout the workshops. The configuration of learning activities is illustrated in Figure 1.

The purpose of the learning activities developed and continually refined is to accelerate the 'process of changing the behaviour patterns . . . [of the students] . . . using behaviour in the broad sense to include thinking and feeling as well as overt action' (Tyler, 1949 pp 5–6). Over time, two specific aims for the programme have emerged: one relates to helping students to make the journey from student to graduate entrepreneur and the other (more general) relates to helping the students to develop the attributes of a reasonable adventurer. Heath (1964) defines the 'reasonable adventurer' as a graduated student capable of making his or her own opportunities for satisfaction – a disposition thought to be a necessary precondition for engaging in entrepreneurial behaviours.

At the heart of this developing curriculum has been an increased provision for student freedom. The use of freedom is essential to provide space for all students to consider a wider range of experience variations. Conversely, the increased use of discipline (that is, assessment) provides moments when judgement must be

brought to bear on what (behaviours) will be selected for and against. In the fullness of time, the learning environment will pass judgement on what has been successful and what has not. This process requires an acknowledgement that there is no starting or end point to the development of graduate entrepreneurs, facilitators and the programmes within which they meet. The facilitator must act in an entrepreneurial manner at all times. Just as students must continually reflect on the task at hand, so must the facilitators.

This requires the facilitator to ignore any predisposition towards automatically adopting a prescribed text unless it proves the best means of assisting students to achieve the learning outcomes associated with the process – outcomes that *must* be determined before any text is considered. Therefore, the facilitator is the creator of learning outcomes, learning activities and related assessment procedures. In short, the development of a dynamic learning environment that exposes students to the entrepreneur's way of life cannot and should not be outsourced to a publisher. Around and through this very point, the quality of entrepreneurship educators is determined. The literature is very clear (Gibb, 2002) that entrepreneurship education is not just an extension of management education, that it should not be taught from a traditional lecture-centred perspective. The argument presented here is therefore that quality entrepreneurship educators are entrepreneurs who provide a role model for their students. They demonstrate persistence, tolerance of ambiguity and creativity in the way they approach curriculum development. Most importantly, they encourage student involvement in this process.

Conclusion

Following the lead of Allan Gibb, this paper has argued that it is critical for enterprise educators to ensure exposure to the *entrepreneur's way of life* – to ensure that this way of life surrounds students in and outside the classroom, and that it is their 'here and now' through which their personal development is channelled.

This paper contributes to the growing literature related to enterprise education in a manner that can be best illustrated using the following syllogism:

- We cannot know in advance what is the most efficient and effective way to allow students (in differing higher education settings) to learn *through* and *for* enterprise.
- We can expect that any initial curriculum designed to allow students to learn *through* and *for* enterprise in higher education will be continually subject to change.

- Therefore, the initial development of an enduring philosophical approach intrinsically tied to a programme's overarching aims is critical to ensuring that no matter how much change is experienced within a programme, its initial aims and objectives remain tied to a strong philosophical position.

In closing, to ensure progress to an *end* is increasingly advanced, enterprise educators should expect that it is *all* that relates to the *means* that is continually subject to change. This is the constant challenge of the enterprise educator – to seek a needle in a haystack that refuses to be found, despite the fact that we believe from one day to another that it is obtainable. Our success it would seem resides not in ever acquiring the needle, but in being able to seek it regardless of how many times we fail to find it.

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