
Entrepreneurship education and training in Canada: a critical assessment

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Abstract

Management training is constantly seen as an effective way of providing small-medium size enterprises with the management expertise they require in order to develop and grow. The SME sector in Canada plays a prominent and essential role in the growth and expansion of the domestic economy through its contribution to the domestic output and job creation. However, this sector suffers from a considerably high failure rate that is largely attributed to the lack of management skills and planning, which can potentially be improved by providing training and education in different business areas. This paper assesses the entrepreneurship education and training efforts in Canada and identifies the common challenges that face this process.

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Introduction

The small business sector plays a significant role in the health and growth of the Canadian economy and is emerging as Canada's strategic sector in the new millennium. In 2001 over 2.5 million firms in Canada were categorized as small businesses, representing over 98 percent of the total number of Canadian businesses. As a group, Canadian small businesses employ nearly 60 percent of the work force and produce 45 percent of the gross national product and approximately two-thirds of the new jobs (Ibrahim, 1999; Ibrahim and Ellis, 2002).

Despite the importance of the small business sector to the Canadian economy, the failure rate in this segment is alarming. It is estimated that approximately two thirds of all start-ups fail within the first five years. According to Industry Canada – Entrepreneurship and Small Business Office the bankruptcies rate is extremely high. Research studies of small business failure in Canada have attributed the high failure rate to lack of management skills (Ibrahim and Ellis, 1998; 1986; Landesberg and Edmunds, 1983). Managerial skills include: strategic planning, marketing, cash management, networking, negotiation and general management skills. According to a study by Dun and Bradstreet (1983), 90 percent of small business failure in Canada is attributed to managerial incompetence.

Training and education of entrepreneurs in Canada

Training and education of Canadian entrepreneurs have been repeatedly cited as an effective way to reduce small business failure in Canada (Ibrahim and Ellis, 2002; Menzies and Gasse, 1999; Carrier, 1999; Menzies, 1998; Blais, 1997; Béchard and Toulouse, 1997). A recent study by Menzies and Gasse (1999) suggests that entrepreneurship education and training are valuable tools to enhance the managerial skill of Canadian small business owner and managers. The authors noted that entrepreneurship training is gaining popularity among Canadian universities.

The objectives of this research are twofold: first to assess and review entrepreneurship education and training efforts in Canada, in particular the role of the various government and non-government organizations in the process; second to identify and discuss the challenges facing entrepreneurship education and training.

A number of organizations play a significant role in training Canadian entrepreneurs.

These include:

- universities and colleges;
- small business centres affiliated to universities;
- The Business Development Bank of Canada (BDC);
- major Canadian banks;
- the Institute of Canadian Bankers (ICB);
- the Canadian Federation of Independent Businesses (CFIB);
- youth employment services (YES);
- provincial small business centres;
- YMCA programs.

In the following sections we discuss the contribution of each of these organizations to entrepreneurship education and training.

Entrepreneurship programs in Canadian universities

University entrepreneurship programs tend to be the driving force behind training Canadian entrepreneurs. Menzies (1998) and Menzies and Gasse (1999) found that 53 Canadian universities offer courses in entrepreneurship and small business management aimed at enhancing managerial skills for aspiring and existing entrepreneurs. Indeed previous research has found a significant relationship between training and the propensity for entrepreneurship career. Upton *et al.* (1995) found that 40 percent of those who attended courses in entrepreneurship have started their own businesses, while 30 percent joined family businesses and only 30 percent worked for large organizations. Ibrahim and Ellis (1986) reported similar results. Those attending entrepreneurship courses have a high tendency to start their own businesses compared with those attending other business courses. Further research evidence suggest that entrepreneurship training is critical to venture success (Ibrahim *et al.*, 2001; Béchard and Toulouse, 1997; Vesper, 1993;

McMullan and Vesper, 1987; Ibrahim and Goodwin, 1986).

A Canadian study by Béchard and Toulouse (1997) suggests that entrepreneurship knowledge can be grouped into three different categories. These include: (1) orientation and awareness; (2) new venture creation; (3) venture management – survival and growth.

Menzies and Gasse (1999) found that these three areas have been the focus of most entrepreneurship education and training programs in Canadian universities. Entrepreneurship courses covered topics such as developing the business plan, the venture creation process and small business management. However, Menzies and Gasse (1999) noted that Canadian entrepreneurship courses tend to focus more on the pre-venture creation process and less on management of existing small businesses. This limitation was supported by Vesper and Gartner's (1999) international survey of entrepreneurship education.

Further several studies of entrepreneurship training in Canada have noted the need to provide technological training to Canadian entrepreneurs in order to enhance their innovation skills in an increasingly hostile and competitive environment. Clarke and Reavly (1987) and Clarke (1990) suggest that Canadian engineering schools should provide technical training to entrepreneurs. Blais (1997) contends that Canadian engineering schools should play a major role in training technological entrepreneurs. Menzies and Paradi (1999) found that 40 percent of engineering graduates who had received entrepreneurship training had started their own small business.

Entrepreneurship and small business centres

Research studies suggest that entrepreneurship and small business centres affiliated to universities and colleges play a critical role in training and mentorship of entrepreneurs and managers of small businesses. Menzies and Gasse (1999) found that 32 Canadian universities have an entrepreneurship and small business centre. These centres provide training and mentorship to local small business owners

and managers in their communities. However the impact of these centres on the growth and success of small businesses in their communities is not known.

The Business Development Bank of Canada (BDC)

BDC is a Crown Corporation and is considered Canada's small business bank. Its role is to promote the establishment and development of small and medium sized businesses in Canada. A key activity of the BDC is to provide training, counseling and mentoring of entrepreneurs and small business managers. The bank has provided training to various groups including the young, women, and exporters, expanding and Aboriginal entrepreneurs. The objective of training and mentorship is to promote sound management practices in small business. However the BDC training activity is limited and has yet to reach its full potential.

Major Canadian banks

In the past few years the major Canadian banks have played a key role in providing training not only to Canadian entrepreneurs but also to bankers and risk managers who deal with small businesses. The contribution of key players is discussed below.

The Canadian Institute of Bankers has developed a small business program to provide rigorous training to account managers in various financial institutions on small business including management, risk, skills and legal aspects. The first author of this paper has been a principal developer and advisor of this program (Ibrahim, 1999; Ibrahim and McTavish, 1998). Over 20,000 account managers dealing with small businesses have received entrepreneurship training since 1994.

Further, major Canadian banks, individually or through joint agreement with universities, and non-government organizations have provided much needed training and mentorship programs to Canadian entrepreneurs. For example the Canadian Imperial Bank of Commerce has supported small business training and mentorship programs at both Concordia and Carleton Universities. The Bank of Montreal, Institute for Small Business in conjunction with the University of Western Ontario have developed a three-day training program for

entrepreneurs of high growth small businesses. The Royal Bank has also developed a training course specifically designed for women entrepreneurs. The bank also offers an entrepreneurship-training program for the First Nations community in New Brunswick as well as a program for knowledge-based entrepreneurs. The Scotia bank also supports a training program for women entrepreneur at Simon Fraser University as well as a training program for Aboriginal small businesses at the University of Saskatchewan. Further the Toronto Dominion Bank has developed a training program to educate small business owners and managers about how to use the Internet.

The Association of Canadian Bankers has also teamed with Concordia University to provide training to Aboriginal and minority entrepreneurs. The association also provides educational self-learning materials for Canadian entrepreneurs.

However, it must be noted that most of these training activities by the banking industry started in the early 1990s as a result of public pressure (Report of the Standing Committee on Industry, 1994; Wynant and Hatch, 1990). Further these efforts are still not sufficient in light of the high failure rate in the Canadian small business sector (Report of the Task Force on the future of the Canadian Financial Service Sector, 1998; Ibrahim, 1999).

Non-government organizations (NGOs)

Non-government organizations are active in the training of Canadian entrepreneurs. These include the Canadian Federation of Independent Business, Youth Employment Services and YMCAs. We discuss their contributions briefly:

- *Youth Employment Services (YES)*. These are non-profit organizations created by business leaders, educators and other volunteers. A key activity of these organizations is to provide training seminars to local entrepreneurs.
- *The Canadian Federation of Independent Business (CFIB)*. The CFIB is an advocacy organization for small and medium sized enterprises in Canada. The CFIB publish statistics as well as educational materials for self-learning.
- *YMCA*. The YMCA has developed a number of programs to train

entrepreneurs across Canada. These programs are supported by volunteers, local businesses and banks. For example the Young Women's Entrepreneurship program is supported by the Canadian Bankers Association.

While the contribution of these organizations is admirable it is still limited, and lacks continuity despite the significant growth of the small business sector and in particular new economy small firms such as soft and hardware, biotech and communication companies. If these companies are to remain competitive, training efforts must be intensified and conducted within a coherent framework.

Federal and provincial initiatives

Provincial government with the support of the Federal government and private sectors developed province wide network of Small Business Enterprise Centres. A key activity of these centres is training and mentorship of local entrepreneurs. For example, the Ontario government has established five centres across the province to support small business.

Further Federal government organizations such as Industry Canada and Canada Economic Development have provided support in the area of entrepreneurship training. However Federal and provincial efforts lack coherence and focus, despite the intense competition and the hostile environment facing small Canadian firms both in the domestic and global markets (Ibrahim, 1999; Matlay, 1997).

The training challenge

We believe entrepreneurship training in Canada faces a number of challenges.

First, both empirical and conceptual research on entrepreneurship training in Canada is lacking. Most studies tend to be survey type and lack methodological rigor. Further, these studies tend to focus on entrepreneurship education and training in Canadian universities and affiliated Small Business Centres. This may be partly due to lack of data available to researchers on the contributions of various Canadian organizations to entrepreneurship training.

We believe that data sharing is the key to developing an effective entrepreneurship training strategy in Canada.

Second, there is a lack of conceptual clarity on the appropriate paradigm for entrepreneurship training. Basically, there are no systematic efforts to identify the personality traits and skills that make for a successful entrepreneur. As a result there is confusion about the appropriate approach to entrepreneurship training.

Third, there is a lack of a national strategy for entrepreneurship education and training. This is a major concern to many observers. Indeed globalization may force many Canadian small companies out of business as a result of the lack of technical skills and managerial competencies (Ibrahim, 1999; Matlay, 1997). Therefore, if the Canadian small business sector is to remain competitive in a free trade environment, a coherent national policy agenda must be developed. We believe the national agenda must first develop a framework of entrepreneurship training in terms of the appropriate traits and skills that are necessary for a successful entrepreneur. Second, it must identify the various organizations involved in entrepreneurship training. Third, it must coordinate the training activities between these organizations. Finally, it must ensure that these organizations work within the national framework.

Entrepreneurship training and education in Canada: a conceptual model

The previous discussion points to a need for a conceptual framework for entrepreneurship training in Canada. Indeed despite the high failure rate in the Canadian small business sector little effort has been made to explore training and development needs of entrepreneurs and identify the role of the various organizations in the process. In this section we offer a conceptual model of entrepreneurship education and training in Canada. The model addresses a number of fundamental questions:

- What are the traits and skills associated with successful entrepreneurs?
- Can we predict the personality traits associated with successful entrepreneurs?

- What is the appropriate training and development approach?
- What is the role of the various organizations in training and development of entrepreneurs?

Figure 1 depicts the proposed model.

Entrepreneurship traits – the right stuff

Many research studies have examined the personality traits associated with successful entrepreneurs personality traits such as high need for achievement, independence, moderate risk taking propensity, tolerance for ambiguity, and innovation were found to have a significant impact on the making of a successful entrepreneur (McClelland, 1985; Hornaday and Aboud, 1978; Ibrahim and Goodwin, 1986). We briefly discuss these traits.

David McClelland (1985) noted in his classical work, *The Achieving Society* that the entrepreneur’s need for achievement predisposes them to perform different activities exceptionally well as a measure of achievement. McClelland’s theory of the need for achievement (n-Ach) identified three traits associated with successful entrepreneurs:

- (1) the desire to solve problems and gain satisfaction from attaining goals that they have set and prioritized themselves;
- (2) the ability to take moderate risks after assessing the alternatives; and
- (3) the need for feedback as a measure of their success.

According to McClelland (1987), those who score highly on the n-Ach were found to have a higher probability of success in business and

of benefiting from business training and education. McClelland’s need for achievement has been cited in the small business literature as a fundamental trait associated with successful entrepreneurs.

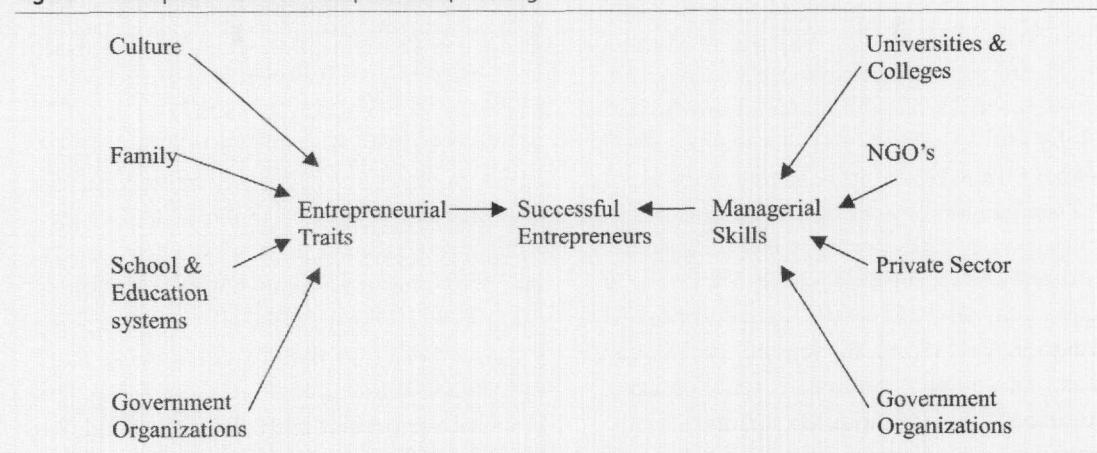
A moderate risk-taking propensity is a typical trait associated with successful entrepreneurs and venture creation. Research studies found that successful entrepreneurs do not deliberately seek out high-risk situations, nor do they strive to avoid risk altogether. In essence they are willing to accept the risk and uncertainty inherent in new opportunities (McClelland, 1987; Bird, 1989; Ibrahim and Ellis, 1990).

Mintzberg and Waters (1982) noted that the notion of controlled boldness is a key characteristic of successful entrepreneurs. They often take special care to research problems and consider several alternative solutions before reaching a decision.

Tolerance for ambiguity has been identified as one of the traits associated with successful entrepreneurs (McClelland, 1985). This trait refers to the ability of the entrepreneur to perceive ambiguous situations in a positive and challenging way. Ambiguity in this sense is defined as a lack of complete and definitive information. This trait has been found to allow entrepreneurs to organize their thoughts and make decisions under conditions of uncertainty. Schreer (1982) tested a sample of entrepreneurs and managers and found successful entrepreneurs to be more tolerant of ambiguity than corporate managers.

Joseph Schumpeter, the great economist, identified innovation as a key characteristic of a successful entrepreneur. In most industries, significant innovations originate from the garages and basements of entrepreneurs such

Figure 1 Conceptual model of entrepreneurship training



as Steve Jobs, founder of Apple Computers, and William Hewlett and David Packard, founders of Hewlett-Packard. David McClelland's research confirmed the successful entrepreneur's predisposition to innovate suggesting a strong relationship between a high need to achieve and innovation (McClelland, 1987).

Research studies have also reported that successful entrepreneurs possess a high need for independence and autonomy. Many entrepreneurs have left successful executive careers to start their own business because of the strong need to work independently and be their "own boss" (Ibrahim and Goodwin, 1986; Ibrahim and Ellis, 1990; Bird, 1989). The following list summarizes the entrepreneurial traits associated with successful entrepreneurs:

- high need for achievement;
- high need for independence;
- locus of control;
- tolerance for ambiguity; and
- innovation.

Managerial skills and competencies

A second set of factors associated with successful entrepreneurs is management skills and competence. Unlike large organizations, small firms have limited resources. Thus the entrepreneur must have the management skills to perform various functions effectively. In other words the entrepreneur is expected to assume the role of functional managers that are found in large organizations. This resource constraint requires that the entrepreneur develop skills and competencies in critical areas such as strategy, cash flow management, marketing, human resources, and networking. These areas of competencies have been cited in the small business literature as a critical element to successful small business (Ibrahim and Goodwin, 1986; Hofer and Sandberg, 1987; Birley, 1985). We discuss these skills and competencies briefly.

Studies have shown that carving a niche strategy is effective for the small firm (Ibrahim and Goodwin, 1986). Successful entrepreneurs must be able to tailor the firm's product or service to meet a specific customer need. In a highly competitive cut-throat environment only those firms that have established a unique competitive position

based on their areas of distinctive competence will succeed. Distinctive competence refers to the unique skills and activities that the small firm has developed over rival firms (Porter, 1980; Crawford and Ibrahim, 1985). Hofer and Sandberg (1987), noted management scholars, examined critical success factors in new ventures and concluded that business strategy, the entrepreneur's traits and characteristics as well as the industry structure are key factors for a venture's success.

Effective management of cash flow was also identified as a critical skill for a successful small business. Indeed, in small business, profits do not guarantee a healthy cash flow situation especially if the firm is growing rapidly without prior financial planning. Financial management skills are therefore critical to a successful entrepreneur. Knowledge of managerial accounting techniques such as break-even and sensitivity analysis as well as cash flow projection and financial performance analysis is a prerequisite for a successful entrepreneur. Further effective management of inventory allows the entrepreneur to reduce cost and obsolescence. However, designing a proper inventory policy requires knowledge of cost system, market condition and suppliers bargaining power (see, for example, Ibrahim and Goodwin, 1986; Said and Hughey, 1977).

Research evidence also reveals that marketing skills are critical for a successful entrepreneur and a growing small firm. The flow of goods and offering of services to fulfill the needs and desires of customers are critical to the success of the small firm. Marketing skills include the ability to conduct proper market research to position the product or service competitively, to set an effective pricing and promotion strategy (Levitt, 1980; Kotler, 1987; Greenfield, 1984).

Research studies reported that successful small business is the result of the entrepreneur's ability to divorce themselves from the day-to-day routine business activity and to focus on strategic issues (Ibrahim and Ellis, 1987). Many studies have linked small business failure to the entrepreneur's reluctance to delegate small details that could be handled by their staff (Ibrahim and Ellis, 1986).

Furthermore research has found that the entrepreneur's skills to develop and maintain a network of contacts are critical for operating successful small businesses. Networking provides the entrepreneur with a pool of information and advice (Birley, 1985). The following list summarizes the managerial skills associated with successful entrepreneurs:

- strategy;
- cash flow management;
- financial planning;
- marketing skills;
- delegation skills; and
- networking.

The making of a successful entrepreneur

The previous discussion suggests that entrepreneurial traits and managerial skills are key ingredients in the making of a successful entrepreneur and in developing a strong and competitive small business sector. The relationship between particular traits and skills and small business success raises two fundamental questions in the context of training and education:

- (1) Can we predict entrepreneurial traits?
- (2) How can we develop and enhance entrepreneurial traits and skills?

Prediction and development of successful entrepreneurs

Research studies revealed that most entrepreneurial traits can be predicted in individuals early in their life (Kourilsky, 1977; Ibrahim and Goodwin, 1986). In a study by Kourilsky (1977) a number of entrepreneurial traits such as innovation were identified in a sample of elementary school children. Furthermore, McClelland (1987) developed a test that would predict which person shows a greater or lesser probability of succeeding as an entrepreneur. He found that those who score highly on the need to achieve have a high probability of success and are more likely to benefit from business training courses.

The ability to predict entrepreneurial traits draws our attention to the significant role of entrepreneurship training and development including the mentorship and the grooming process in pre and early adulthood. Prediction also draws our attention to the significant role of the family, the education system and the government and non-government

organizations that have a vested interest in developing a strong small business sector that is capable of competing effectively world-wide.

The family in particular plays a significant role in developing entrepreneurial traits. The role of the family brings to focus the role of the culture. Studies have shown that some cultures see entrepreneurship as a more desirable career opportunity than others and thus encourage individuals at a young age to develop entrepreneurial behavior (Ibrahim and Ellis, 2002). A survey of 11 nations by the Canadian Federation of Independent Business revealed that Canada had the highest percentage of entrepreneurs who were born outside the country. Further research suggests that two-thirds of Canadian entrepreneurs come from families where the father or mother is self-employed. The entrepreneurial environment and parental guidance and support were found to be conducive to fostering entrepreneurial traits such as risk-taking, innovation and independence. The self-employed parent becomes a role model and a mentor to the nascent entrepreneur and is usually inclined to encourage entrepreneurial behavior. In other words the family provides the potential entrepreneur with the aspiration to follow the same career choice. The family role in developing these traits at a young age can be observed in simple acts such as encouraging children to set a lemonade stand in their front yard, in working during school holidays, to disassemble and reassemble their toys. These acts were found to develop traits such as independence, innovation, risk-taking and achievements.

The school and education system play a pivotal role in predicting and developing entrepreneurial traits. Schools' curricula should focus on encouraging autonomy and independence, innovation and creativity as well as risk-taking. The pedagogical approach should encourage children to make decisions and to accept mistakes as part of the learning process (Ibrahim and Ellis, 2002).

Studies have shown that experiential type learning can play a critical role in developing entrepreneurial traits. Experience-based education was found to enhance entrepreneurial traits in pre and post adulthood. Further case studies allow nascent entrepreneurs to develop their risk-taking,

innovation and autonomy traits (Clark *et al.*, 1984).

Government and non-government organizations can play a significant role in developing entrepreneurial traits. For example, government programs to provide financial support, contacts and training to nascent entrepreneurs could help enhance entrepreneurial activities.

A recent non-government initiative known as the Shad Valley was established with support from banks; private sectors and the Canadian government select bright high school students from across Canada for a summer program. Students work on their business ideas under a mentor and develop a business plan. The objective is to enhance entrepreneurial traits in nascent entrepreneurs.

Mentorship program has also been found to enhance entrepreneurial traits, in particular innovation. The mentor provides the guidance and support to the nascent entrepreneur. Mentors are often successful entrepreneurs in the community who volunteer their time.

Development of managerial skills

Education and training play a pivotal role in developing the managerial skills necessary for a successful small business. Skill development courses were found to enhance the entrepreneur's chance of success. However, for many years business education in Canada and elsewhere has followed the traditional paradigm that large organizations are responsible for job creation and economic growth in general. Thus skill development courses in various business functions such as accounting, finance, marketing and general management have focused to a great extent on large organizations. Recent research on job creation (Ibrahim, 1999) has changed this traditional view. Small businesses are gradually seen as the engine of economic growth and the creators of jobs. As a result more courses in entrepreneurship education are offered. However, specific courses in functional skills are still lacking.

Furthermore, most business courses in Canada and most countries tend to focus on specific business functions such as accounting, marketing, finance and human

resources. The objective of this type of education is to create functionalists rather than decision makers. Entrepreneurial education requires emphasis on decision making skills, in other words the ability to utilize the various functional skills in making decisions. Typically the entrepreneur runs the small firm with limited numbers of employees due to resource constraints. Specialized functions do not exist or are often limited to one or two key functions. As a result the entrepreneur has to make decisions based on the overall picture of the business. Thus entrepreneurial education requires a shift to a decision-making paradigm. This type of business education integrates the functional knowledge and thus is more suited to entrepreneurs and small business training in general.

Case studies of small business and entrepreneurs in action were found to develop and enhance decision-making skills of potential entrepreneurs (Clark *et al.*, 1984). Mentorship and incubator programs were also found to enhance the entrepreneur's decision making and managerial skills and competencies.

Various government and non-government organizations could play a significant role in the training of budding entrepreneurs. Government agencies such as the Business Development Bank of Canada as well as Industry Canada Entrepreneurship and Small Business office could provide the needed support directly by offering training programs to entrepreneurs or indirectly through grants to small business programs in universities and colleges across Canada. The federal and provincial government could also support mentorship and incubator programs.

Non-governmental organizations (NGOs) could play a significant role in the training and development of local entrepreneurs in communities across Canada. Youth employment centres could provide the mentorship needed to nascent entrepreneurs in collaboration with universities and colleges.

The Canadian banking industry has a vested interest in developing a successful small business sector. Banks could provide support to incubator programs as well as scholarship funds to support entrepreneurial education and small business centres across Canada.

Conclusion

The Canadian small business sector plays a significant role in the economy. Despite its importance the failure rate is quite alarming. A major cause of this high failure rate is the entrepreneur's lack of managerial skills and competencies. It has been argued that entrepreneurship training is a key strategy to reduce the high failure rate in the small business sector. Many Canadian government and non-government organizations have contributed to entrepreneurship training. However, these efforts are still limited. Further the lack of a coherent national strategy and a policy agenda regarding entrepreneurship training could threaten the global existence of the Canadian small business sector. We offered a model for entrepreneurship training and education.

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