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Cara C. Gilmore (MBA student)  
Judy Ann Roy  
Faculty of Administration  
University of New Brunswick

## **ENTREPRENEURSHIP EDUCATION IN BUSINESS SCHOOLS: FRAMEWORKS FOR INTEGRATION**

Entrepreneurship education has grown rapidly over the past few decades. As the field grows and expands, the challenge for business schools is to manage effectively the implementation and development of these programs. The following is an examination of several possible frameworks for entrepreneurship education and recommendations on selecting an appropriate structure.

### **Introduction**

The effectiveness of any university program is dependent on a strong, thoroughly considered structure. The design must be carefully thought out to suit not only the school's curriculum and mission but also its economic environment. As the popularity and necessity of entrepreneurship education grows, business schools must take steps to ensure the implementation of a stable framework. While many options exist, it is the responsibility of each school to select a framework that suits its goals and purpose. Before examining some possible choices for entrepreneurship program structures, it is important to understand the history behind the growth of entrepreneurship education and why universities play such an important role in entrepreneurship development.

### **The Development of Entrepreneurship Education**

Entrepreneurship was introduced into the curriculum of business schools in the early 1970s. For most of the initial years of its development, the field struggled to be recognized as a "legitimate" discipline. Entrepreneurship had to move beyond the negative connotations associated with small businesses (i.e. buying a job, "ma and pa" image) and establish itself as "its own field, not one under the heading of small business." It was categorized initially as a "general management" discipline since most schools were not sure how to integrate the subject into their curriculum. Later, however, entrepreneurship was placed under the more appropriate heading of "small business management" (Ronstadt et. al., 1990).

An increasing amount of time and effort has been devoted to teaching entrepreneurship by business faculties since its introduction into the curriculum. This shift is evident in a number of ways. Since 1980, the number of endowed positions in entrepreneurship in American universities has doubled every five years, from 18 in 1980 to 157 in 1995. In 1994, there were 1,060 post-secondary institutions offering courses in the field. Between 1991 and 1996, 24 books intended as college textbooks were published, further indicating the growing interest in entrepreneurship. Also, there has been a substantial increase in the number of peer-reviewed

entrepreneurship journals, with a growing number focusing on international entrepreneurship (Katz and Green, 1996).

A survey on entrepreneurship in American universities provides further indications of the strong growth in this field. Gartner and Vesper discovered that between 1974 and 1991 the number of universities offering courses in entrepreneurship increased by more than 300%. At business schools, the increase in course offerings was 67% over the same period, indicating that other faculties are recognizing the importance of entrepreneurship in their curricula (e.g. engineering). In fact, according to McMullan (1988) up until the 1980's, entrepreneurship education had been largely a "fifth-columnist activity of an assortment of academics within departments that had other mandates and commitments".

From the Gartner and Vesper study in 1994, of the universities offering entrepreneurship courses, 37.6% offer courses at the undergraduate level, 23.7% at the graduate level and 38.7% at both the undergraduate and graduate levels. The survey also discovered that the "standard" entrepreneurship course includes a combination of business plan writing, speakers, readings and case materials.

Although the entrepreneurship course offerings have increased over the past two decades, the number of professors dedicated to the subject are still few in number. A survey of American universities by Robinson and Haynes discovered that only 31.9% of the institutions surveyed had one or more staff dedicated to the field. Most schools, 59.7%, had at least one part-time position in the faculty (Robinson and Haynes, 1991). These results indicate that although the field is becoming more recognized, commitment to the programs and their development is still at a minimum. This may be due to a number of factors from lack of monetary resources to devote to the subject, a lack of interest in entrepreneurship by the faculty and students or failure to recognize its importance to future economic development.

### **Importance of University Involvement in Entrepreneurship Education**

Post-secondary institutions play a crucial role in entrepreneurial development. Recent research has indicated that the traditional myth of entrepreneurs as uneducated people unable to find work in other places is simply not true. In fact, the majority of today's small business owners have some form of post-secondary education (72%) and approximately 47% have at least a bachelor's degree (see Table 1) (Business Development Bank of Canada, 1998). The importance of these numbers become evident when the education levels of entrepreneurs are compared to those of the rest of Canada: only 48% of Canadians have some form of post-secondary education and 52% have high school or less (Statistics Canada, 1996). Similar results can also be drawn from the education levels of Atlantic Canadians. Also, research has revealed that the more entrepreneurship courses taken by a student, the greater the chances they will become an entrepreneur in the future (Gillin et. al., 1996). Therefore, universities play an essential role in educating future entrepreneurs. However, their contributions do not end there. They also participate in programs to help local small businesses and are one of the key groups that encourage further advancement and development in the field through research and partnerships with businesses.

**Table 1 - Education Levels of Entrepreneurs v.**

### **Education Levels of the Canada and Atlantic Canada** (Statistics Canada, 1996)

Education Level	Entrepreneurs	Canada	Atlantic Canada
High School or Less	28%	52.8%	55.9%
College	21%	24.2%	22.8%
Incomplete University	4%	9.7%	10.7%
Bachelor's Degree	31%	10.6%	7.6%
Master's Degree	12%	2.2%	1.7%
Doctorate	4%	0.5%	0.3%

Both the Organisation for Economic Cooperation and Development (OECD) and the Atlantic Canada Opportunities Agency (ACOA) have recognized the important role that universities play in their local economies. The OECD, an international association dedicated to promoting economic growth, identified a region's improvements to the intellectual infrastructure and educational policy as some of the key factors contributing to the success of entrepreneurs. It states that regions with quality universities tend to attract investors and entrepreneurs, who in turn create growth. Therefore, areas need to work on improving their intellectual infrastructure through developing their higher education systems and creating programs which link both academic and business researchers. The educational policy of a region can enable its workforce to better deal with change by improving their skills and educational levels. The OECD recommends that universities should develop programs which focus on "enterprise skills, including business and financial planning, cash-flow management, personnel management and employee development" (OECD, 1990).

The Atlantic Canada Opportunities Agency (ACOA) has also emphasized the important role that universities play in the development of entrepreneurship and the economy. In its Entrepreneurship Development framework, the educational system plays the role of "pushing" the entrepreneurship culture. In order to do this, ACOA believes that post-secondary institutions must focus on courses which motivate students to become entrepreneurs and which teach them the required skills to do so. It also suggests, like the OECD, that universities focus on teaching students key business skills like "opportunity identification, business planning, marketing and financial skills" (ACOA and OECD, 1996).

### **Frameworks for the Development of Entrepreneurship Programs**

As the field of entrepreneurship education has grown and expanded, several frameworks for entrepreneurship program development have emerged. Many business schools have added courses to their programs hastily in order to keep pace with a trend. In 1988, McMullan noted the massive expansion of entrepreneurship education, however, felt that the field was too new and ill-prepared for large-scale growth. This has led to problems since long-term planning about the effective execution of the programs and how to best implement these programs was not considered. These reactive frameworks, with a series of disjointed courses, lack the continuity required for effective educational programs. On the other hand, there are schools who have added carefully courses according to a predetermined plan in order to ensure consistency and coherency. This type of framework creates a strong foundation for the future growth and success of entrepreneurship education. In order for any entrepreneurship education to be successful, a clear path of development must be established whose goal is to maximize the learning and educational opportunities for the students.

One possible framework for the development of entrepreneurship programs was formed out of a challenge to the traditional understanding of entrepreneurship and the entrepreneur. Maranville states that too often the term “entrepreneur” is simply classified as a person who is either self-employed, a leader or an owner. He believes, however, that the main role of entrepreneurship is innovation, which he considers to be “the method of changing the values and satisfaction of consumers.” This innovation should take place both within the entrepreneur’s own business and within larger organizations (Maranville, 1992).

Maranville believes that entrepreneurship is vitally important for business students to study because of its broad reaching impact. Students who work in both small and large organizations must continually innovate to help the business grow and succeed. As more and more small businesses are created (due to an absence of hiring by larger corporations), these firms must learn how to “manage innovation for long-term growth.” Therefore, “students who work in these companies will need to have the abilities to manage the innovation process.” On the other hand, as larger organizations face competitive pressures from smaller firms with greater flexibility they must also innovate to maintain market share (Maranville, 1992).

Based on this relationship between innovation and entrepreneurship, Maranville recommends three objectives that business schools must consider in the development of entrepreneurship curriculum:

1. To explore the economic nature and role of entrepreneurship (why is it important).
2. To discover and examine the principles of innovation (as they relate to entrepreneurship).
3. To track the role of entrepreneurship and the principles of innovation as they occur in economic history (sometimes entrepreneurship is more important to economic development than at other times) (Maranville, 1992).

As Maranville states:

*Though a student may master the material presented in a course on entrepreneurship, not every person will be in the right place at the right time with the right resources to innovate and thus be known as an entrepreneur. However, that student will definitely have a more full understanding of the entrepreneurial phenomenon, and by doing so, become a more competent stakeholder - whether investor, employee, manager, or possibly, entrepreneur.*

Another framework, proposed by Duke, centres on the important interaction between marketing and entrepreneurship. In his view, marketing is a “a boundary function responsible for interacting with key components of the environment on a regular basis.” He says that marketing is responsible for managing the interdependence between a firm and its environment, providing it with the resources required to foster an entrepreneurial orientation. Due to this link between the two fields, he believes that “marketing is most likely to become the natural home for entrepreneurial processes in established firms” (Duke, 1996). Duke also states that “the end product of educational efforts should be graduates who are capable of continuously redefining a company’s product-market portfolio and its marketing mix programs.” Accordingly, this requires a stronger relationship between entrepreneurship and marketing (Duke, 1996).

Duke also emphasizes the importance of understanding and evaluating students’ interest in courses. His research reveals many interesting correlations between students and their interests: senior students and freshmen are most likely to enroll in internships; business majors

are most likely to enroll in courses like Small Business Management, Financial Management, Marketing, Creativity, Corporate Entrepreneurship, Internships and Legal Environment; students in business programs are the most interested in entrepreneurship; senior students are the most interested in starting a business within five years of graduation; students with strong interest in entrepreneurship are most likely to enroll in New Business Creation, Financial Management, Marketing, New Product Management and Managing Family-Owned Businesses; male students are more likely to enroll in entrepreneurship courses; and students with families involved in businesses of their own are more likely to take an entrepreneurship course.

A method of understanding a business school's target audience is to examine research into the personality traits most attributable to entrepreneurs. Studies have shown that traits such as achievement motivated, risk taking and locus of control are key characteristics of entrepreneurs. A study by Brockhaus in 1982 indicated that entrepreneurs have greater internal locus of control than the rest of the population. This means that entrepreneurs in particular believe that the outcome of any given event is contingent on their own behavior and not that of others (Hatten and Ruhland, 1995).

In 1995, Hatten and Ruhland did a study on whether students' entrepreneurial characteristics and attitudes toward entrepreneurship changed after participating in the Small Business Institute (SBI) program, a "cooperative arrangement between colleges and universities, small business and the Small Business Administration (SBA)" in the United States. From the study, two main conclusions were drawn. First, students with a strong internal locus of control are more likely to develop a positive attitude towards entrepreneurship after participating in the SBI program than students who did not have an internal locus of control. Second, the program has a stronger positive impact on attitudes toward entrepreneurship for students between the ages of 20 and 22. One of the recommendations from the research was that student teams should be balanced between those who look for solutions to problems within themselves and those who look to external sources for answers (Hatten and Ruhland, 1995).

A third and one of the more elaborate frameworks for the development of entrepreneurship programs was formulated by Ronstadt, Plaschka and Welsch. Their research indicates that entrepreneurship programs at business schools are developing along two dimensions: the number of entrepreneurship courses and the degree of integration of these courses. The first dimension, the number of entrepreneurship courses, relates to the "number and types of course that are offered and their standing in the curriculum." The degree of integration of these courses, the second dimension, is "the level of acceptance and support from a variety of different groups"(i.e. faculty, students, colleagues, alumni, professional associations, etc.) (Ronstadt et. al., 1990).

The results of their study based on these two dimensions revealed two dominant methods of organization: Framework A and Framework B. *Framework A* involves the various ways in which the dimensions of the number of entrepreneurship courses offered and their degree of integration can be combined.

1. The first way is labeled the *Unsupported Isolated Course*. This is typically a basic course such as Entrepreneurship or New Venture Management which is not well integrated into the curriculum.
2. A second method of organization is the *Integrated Supplemented Course*. Unlike the Unsupported Isolated Course, this course has a high degree of integration in the business

curriculum as either an elective or a required course and is complemented by a wide variety of activities (i.e. entrepreneurship centres).

3. Another possible combination is a series of courses with *Low Integration* which have arisen “as an extension of established functional courses or out of a series of seminar courses thought up by individual faculty members without concern for how a course fits into the total curriculum.” The universities who use this approach are actually providing a disservice to their students, since the design and structure of such a program is not well planned out.
4. A fourth means of organizing is the *Integrated Program*. This structure involves a series of courses that are integrated with both one another and the school’s curriculum. It is considered to be the “ideal state of a mature structure” since it offers “a full complement of coordinated courses based on a well-conceptualized growth-oriented framework” (Ronstadt et. al., 1990).

*Framework B* is different from *Framework A* in that it involves the addition of entrepreneurship courses related to disciplines “that may be required in an entrepreneurial undertaking” and incorporates the stages of transition in a firm and a functional approach. The first dimension, *stages of transition*, involves developing courses that deal with issues that evolve as entrepreneurs and their businesses move through the various stages of development (i.e. Business Planning, Management of Risk, New Venture Initiation, Expansion Strategies). The second dimension, *the functional approach*, involves the exploration of specific topics required to solve problems. Often, entrepreneurship courses are initially grouped under the management or marketing areas in which the emphasis is placed on the functional field rather than on entrepreneurship. The schools quickly begin to realize that a multi-disciplinary approach is the best way to prepare entrepreneurs for the wide variety of problems and issues they will encounter. This leads to the development of an interdisciplinary program. Some schools have even attempted to combine the elements of the stages of transition and the functional approach. However, most often, universities are comfortable with the middle ground between the two elements (Ronstadt et. al., 1990).

While the three frameworks of Maranville, Duke, and Ronstadt do provide business schools with direction in the development of entrepreneurship programs, other elements should be considered. First, the dominant purpose behind any entrepreneurship program should be to further the mission of the business faculty. If the faculty’s goal is to train its students to be technologically proficient, then the entrepreneurship program should also have that focus. Or, on the other hand, if the goal is to integrate the programs of the business school with its community, then any entrepreneurship program must strengthen these links. The goals and mission of any entrepreneurship program in a business school must be consistent with and flow from the broader purpose of the faculty within which it operates.

It is also important that universities understand the economic environment in which they are providing entrepreneurship education. Depending on where the business school is located, the purpose of its entrepreneurship program will be different. In larger cities, it may be more important to focus on entrepreneurship within large organizations rather than the development of small business. In smaller, more rural regions, the creation and understanding of small business is crucial since the people in these areas will most likely be making their own jobs rather than working for a large corporation. Also, since the majority of entrepreneurs have some form of university education, the schools must realize that they do have an impact on their regions. By

providing educational opportunities with the ability to fill voids in their unique communities, business schools are fulfilling their role as a key player in economic development.

Finally, business schools should continually evaluate and re-evaluate the programs they are offering. The effectiveness of any program must be monitored to ensure that it is still achieving its purpose and is still having the desired impact on the students and other interested parties. This evaluation can be aided by examining current research on frameworks for entrepreneurship program development and by looking at the methods other schools have used to evaluate their programs. Schools such as the University of Calgary are committed to monitoring their entrepreneurship program and have used methods such as questionnaires to measure its level of success (Chrisman, 1997). Through implementing the most current research and developing an evaluation process based on this information, the results of the process will be beneficial to both the program and the students and professors involved with it.

### **Recommendations for Entrepreneurship Education Development**

#### **Recommendation: Be Consistent with the School's Mission**

Any program introduced into a business faculty should be consistent with the faculty's mission and goals. The absence of guidance for entrepreneurship programs will lead to problems with purpose and direction. Therefore, the goals of any entrepreneurship program should be established in the beginning and should flow from the broader mission of the faculty.

#### **Recommendation: Understand the Economic Environment**

The economic environment of the business school's community is also important. Since the majority of entrepreneurs have some form of university education, schools should remember the responsibility they have to their students. Through maintaining focus on this important role, business schools are providing support to their students as well as fulfilling their roles in economic development.

#### **Recommendation: Take Advantage of Current Research**

When selecting the appropriate strategy to pursue regarding entrepreneurship education, business schools should draw upon the research of others. The entrepreneurship education frameworks discussed earlier provide valuable insight on some effective methods of entrepreneurship education organization. Researchers recommend that curriculum designers develop a variety of structures to meet the changing needs of growing firms and that they "be sensitive to career paths of people in or entering the entrepreneurship arena and take some responsibility for outlining the entrepreneurial career paths of business students" (Ronstadt et. al., 1990).

#### **Recommendation: Take Advantage of the Experiences of Others**

It is important to consider the experiences that other universities have had and the lessons that they have learned. As with any program, some methods are more successful than others. Despite indepth research and careful planning, things do not always turn out the way intended. It is not until the system is actually operational that unforeseen problems and uncalculated delays become apparent. It is recommended that business schools learn how others are operating their entrepreneurship programs and how they have changed and adapted these

programs over the years. When a company, group or individual has the benefit of learning from the experiences of others in similar situations, they can be better prepared to confront and prevent unanticipated situations.

### **Recommendation: Adopt An Integrated Approach to Entrepreneurship Education**

In the future, it is recommended that program designers use an integrated approach to entrepreneurship education. Since entrepreneurship is a discipline concerned with all areas of operations (marketing, strategy, finance, etc.), it makes sense that entrepreneurship education be equally integrated. While the school's mission and economic environment will determine a portion of the curriculum's design, the faculty should decide how the remainder of the framework should be structured.

One structure to consider is the interaction between entrepreneurship and innovation, as proposed by Maranville. The goal of this framework is to understand how these two elements work together, their effects on both large and small organizations and how they provide businesses with more competent stakeholders and employees. Another possible approach is the interdependent relationship between entrepreneurship and marketing, combined with an understanding of a business school's target audience. Some may prefer a more structured framework like those developed by Ronstadt et. al. For instance, smaller schools may discover that the best method of achieving an uniform and effective program is to use the *integrated supplemented course approach*. The development of entrepreneurship centres and clubs to complement existing courses allows these universities the opportunity to offer entrepreneurship education to their students at a minimal financial commitment. On the other hand, for larger universities, the best method of organization is a form of the *integrated course* framework. This structure provides students with not only a wide variety of courses to choose from, but also the benefits of a integrated and coherent program (Ronstadt et. al., 1990).

Each individual business school must decide which approach it wants to pursue. There is no one perfect framework that meets the needs of every school. Through understanding its goals and objectives, business schools are not only creating effective entrepreneurship programs but are benefiting their entire curriculums.

### **Implications for Further Research and Conclusion**

Since entrepreneurship is an integrative activity based upon the capacity to understand very complex dilemmas regarding purpose, possibilities, and tools, then non-traditional and integrative processes in designing entrepreneurship programs should be followed. Further research into non-traditional processes and frameworks is needed. Issues including how to deal with the overwhelming complexity of entrepreneurship, the multi-functional roles, multi-dimensional problem solving and the unpredictability, uncertainty, and ambiguity are necessary to integrate. In essence, a holistic and multi-disciplinary perspective to entrepreneurship education is required.

The successful implementation of any entrepreneurship education program in any business school is dependent on several factors. It is important that the curriculum fit with the mandate of the faculty as well as the external environment. It is also crucial that the university establish goals for the program that are suitable to the school's vision and that are grounded in the research and experiences of other entrepreneurship educators. The recommendations provided are only a framework for the development of future entrepreneurship education.

Universities must be willing to evaluate continuously and adapt their curriculum as the world around them evolves in order to be and to remain effective educators.

### References

Atlantic Canada Opportunities Agency and Organisation for Economic Co-operation and Development. *The Implementation of an Entrepreneurship Development Strategy in Canada*. ACOA and OECD: Paris, 1996.

Atlantic Canada Opportunities Agency. *The State of Small Business and Entrepreneurship in Atlantic Canada*. ACOA: 1996.

Atlantic Canada Opportunities Agency. *The State of Small Business and Entrepreneurship in Atlantic Canada*. ACOA: 1998.

Business Development Bank of Canada. *Beyond Their Small Businesses: A Survey*. Business Development Bank of Canada: 1998.

Chrisman, James J. "Program Evaluation and the Venture Development Program at the University of Calgary: A Research Note." *Entrepreneurship: Theory & Practice* 22 (Fall 1997): 59-74. EBSCO/Item Number 1209751 [September 2, 1999].

Duke, Charles R. "Exploring Student Interest in Entrepreneurship Courses." *Journal of Marketing Education* 18 (Fall 1996): 35-46. Available: EBSCO/Item Number 9703043183 [January 30, 1999].

Gartner, William B. and Karl H. Vesper. "Experiments in Entrepreneurship Education: Successes and Failures." *Journal of Business Venturing* 9 (1994): 179-187.

Gillin, M. et.al. *An Empirical Assessment of the Returns to Investment in Entrepreneurial Education*. Presented at the Babson College, Kauffman Foundation Entrepreneurship Conference, Seattle: March 1996.

Hatten, Timothy S. and Sheila K. Ruhland. "Student Attitude Toward Entrepreneurship as Affected by Participation in an SBI Program." *Journal of Education for Business* 70 (Mar/Apr 1995): 224-228. Available: EBSCO/Item Number 9507052040 [January 30, 1999].

Katz, Jerome A. and Richard P. Green II. "Academic Resources for Entrepreneurship Education." *Simulation & Gaming* 27 (September 1996): 365-375. Available: EBSCO/Item Number 9608301967 [January 30, 1999].

Maranville, Steven. "Entrepreneurship in the Business Curriculum." *Journal of Education for Business* 68 (September/October 1992): 27-31. Available: EBSCO/Item Number 9301070904 [September 2, 1999].

McMullan, W.E. "The economics of entrepreneurship education." *Journal of Small Business and Entrepreneurship* 6,1(1988); 8-18.

Organisation for Economic Co-operation and Development. *Implementing Change: Entrepreneurship and Local Initiative*. OECD: 1990.

Robinson, Peter and Max Haynes. "Entrepreneurship Education in America's Major Universities." *Entrepreneurship: Theory and Practice* 15 (Spring 1991): 41-52.  
Available: EBSCO/Item Number 9606215454 [January 30, 1999].

Ronstadt, Robert. "The Educational Entrepreneurs: A New Era of Entrepreneurial Education is Beginning." *American Journal of Small Business*, Spring 1987.

Ronstadt, Robert, Gerhard R. Plaschka and Harold P. Welsch. "Emerging structures in Entrepreneurship Education: Curricular Designs and Strategies." *Entrepreneurship: Theory & Practice* 14 (Spring 1990): 55-72.

Statistics Canada. *Population 15 years and over by highest level of schooling*. 1996 Census Nation Tables.