

Is Management Education Developing, or Killing, the Entrepreneurial Spirit?

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Abstract

Sustained business growth and profitability requires managers to exercise the spirit of entrepreneurship. Since the spirit of entrepreneurship may not be endemic in every person, or may require awakening and enhancing, business education should teach not only the various business disciplines but also the essence of entrepreneurship. We feel that many business schools may be failing in their duty to develop the spirit of entrepreneurship, even in their entrepreneurship courses.

Introduction

We propose that business academics and researchers who largely confine their attention to one of the functional disciplines have largely neglected the essence of entrepreneurship. As a result, business school graduates lack one of the key ingredients for commercial success. By this test, business schools are failing. The essence of entrepreneurship must be an integral part of the culture and structure of business schools. We believe that even in dedicated entrepreneurship courses many business academics merely pay 'lip service' to this important endeavor. For example, business schools often approach entrepreneurship as a capstone course that 'brings together' the functional parts of a business. We argue that entrepreneurship is more than just the sum of the parts. Business schools, and in particular entrepreneurship courses, must recognize this distinction and target the educational experience accordingly. This paper investigates the distinction between entrepreneurship and the functional disciplines, classifies and investigates current approaches to entrepreneurship education and makes recommendations for improved entrepreneurship education.

Distinguishing Entrepreneurship from Functional Disciplines

If we are to define entrepreneurship as something different from a simple collection of the knowledge in the various functional disciplines, or as something more than a simple subset of that knowledge, we need to examine what it is that makes entrepreneurship different, special, and worthy of separate study. That is, what is the essence of entrepreneurship?

First, entrepreneurs must look beyond the limits of the functional disciplines, if they are to succeed in advantageously positioning themselves for future competitive situations. They must consider the environment and what relevant others (including customers, rivals, governments) will do independently of, and in reaction to, their own actions. Entrepreneurs must make decisions in the face of the unknown and the presently unknowable through anticipation and/or reliance on forecasts of the actions of others. Thus, entrepreneurship addresses the many unstructured and unique issues facing the manager in an environment of uncertainty. Acknowledging that the information requirements to be a successful entrepreneur are considerable, the essence of entrepreneurship involves bringing together the many component parts of an organization as well as information from the external environment. The functional problems facing the same entrepreneur are typically more structured and repetitive; with the information required to make decisions more heavily reliant on internally generated information with a high proportion of historical data.

Second, the entrepreneurial process needs to be continuous and ongoing, with the timing of decisions often irregular in order to grasp unforeseen opportunities, or triggered by other changes in the environment. Decisions are often deliberately broad and have fewer concrete details. Oppositely, for many organizations the functional disciplines are determined, reviewed, adjusted on a periodic basis and then presented in greater detail, e.g., submission of annual financial budgets, reflecting a more certain and available information source.

Third, entrepreneurs need to form a vision over five, ten, or twenty years, although these horizons must be shortened if circumstances dictate. Typically, entrepreneurship commits a firm to a stream of actions over an extended period of time, representing a longer time horizon than those for the functional disciplines, notwithstanding that the entrepreneur might plan to exit the business before the time horizon. It follows that entrepreneurship is concerned more with the longer-term strategic level rather than the shorter-term tactical level of decision making.

Finally, entrepreneurship involves the coordination of the traditional disciplines. Decisions about such factors as customer mix, competitive emphasis or organizational structure necessarily involve a number of the firm's strategic business units, functions,

divisions, or program units, which must be coordinated effectively if the firm is to achieve its objectives.

Therefore it appears that entrepreneurship performs the role, over and above the management of the functional disciplines, of focusing on the comprehensive alignment of the internal and external environments as well as between the elements within the organization. While each functional discipline deals with some aspect of the internal/external alignment process, they lack the overall perspective and therefore the ability to coordinate in order to achieve consistency.

Entrepreneurship characteristically involves substantial resource acquisition and deployment as a means of providing, sustaining, and communicating coordination. The people, the physical assets, and/or moneys required, must be either redirected from internal sources, or secured from outside the firm. This would normally be beyond the scope of the functional disciplines, whereas the pervasive nature of entrepreneurship allows a perspective of understanding the ramifications of authorizing resource allocations necessary for implementation of major actions. Entrepreneurship represents the original source of action for the organization with the functional departments' decisions based on, or at least guided by, this overriding strategy.

This begs the question “How is entrepreneurship different from general management, or the ordinary responsibilities of the CEO?” The primary difference lies in the fact that the entrepreneur manages his/her *new* business with substantially *greater uncertainty* about the preferences of customers, the production process, and/or the identity and actions of rivals (both actual and potential). The entrepreneur is charting new territory, which brings with it special navigational problems to be solved.

Thus, the essence of entrepreneurship is the ability to envision and chart a course for a new business venture by combining information from the functional disciplines and from the external environment in the context of the extraordinary uncertainty and ambiguity which faces a new business venture. It manifests itself in creative strategies, innovative tactics, uncanny perception of trends and market mood changes, courageous leadership when the way forward is not obvious, and so on. What we teach in our entrepreneurship classes should serve to instill and enhance these abilities.

Current Approaches to Entrepreneurship Education

Current entrepreneurship education is likely to fall predominantly into one of the following four categories.

1: The “Old War Stories” Approach

The “old war stories” approach is an attempt to recognize and explain the entrepreneurial essence. The entrepreneurial school of strategic thought proposes that the

entrepreneurial process exists in the mind of the single strategist (leader) as a long-term direction, a vision of the organization's future. This is semiconscious process based on experience, intuition, judgment, wisdom, insight, etc., that bonds formation and implementation together through personalized feedback.

However, while the phenomenon is recognized, there is little said about the process used to obtain entrepreneurship over and above the leader's innate qualities and there is little to no acknowledgment of the organization or the environment, other than that they represent the entrepreneur's vehicle and terrain respectively. This school of entrepreneurial thought teaches entrepreneurship using the "old war story" approach, i.e., a series of successful entrepreneurs tell their stories of how they became successful entrepreneurs. There is little reliance on theory and an emphasis on anecdotal evidence.

2: The "Case Study" Approach

The case study approach promotes entrepreneurship as a process that is a controlled and conscious thought process. It is only after these unique, full blown, explicit and simple entrepreneurial strategies are fully formulated can they then be implemented (Andrews 1987). The case analysis provides the status quo of a situation and the entrepreneurial formulation process is used to develop the optimal outcome.

However, this perspective encourages the separation of thinking (formulation) from acting (implementation) and assumes that the world stands still while the formulation process takes place, thereby impeding entrepreneurship. Mintzberg (1990) criticizes this approach for requiring students, who know nothing about the particular company, other than twenty pages of verbalized and numerical abstractions, to discuss a solution in a class.

3: The "Planning" Approach

The "planning" approach to entrepreneurship is also viewed as a controlled, conscious process, but applies a formal approach that decomposes the process into distinct steps often accompanied with checklists and techniques. The optimal entrepreneurial strategies emerge full-blown, usually in the form of a business plan, to be converted to detailed objectives, budgets, programs, etc.

Planning by its nature is designed to extrapolate known trends and is designed to set direction and discourage change. The possible inflexibility of this approach impedes or denies the spirit of entrepreneurship.

4: The "Generic Action" Approach

The "generic action" approach recognizes the importance of entrepreneurship by emphasizing the importance of such strategic imperatives as pre-emptive early deterring

price; market signals including pre-emptive threats, bluffs, etc.; and the timing of entry providing the firm an opportunity to exploit first mover advantages.

However, this approach still separates thinking from acting, thereby ignoring the importance of people while constraining freedom of action. It appears to deny the spirit of entrepreneurship further as the competitive forces are thought to dictate the appropriateness of action, i.e.; the competitive forces are analyzed to formulate the optimal entrepreneurial action. Once formulated, there is no need for initiative, 'only' implementation.

Result of Current Approaches

The above approaches represent the traditional methods of teaching entrepreneurship, and for that matter functional discipline subjects as well, in business schools. They provide education through the teaching of information and logic. While management games have the potential to teach or at least develop entrepreneurship many of them fail due to the application of the game under these traditional principles of teaching. It is proposed that these traditional teaching principles falsely equate thinking with logic. Logic is more involved in the articulation of a 'water tight', error free argument. DeBono (1978) proposes that fluency and coherent expression are tools of thinking, not thinking itself and the preoccupation to avoid errors in the argument is a disincentive to exploring and constructing a potentially more successful alternative.

Case studies are often used in Business Schools today. The skills of case study analysis are concerned with making and defending a point of view. The defense of the point of view requires the skill of logic and ingenuity but does not require creativity, initiative, intuition, timeliness or perception, in fact it can dissuade these entrepreneurial qualities encouraging perceptual blindness. The students are expected to formulate the optimal strategy based on the information contained within the four walls of the case.

With the current use of problem solving, as evident in case studies, the starting and end points are known, or at least defined, and the process involves either linking the two, or manipulating the situation to eliminate the cause of the starting point. Whereas in entrepreneurial thinking the starting and ending points may be open and unclear, i.e., as you move from simple problem solving to more complex problems facing entrepreneurs the more vague the starting and ending points become.

In business school education, much emphasis is placed on understanding, analysis and logic which could be considered a passive, descriptive and contemplative type of thinking which is a different skill from the generative pro-active skill that is also required for entrepreneurial thought. It is the authors' opinion that the emphasis on teaching and testing logic as a substitute for entrepreneurial thinking, a common practice in business schools, is inappropriate. Logic would seem to be a small part of entrepreneurial thinking, especially when there is imperfect information, which is typically the case. If logic is

emphasized too heavily or used too early, then exploration of new options will not proceed, thus narrowing perception and consequently actions (DeBono, 1978).

In fact, perfectly logical thinking can lead to incorrect and unworkable answers and therefore it is common for people to throw logic to the wind and go with their 'gut feel'. This may be the result of logic being based on unacceptable value systems and inadequate perception. Freedom from constraints created by logic can make for entrepreneurial thinking.

Recommendation

The Art of Entrepreneurship

We argue that all too often business schools have used the above approaches to teach the "science" of business and have neglected the "art" of doing business. By the science, we mean that business schools would seem to do an excellent job at teaching the theory of business, which is based on the analysis of practical experience. It is based on the philosophy that there exist patterns that form objective laws that are independent of human activity. The science of business is rational and logic.

We argue that business schools must go further and develop the art of entrepreneurship. The art of entrepreneurship we believe is an ability or mastery based upon profound theoretical knowledge and the ability to apply these creatively and with initiative in practice. The art of entrepreneurship does not divorce the formulation from the implementation; they are one.

The following table is adapted from Edward DeBono's lateral thinking principles (1990) and is applied to highlight the difference between the "science" of current approaches to entrepreneurship education and the "art" of entrepreneurship education which is needed. In so doing we propose that it also provides a distinction between high quality business schools and average business schools. The poor business schools fail in both the science and the art.

Science is selective, whereas the Art of Entrepreneurship is generative.

Science moves only if there is a direction in which to move, whereas the art of entrepreneurship moves in order to generate direction.

Science is analytical, whereas the Art of Entrepreneurship is provocative.

Science is sequential, whereas the Art of Entrepreneurship can make jumps.

Science requires each step to be correct, whereas with the Art of Entrepreneurship this does not need to be so.

Science uses the negative to block off certain pathways, whereas with the Art of Entrepreneurship there is no negative.

Science excludes irrelevant information, whereas the Art of Entrepreneurship welcomes chance intrusions.

*Science has fixed categories, classifications and labels, whereas the Art of Entrepreneurship there are no such constraints.
Science follows the most likely paths, whereas the Art of Entrepreneurship explores the least likely.*

Approach for Entrepreneurship Courses

The “Learning” Approach

There needs to be a movement away from the over-emphasis on the science of business, logic and teaching the optimal answers and towards the art of entrepreneurship, perception, creative thinking and learning. We expect this change to be difficult considering the momentum behind the status quo. We propose that a learning approach would represent such a change. The “learning” approach to entrepreneurship education recognizes the complexity of the environment and that entrepreneurial learning takes place through only a partly controlled, creative conscious thought process. The entrepreneur learns over time and this precludes deliberate control: formation and implementation are recognized as indistinguishable. Entrepreneurship is taught so that the overall entrepreneurial direction is deliberate but the details are often emergent, similar to the concept of emergent strategy (Mintzberg & Waters, 1985; Quinn, 1980; Mintzberg, 1990).

This proposed approach to entrepreneurship education requires a shift in emphasis from teaching to learning. Learning is most beneficial when the student actually performs the skill in an environment as close as that in which it will be performed in real life, i.e., they must be immersed in the milieu, practice the skill and receive constructive feedback from an expert (Hsu, 1989). The role of course instructor is to create the appropriate environment and observe, measure, report, debrief and provide a mechanism for expert feed back. Learning takes place through a process of trial and error with guidance and learning provided through the correcting or firming of expert feedback (Hsu, 1989).

However, learning the rules of entrepreneurial thinking does not develop the practical skill. Using thinking in particular situations develops thinking skills in that particular situation, but does not necessarily provide a transferable skill. The skill of thinking entrepreneurially must be generated by the person and not the situation. It is relatively easy to train someone based on ‘situation centered’ skills and difficult to train people on ‘person centered’ skills (DeBono, 1978).

Most experiential learning through games, role plays, and simulations suffer the problems mentioned above. They are used to develop situation-centered skills where the simulated environment would have to be almost identical to the real world for benefit to be achieved. Even then the strategic thinking skill developed is situation specific and not fully transferable to other situations. Games also have an internal logic which good players quickly learn because it is repeated so often. The ‘real’ world has no such internal logic and instead, requires some basic transferable thinking skills (DeBono, 1978).

Entrepreneurial thinking is in part, a matter of attention directing, however attention often follows tracks that have been developed through experience. To develop entrepreneurship we need to encourage our students to think outside these tracks. This can be done through artificial attention directors derived from outside the situation to be imposed on the entrepreneurial situation. The redirection of attention from these common paths can be achieved through artificial tools and role playing (DeBono, 1985).

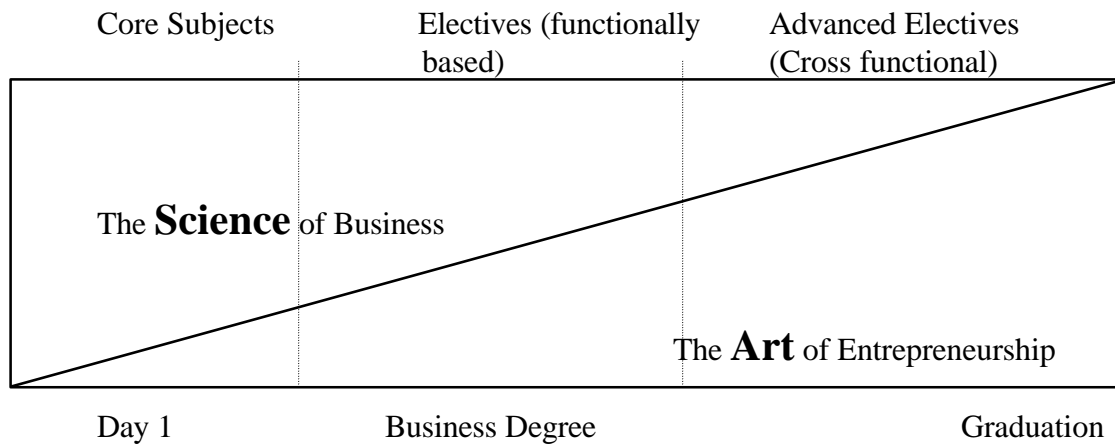
However even with an emphasis on learning, all too often the evaluative feedback is neglected or misused. A grade on an assignment does not constitute evaluative feedback and is often evaluated against the science principles of business, rather than those of art. The evaluative feedback appears to have maximum benefit when it is as immediate as possible while keeping in consideration that it should not interrupt the learning process of actually performing the skill.

The aim of teaching entrepreneurship utilizing the “learning” approach is to develop and speed up the transition from the controlled conscious process to dominance by an automatic process. That is, there should be a development from learning the basic skills that place a great strain on the working memory to a stage where the procedures for automation strengthen and become more fine tuned decreasing the likelihood of type one and type two errors. This transition would move part of the way towards developing entrepreneurial spirit.

Approach for Business Degrees

But how does such an approach to entrepreneurship course fit within a total business education? Figure 1 demonstrates the proposed relationship between the science of business and the art of entrepreneurship in a business degree to represent an integrated approach to the education of entrepreneurship.

Figure 1: The Science and Art of Proposed Business Degree



The purpose of the core courses is to build the foundation of knowledge. This is legitimately under the umbrella of the science of business requiring students to receive the information through attending lectures, reading and memorization. The traditional teaching methods of textbooks, study notes, videos and lectures are the optimal methods of building up the necessary retention of information. These should be supplemented by debates, workshops and case studies.

The purpose of the functionally based electives is to provide the students the ability to build on the core courses and organize knowledge. This is performed through a greater emphasis on debates, workshops, discussions and case studies with some text book teaching. This should be supplemented by an introduction to experiential learning, either through role plays or 'real world' assignments that involve both formulation and implementation. It is also important to monitor, and maximize, learning through constructive feedback.

The purpose of advanced, cross-functional electives such as entrepreneurship are to provide an environment where the students learn how to use their knowledge and develop skills such as creativity, intuition, boldness and timeliness. This environment can be created through the appropriate use of games, simulations, role plays and on the job training.

Conclusion

The challenge has been made to educators to perform the difficult task of change. Change from the comfortable and acceptable methods of teaching to innovative learning methods that coincide with the requirements of business students and potential entrepreneurs. Business schools that adapt early will produce the graduates that are best able to generate wealth for themselves, their businesses, and their country. We encourage academics and business school administrators to take the first step, or to continue their progress along the way if they are already cognizant of the need for change.

References

- Andrews, K.R. 1987. **The Concept of Corporate Strategy**. Homewood, Illinois: Irwin.
- Crouch, A. 1993. **Strategic Management Course Notes**. Bond University, Australia.
- DeBono, E. 1978. **Lateral Thinking**. Penguin.
- DeBono, E. 1985. **Six Thinking Hats**. Little, Brown and Co.
- DeBono, E. 1990. **I am right- You are wrong**. Viking.
- Hsu, E. 1989. Role event gaming simulation in management education: A conceptual framework. **Simulation and Games**, 20: 409-438.
- Mintzberg, H. 1990. Strategy formation: Schools of thought. In J. W. Fredrickson (Ed.), **Perspectives on Strategic Management**. NY: Harper and Row.

Mintzberg, H. 1992. Debate- MBA: Is the traditional model doomed? **Harvard Business Review**, 70 Nov/Dec: 128-140.