

Does entrepreneurship education have a role in developing entrepreneurial skills and ventures' effectiveness?

Abstract:

The purpose of the paper is to examine the impact of entrepreneurship education and training on the development and enhancement of entrepreneurial skills that may be essential to improve ventures' effectiveness. One hundred and seventy entrepreneurs and prospective entrepreneurs were surveyed in the United States to determine their motivations for business ownership and assess their perceived factors that may have contributed to the success or failure of their ventures. The findings clearly indicate that there is causal linkages between entrepreneurial education (managerial skills), social competence (interpersonal skills), and to a greater degree, basic entrepreneurial training skills and ventures' effectiveness. They were statistically significant confirming prior expectation of the significant value of entrepreneurship education. The data demonstrates that the entrepreneurial education and training programs appear to create openness, confidence, and trust among the participants in this study. However, the type of entrepreneurship education must be coupled with content that is rich in learning principles, innovation, and reflection in order to enhance ventures' effectiveness.

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INTRODUCTION:

Entrepreneurial firms including small and medium-sized enterprise (SMEs) make indispensable contribution to the market economics. They are an essential part of the renewal process that encompasses and defines the market economies. These firms play an important role in the innovations that lead to technological change and productivity growth. In the short term entrepreneurial firms are about change and competition because they change market dynamics. They also create an opportunity for millions of women, minorities, and immigrants to achieve success. (Kuratko and Hodgetts, 2004). In recognition of this, Higher Education Institutions (HEI) have been supported through government policy to provide training programs for SMEs aimed at developing a higher level of skills that will support small business growth (Gordon, Hamilton and Jack 2010).

Entrepreneurship Education

Current entrepreneurial education consists of a chronologically based approach. That is, business entry has become one of the most broadly addressed entrepreneurial subjects in current curricula (Kuratko, et. al, 2004). This business entry concept has become a sort of umbrella for the analytical, social, leadership and innovative skills that entrepreneurs rely on to achieve success. Business entry also identifies various sources of venture capital that may be available to entrepreneurs in need of funding. Furthermore, the teaching of the ability and willingness to make decisions based on imperfect or incomplete knowledge has been taught as an important issue for entrepreneurial education.

There are many challenges facing entrepreneurs and they should be well prepared before implementing their idea. "Entrepreneurship is risky mainly because so few of the so-called entrepreneurs know what they are doing. They lack the methodology. They violate the elementary and well-known rules. "It needs to be systematic, managed based on purposeful innovation" (Drucker, 1985, P.14). "Entrepreneurs possess skills, many of which are embedded within us. We can uncover these hidden traits, and develop them sufficiently to become a successful entrepreneur" (Kaplan and Warren, 2010 P. 8). As Peter Drucker says, "Entrepreneurship is nothing more than a discipline and, like every discipline, it can be learned." Drucker's main point is that innovation is not an activity limited to a special class of people (Drucker, 1985, P.24).

Entrepreneurial Skills

The skills that are required by entrepreneurs fall into three distinct categories: technical skills, business management skills, and personal entrepreneurial skills. Technical skills include written and oral communication, technical management, and organizing skills. Business management skills are managerial skills like planning, decision making marketing and accounting. Entrepreneurs also should have personal skills such as innovation, risk taking, and persistence (Henry et. al, 2005).

Students can learn these skills through effective entrepreneurship education to become successful entrepreneurs, Rae defines the term "entrepreneurial learning as learning to recognize and act on opportunities through initiating, organizing, and managing ventures in social and behavioral ways" (Rae, 2006, P. 16). Although there seems to be wide variations in the personalities and characteristics of each kind of entrepreneur, the willingness to undertake risk and the possession of entrepreneurial skill sets are common themes prevalent in every style.

Understanding the role of entrepreneurial education on the creation of this willingness to undertake risk and the development of an entrepreneurial skill set is the focus of this study. It is against this background that this research is set. More explicitly, we deal with the question.

What is the impact of entrepreneurship education on the development and enhancement of entrepreneurial skills that may be essential to improve ventures efficiency and effectiveness as perceived by entrepreneurs and prospective entrepreneurs?

This paper reviews prior research regarding entrepreneurial education programs mainly in the United States, England, France and Germany and highlight some major challenges related to that issue. The next section derives the framework proposed to evaluate entrepreneurial education programs. In the third section we present the results of the survey analysis of operating and prospective entrepreneurs and their assessment of the entrepreneurship education programs that they have been involved in these programs for several years, and the final section we discuss implications and further research avenues.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK:

The following is the review of curriculums from randomly selected institutions of higher education in the United States, United Kingdom, France and Germany in order to assess the nature, content and type of entrepreneurial education offered by those schools.

Figure 1 helps to explain what business schools are currently offering in the line of entrepreneurship education. Most universities do offer entrepreneurship education that does foster innovation, exploit market opportunities and explore the viability of an entrepreneurial venture. At the other end of the spectrum, most universities are not offering courses dealing with international business and VRIO (value, rareness, immutability and organization) analysis. On middle ground, there appears to be a split between those colleges offering business planning, growth strategies, resources obtainment and exit strategies. Some of the courses we thought were more noteworthy are the following:

Ohio State University

Ohio State University appears to have an excellent entrepreneurship programme. This university covered every point that we believe should be covered in entrepreneurship education. In addition, Ohio State university students have a business plan competition available to them that has the potential of yielding a one hundred thousand dollar cash prize to the best business idea presented (Ohio State University, Deloitte Business plan competition, Web Nov, 2009). Further, Ohio State University offers a realistic and practical entrepreneurship education curriculum. One other brief note is that Ohio State University was the only university we found to have a curriculum that implemented the use of business plan software. Perhaps this is a minor detail, but being able to effectively use software to expedite the creation of sound business plans could be of significant importance to entrepreneurship education.

Syracuse University

Syracuse University offers an undergraduate degree, an MBA with a concentration on entrepreneurship, an MS in entrepreneurship, and a PHD in entrepreneurship. Some of the courses offered at the graduate level include managing new product development, marketing strategies for the diffusions of innovation, and opportunity recognition and ideation. Graduate students also participate in the D'Aniello Entrepreneurship Internship. Students work directly with an entrepreneur, president or senior executive in a high growth, innovative company in Syracuse metropolitan area (Wittman, 2009).

University of Pennsylvania

The University of Pennsylvania has also undergraduate, MBA, and PHD degrees in entrepreneurial management. Some sample course titles are "Change, Innovation, and Entrepreneurship", "Private Equity in Emerging Market", and eHealth: Business Models and Impact among others (Wittman, 2009)

Lancaster University (UK)

Lancaster University in England conducted a study of the regional economic development impact of a university led entrepreneurship education programs for small business owners in England. To deal with these issues a qualitative approach to the research was used to examine the situations of five SME owner/ managers who participated in the Lancaster University LEAD programs between 2004 and 2006. Participants for this study were originally interviewed at the beginning and in the middle of the programs and follow up interviews were carried out by the lead author of this study (Gordon, Hamilton, and Jack, 2010). The result clearly indicated there was a positive impact of entrepreneurship education program that is for small business owners that are rich in principle innovation and reflection, which makes this, program a unique programme. This programme was a useful tool to knowledge transfer, innovative and competitive advantage (Gordan, Hamilton, and Jack, 2010).

At LMU Munich School of Management in Germany, Weber, Graevenitz and Dietmate (2009), developed a theoretical model of Bayesian Learning in which entrepreneurship education generates signals which help students to evaluate their own aptitude for entrepreneurial tasks. The results of their study provide support for the notion that the student receives valuable signals and learn about their own type in the entrepreneurship courses and education.

In France and Belgium, Fayolle, Gailly and Lassas--Clerc (2006), proposed the theory of planned behavior (TPB) model. In this theoretical framework the formation of intention depends upon attitudes toward behavior, subjective norms and perceived behavioral control, and is a good predictor of the behavior. In sum, their approach focuses on the impact of entrepreneurship education programs (EEP) in terms of evolution of students' attitude and "mindset", rather than only in terms of business created. EEP objectives include raising entrepreneurial awareness and mindset, learning how to innovate and develop new activities, or simply discover what entrepreneurship is about.

Even from this basic and limited look at what major and non-major universities are offering in the way of entrepreneurship education, some limitations of traditional entrepreneurship education become evident. The first of these is that entrepreneurship education is fragmented at most universities. This means that entrepreneurship students are not getting a broad enough education involving their role in a free market economy.

Another important consideration is that the availability of internship, apprenticeships and mentoring opportunities may be sparse for those students who wish to be entrepreneurs. Further, even when practical training opportunities are available, it is oftentimes difficult for universities and industries to cooperate. Finally, departmental resistance to change in curriculum could present an inflexible environment where implementing a new entrepreneurship education program may range from difficult to impossible (Kaplan and Warren, 2010, Krueger, 2002).

SUCCESS VARIABLES

Most entrepreneurial studies have focused on a few sets of variables that contribute to the success of entrepreneurs' ventures: (1) the psychological and personality traits of entrepreneurs; (2) the managerial skills and training of entrepreneurs; (3) and the external environment with respect to psychological and behavioral traits (Bensing, Chu, and Kara, 2009). Ibrahim and Goodwin (1986) found four success factors: entrepreneurial values, managerial skills, interpersonal skills, and environmental characteristics. The entrepreneurial values were psychological in nature and included characteristics such as intuition, extroversion, attitude toward risk, flexibility, and a sense of independence. Managerial skills included variables' such as having a niche strategy, an effective budget system, experience, education and a simple organizational structure. The interpersonal skills factors were comprised of good customer relations, good employee relations, and good interpersonal skills, (Chu, Benzinger and NcGee, 2007). Finally, the environmental characteristics included interest rates, taxes and governmental assistance. (Cetindamar, 2005).

Measuring Venture Effectiveness

A number of variables can be used to measure organizational effectiveness. The most common measures are financial, such as increase in sales or revenues, increase in venture capital, increase in profitability, and so forth. Effectiveness can be defined by measures such as number of customers, products, locations, employees, or other characteristics that could be quantified, such as innovation, creativity, and new ideas (Coluter, 2003 : Kaplan and Warren, 2010).

Alternatively, Likert proposed four different main management systems that companies adopt: Exploitive-Authoritative, Benevolent-Authoritative, Consultative, and Participative-group. Likert contended that the fourth system, Participative-Group, was ideal for the profit-oriented and human-concerned organization, as with entrepreneurial ventures, as it made optimum use of human assets (Accel Team, 2007). Likert (1973) proposed that entrepreneurship ventures effectiveness can be measured by using several variables including performance (profitability,

sales, ROI, and market share), adaptability (flexibility, willing to change, adopt and innovate), and satisfaction (achieving venture's objectives and achieving needs for employees and entrepreneurs).

Despite its importance to developed and developing countries and popularity in the business and academic press, there is little empirical research that clearly links entrepreneurial education (skills) to overall venture effectiveness. Consequently, more information is needed to obtain a more realistic assessment of such a relationship which may have significant implications for the design and implementation of training courses for both prospective and operating entrepreneurs.

RESEARCH FRAMEWORK

The preceding discussion provides a basis for the research framework; It identifies several variables including entrepreneurial education- managerial skills, interpersonal skills, social competence and basic entrepreneurial training skills. The causal linkage among these variables is assumed to influence organizational effectiveness (performance, adaptability and satisfaction). The research models views these variables as important elements to entrepreneurship ventures and are linked to organizational effectiveness as shown in Figure 2. In addition, several hypotheses were developed to guide this investigation of these relationships.

Hypothesis 1: There will be a positive correlation between the development of managerial skills through entrepreneurial education programs and perceived ventures' success factors.

Hypothesis 2: There is a general tendency among surveyed participants in this study to give more credit to entrepreneurial effectiveness in regards to entrepreneurial educational training rather than to other factors.

Hypothesis 3: There will be a positive correlation between entrepreneurial education and organizational effectiveness in this study.

METHODOLOGY

In order to test the research hypotheses a survey of entrepreneurs Group (a) and prospective entrepreneurs Group (b) was developed and distributed to five hundred individuals throughout the United States. The majority of entrepreneurs in group (a) were enrolled in training courses on "how to improve your business through entrepreneurial education," and those individuals were engaged in entrepreneurial ventures for several years. The names of individuals were generated randomly from "a Computer Data Base Disclosure "and records of students at several universities throughout the United States. Group (b) was composed of people wishing to become entrepreneurs or planning to launch their first business ventures. All of the subjects in this group were trainees enrolled in several courses entitled "how to start your own business" conducted by several business development centers at several American Universities, who

expressed their preference for starting their own business rather than looking for jobs after graduation.

[FIGURE 2 OMITTED]

The definition of the Small Business Enterprise (SBE) or entrepreneurs venture used in the study is based on the number of employees and is currently used by the World Bank (2007a) and European Commission (2003). According to both sources, an SBE has less than 250 employees and most of them less than fifty employees in the developing countries. Study participants were selected randomly to represent a range of organizational sizes and a variety of industries and were enrolled not only at the first tier universities but some were also randomly selected from second and third tier universities throughout the United States. This study was conducted from April 2009 to June 2010. A total of two hundred questionnaires were returned for a response rate of about forty percent. Thirty questionnaires were not acceptably completed, thus reducing the response rate to thirty four percent. The remaining one hundred and seventy were usable questionnaires and these responses were analyzed in this study. An average survey took thirty minutes to an hour complete, and was sent via traditional mail and on-line systems to collect data from respondents. Out of the 170 questionnaire that were usable in this study, 100 questionnaires were from group A, the same individuals who studied and trained in the selected universities in our survey. 70 questionnaires came from prospective entrepreneurs.

Measures

The three page questionnaire was divided into four parts. The first part consisted of items dealing with motivations and reasons for deciding to own business. The second part consisted of items dealing with the perceived factors that may have contributed to the success or failure of ventures among survey respondents. The third gathered demographic characteristics about the participants of the survey to ensure the results represent the broad range of the population. Finally, the fourth part consisted of items dealing with measures to assess the effectiveness of the entrepreneurship ventures as a result of entrepreneurship education and training from the perspective of survey respondents.

To measure organizational effectiveness, the authors used a Likert's Profile of Organization Characteristics because, unlike other potential measures, it allowed addition to be made to the questionnaire in order to assess overall effectiveness with specific new programs or initiatives such as entrepreneurship (Likert, 1973). Several variables were identified as being significant for the purpose of this study. First, there were the elements used to measure the independent variables- entrepreneurial education managerial skills interpersonal skills, social competence skills and basic entrepreneurial training skills with measures (derived from Ibrahim and Goodwin, 1986; Markman and Baron, 2003 and Rae, 2006). The second variable focused on the

elements used to measure the dependent variable-organizational effectiveness that included performance (profitability, sales, market share), adaptability (flexibility, willingness to change), and satisfaction (to include satisfaction of achieving the venture's and employee goals and as well as willingness to advance with the entrepreneur objectives). Some of these measures of effectiveness are used by several authors (Likert, 1973 : Coulter, 2003: Kalan and Warren, 2010).

The Likert instrument has been shown to have acceptable levels of reliability and validity across a variety of setting. The instrument is based on a scale of 1 to 5 (a Likert 5 type rating scale), with 5 being the most effective level and 1 the least effective level. A reliability test was conducted for indices of organizational effectiveness to enhance their credibility. The coefficient alpha for this study was above 0.76. Most researches consider an alpha at 0.70 to be an acceptable criterion for adequate scale reliability. In addition to the scales described above, basic demographic questions, including gender, age, job status , industry type , and annual sales , were included in the survey. Furthermore, several characteristics of responding individuals were compared between earlier and later respondents to provide an indication of non-response bias. This analysis showed no significant differences in the two samples. This result offered some assurance and reliability about the representativeness of the responding individuals. Measurement tools were also developed to analyze the findings and evaluate the results. By using both the descriptive statistics and the ANOVA, the results could be analyzed and validated. Also, multiple regression models were developed to test the relationship between entrepreneurial education and training indicators and effectiveness indicators in this study (Stockburger, 2007).

RESULTS

Motivations of Entrepreneurs

Respondents were asked to rate seven reasons for deciding to own a business. The results are shown in Table 1 using a 5 point Likert scale, with 5 being "extremely "important" and 1 being 'the least important." The scale used in this study was developed by Benzing, Chu, and Kara (2009) and has been used in studies of entrepreneurs in Turkey and other developing countries. It was found that the seven most important motivations were "to find a job as self employed," "to have job security," "public recognition," "to increase income," "to diversify and advance family business," "to be able to used past experience-education and training," and "to support more advanced projects such as backward integration."

Given the fact that the United States in a state of recession for the past few years, where unemployment is high (around 9%), economically unstable, and a great deal of changes in the global and the domestic environments, becoming a business owner is not only a way to increase income, but it can also be a way to survive. These finding support previous studies not only in

the U.S.A., but also around the world (Palich, 2008; Chu et. al, 2007; Kaplan and Warren, 2010) regarding motivations to engage in entrepreneurial action.

Furthermore, respondents were asked to rate twelve factors that may have contributed to the success of entrepreneur's ventures. On a five-point Likert scale, with five (5) being "exceptional" and one (1) being "very weak." The scale and the factors used in this study were developed by Ibrahim and Goodwin (1986) and have been used in studies of entrepreneurs in Canada, the United States, and other studies. It was found that the most effective factors that contributed to the success of entrepreneurs' ventures (in perspective) in this study were "managerial skills and training of entrepreneurs," social competence and interpersonal skills," "Access to Capital" Support from family and friends." Good products at competitive prices," "Good Customer service," Previous business experience" "Hard Work," and other factors.

The inter-and intra-group attitude towards the appropriate training and managerial skills of the entrepreneur was almost identical. There was no significant difference at a level of 0.05 between the two groups. On a scale ranging between 1 (very weak) to 5 (exceptional), the majority of scores in each group (70% in group a , and 80% in group b) fell around category 4 (strong) on the scale, There was also no significant difference at a level of 0.05 between males' and females' attitude towards the entrepreneurial educational and training. Within the group of entrepreneurs, individuals whose fathers were entrepreneurs and those in their middle age (40-55) were more emphatic about the value of entrepreneurial education than the rest of the group members. The difference was statistically significant at the 0.05 level and also confirms hypothesis 1 in this study, which showed a positive and significant relationship between entrepreneur's education and perceived ventures' success factors.

With respect to the factors leading to entrepreneurial success, the role of entrepreneurial education and training was the first choice for 70% of members of group (a) and social competence and interpersonal skills for 60% of them. Surprisingly access of capital, good product and service and hard work factors came last on the list with only 31% believing it should be number one. Subjects in group (b) gave a slightly different response. Both entrepreneurial education and effective management shared the first position with 50% of this group. With respect to the type and nature of entrepreneurial education, the majority 68% of both group (a) and group (b) expressed support for curriculum that include real-life examples of cases based on reflection and interactions through entrepreneurial learning process, rather than typical courses, which are based most of the time on exams, readings and few discussions. These findings provide support for previous studies by (Gordon, Hamilton and Jack, 2010; Weber; Graevemitz and Dietmar 2009) regarding the type of entrepreneurship educational that is needed for effective entrepreneurs.

As for the reason behind one's decision to become an entrepreneur, the need for achievement and security (job and income) was on the top of the list among the two groups which suggests

that McClelland's theory is more universally relevant than previously assumed (McClelland, 1961 ; McClelland et. al., 2003). Hypothesis 2 predicts that there is a general tendency among surveyed participants in this study to give more credit for entrepreneurial effectiveness to entrepreneurial education than to environment factors. These findings, as well as the statistical analysis across different groups in this study, provide evidence to substantiate hypothesis 2, regarding the effects of entrepreneurial educational /training on entrepreneurs' success and effectiveness (see table 2).

Relationship between Entrepreneurial Education Indicators and Ventures' Effectiveness Dimensions

A major objective of this study is to determine the relationship between entrepreneurial education indicators (independent variable) and organizational or ventures' effectiveness dimensions (dependent variable) as defined in the research model. Hypothesis 3 predicts a positive relationship between entrepreneurial education indicators scores and organizational effectiveness scores. In order to prove this substantive hypothesis, it is necessary to reject the null hypothesis which predicts the absence of relationship between independent and dependent variables.

The Pearson Product-moment Correlation[R] was calculated for entrepreneurial education dimensions and effectiveness dimensions to measure the strength, direction and statistical significance of relationship between the independent and the dependent variables with individuals as the unit of analysis. Table 3, Pearson Correlation Coefficients for entrepreneurial education and effectiveness clearly indicates a positive relationship between all measures. It is, therefore, appropriate to reject the null hypothesis, and to state, with more than 95 percent confidence ($P < .05$) with the most significant relationship between effectiveness and basic entrepreneurial training skills dimensions that a positive relationship was found between entrepreneurial educations dimensions and organizational effectiveness dimensions.

Further analysis of the relationship between entrepreneurial education and organizational effectiveness dimensions was done with the use of multiple regression analysis. This analysis determines the proportion of variance in organizational effectiveness scores explained by entrepreneurial education scores. Table 4 presents the results of this analysis, which indicated a positive relationship between measures of entrepreneurial education indicators and effectiveness as reflected in the multiple regression ratios. The results show that 79 percent of the variation in performance, 62 percent of the variation in a adaptability, and 59 percent of the variations in satisfaction are explained by linear regression on the entrepreneurial education dimensions. The F-ratios indicate that these linear associations are statistically significant at $P < .05$.

The causal link between entrepreneurial education, social competence, and, basic entrepreneurial training skills and organizational effectiveness was statistically significant confirming prior expectations and complementing previous studies (Baron, 2000; Krueger, 2002; Kaplan and Warren, 2010). This study points to a positive impact of entrepreneurial education, social competence and basic entrepreneurial training on organizational effectiveness in terms of higher performance, flexibility and satisfaction, thus improving competitiveness and profitability.

CONCLUSION / IMPLICATIONS

The purpose of this study was to examine the impact of entrepreneurship education on the development and enhancement of entrepreneurial skills that may be essential to improve ventures' efficiency and effectiveness. In addressing our concern this study presents a number of interesting findings and has implications for researchers, practitioners and policymakers.

First the attitudinal results presented in this study provide support for the claims of proponents that entrepreneurial education still overshadows other aspects in explaining a small business entrepreneurship's success or failure in many societies. Although it is an elusive variable and methodologically problematic to measure, entrepreneurship education is still perceived as a major determinant of entrepreneurial success, as was the case in this study. A sample of one hundred and seventy subjects comprising two groups- entrepreneurs' and prospective entrepreneurs were surveyed. The results showed almost identical attitudes among the members of the groups towards the entrepreneurial education and training as being outstanding factors for success and have significant essential value to any entrepreneurship venture.

Second, this survey of entrepreneurs in the United States indicates that like many other entrepreneurs around the world, the primary motivations for owning a business are to find a job (desire for independence), to increase income, obtain job security, need for achievement, to advance family business and to support more advanced projects. According to this survey's results, entrepreneurs in the United States believe the most important small business enterprise (SME) success items are education and training of entrepreneurs and social competence, which include honesty, and good social skills. Both interpersonal and managerial skills shared the top positions with all the surveyed groups in this study, at the same time, they viewed government support and political involvement as relatively unimportant to their success.

Third, the causal linkages between entrepreneurial education (managerial skills), social competence (interpersonal skills) and, to a greater degree basic entrepreneurial training skills and organizational effectiveness was statistically significant confirming prior expectation. This study points to a positive impact of entrepreneurial education and training including the content

and nature of entrepreneurship education that is based on interactions, reflections and drawing on action learning principles which motivate entrepreneurs to be innovative and be creative in their ventures.

Implications

As shown in this paper, many researchers believe that entrepreneurship can be taught effectively (Kaplan & Waren, 2010; Henry et. al. 2005; Drucker, 1985; Kuratko, et. al. 2004). However, the major consideration as we go forward should not be a matter of whether or not it can be taught, but how it should be taught. The objective of entrepreneurial education should be to equip entrepreneurs and prospective entrepreneurs with the necessary skills required to face the challenges in designing and implementing a new business venture. This can be achieved in well designed educational curriculum supported by various case studies, business plans, projects, and based on reflection and interactions in the learning process. By allowing entrepreneurs to interact with each other, and with other essential entities in the operating environment this will provide encouragement to think outside the box and be creative (Rae, 2006, Henry et. al. 2005. Kuratko, et. al, 2004).

The data demonstrates that the entrepreneurial education and training programmes appear to create openness, confidence and trust among the participants in the study. Trust appears to play a big role in the way individuals were prepared to engage with entrepreneurial instructors and staff and with each other. It is social trust that is seen to facilitate coordination and cooperation between individuals and firms outside the educational setting which is so essential for any ventures success.

For those involved in entrepreneurship education, this study demonstrates that the creation of trust and sociability are key aspects for the long-term success of the experience of engaging potential entrepreneurs, small business owners and educators. However, this must be coupled with content, that is rich in learning principles, innovation and reflection and must go beyond traditional settings in order to enhance ventures effectiveness (Gordon, Hamilton and Jack, 2010).

For researchers, need to confirm empirically the role of reflection in the entrepreneurial learning process drawing on action learning principles, for example, dealing with staff problems or new threats to business activities, developing leadership and/or empower teams to create new ventures. Any entrepreneurship education programme objectives should be raising

entrepreneurial awareness and mindset, learning how to innovate and develop new activities, or simply discover what entrepreneurship is about (Fayolle, Gailly and Lassas-Clero, 2006).

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Table 1: Factors influencing the individual's decision to become an entrepreneur

Factors	Number of Respondents	
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Find a job as self	25	30 *
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employed

(desire

for

independence)

Have job 20 15

and income

security

Public 18 14

recognition

and have

fun

Financial 12 12

rewards

(increase

income).

To advance 10 11

family

business

Diversity

Need for 9 11

achievement
(use past
experiences
and
education)

Support 6 8

more
advanced
projects
(backward
integration)

Total 100

Note: Sum totals may exceed 100 due to the fact
that some participants selected more than one item.

Table 2: Difference in the perception of the entrepreneurial
education value among the two groups

No.	Mean	Std.	DF	ANOVA	Mean	F
				SS	Square	Value
Entrepreneurs	100	4.86	0.24			

Prospective Ent. 70 4.54 0.02 2 0.12 0.005 0.07

Total 170

Prob. Significant

Diff.

Entrepreneurs

Prospective Ent. 0.9712 No

Total

Table 3: Pearson Correlation Coefficients for Entrepreneurial education Indicators and Effectiveness

Dimensions

Entrepreneurs' Performance Adaptability

Indicators (1) (2)

Entrepreneurs' 0.68 0.60

education and managerial skills

Social Competence 0.56 0.54

and interpersonal skills

Basic	0.74	0.70
Entrepreneurial Training Skills		
Entrepreneurs' Indicators	Satisfaction (3)	Effectiveness (1+2+3)

Entrepreneurs' education and managerial skills	0.52	0.64
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Social Competence and interpersonal skills	0.60	0.54
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Basic Entrepreneurial Training Skills	0.72	0.70
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Table 4: Results of Regression Analysis of Entrepreneurial education and effectiveness

Dependent Variable (Effectiveness)	Multiple Regression	Regression Square	F-ratio
		([R.sup.2])	

Performance	0.82	0.79	5.52
Adaptability	0.70	0.62	6.68
Satisfaction	0.68	0.59	7.40
Effectiveness	0.78		10.50
(1+2+3)			

Note: All $P < .05$.

Figure 1: A Random Sample of Entrepreneurship