

DOI: http://dx.doi.org/10.5007/2175-8077.2013v15n37p82

Artigo recebido em: 17/12/2012 Aceito em: 20/05/2013



Is it Possible to Teach Entrepreneurship? Comparative Analysis with Brazilian Students



É Possível Ensinar Empreendedorismo? Análise Comparativa com Estudantes Brasileiros

Cristiana Fernandes de Muylder

Professora e Pesquisadora PPGA e PMSIGC da Universidade FUMEC - Belo Horizonte - MG - Brasil. E-mail: cristiana.muylder@ fumec.br

Alexandre Teixeira Dias

Professor e Pesquisador PPGA da Universidade FUMEC - Belo Horizonte - MG - Brasil - E-mail: alexandre.tdias@fumec.br

Cláudio Luiz Oliveira

Gestor do SEBRAE - Montes Claros - MG - Brasil. E-mail: claudio.oliveira@hotmail.com

Abstract

Is it possible to teach someone to become an entrepreneur? It is this question that motivated this field survey in a Brazilian entrepreneurial training high school. A quantitative survey was carried out with a population of 313 students of the chosen school, being that 175 students were freshmen and 138 graduates. It was possible to observe that the freshmen and the graduate students confirm that the education and training that they received in the school, did contribute to become entrepreneurs, although a few divergences were described. The students considered that innovating capacity, dealing with risks and gain professional maturity was important factors to achieve success within organizations or businesses. It was suggested new study comparing schools that do not have, as also to carry out studies in other countries with different cultural characteristics.

Keywords: Education. Entrepreneurial. Entrepreneurship. Innovation and Learning.

Resumo

É possível ensinar empreendedorismo? Essa foi a questão que norteou a pesquisa a uma escola de empreendedorismo no Brasil. Uma pesquisa do tipo survey foi realizada em escola de nível médio brasileira. O método quantitativo foi escolhido para pesquisar a população de 313 estudantes da escolha escolhida, sendo que destes, 175 eram calouros e 138 formandos do ensino médio. Foi possível perceber que os alunos calouros e formandos reconhecem o treinamento e o ensino com foco no empreendedorismo como fator que contribui a sua escolha de ser empreendedor embora apresentem algumas divergências de opinião. Os estudantes consideraram que capacidade inovativa, capacidade de lidar com riscos e a maturidade profissional importantes fatores para condução do sucesso do negócio. Foi ainda sugerido como estudo futuro que a pesquisa compare escolas sem foco no empreendedorismo e bases em outros países.

Palavras-chave: Educação. Empreendedor. Empreendedorismo. Inovação. Aprendizagem.

1 Introduction

In Brazil, it is clear the large number of micro enterprises and small businesses in various sectors of the economy and its importance as promoters and inducers of socioeconomic development of the country, generating employment and income. An important aspect of this effect is brought by SEBRAE (2012) through studies conducted by this institution, whose work was called the Statistical Bulletin of Micro and Small Enterprises, which aimed to disseminate information about the importance of Brazilian micro and small enterprises scenario. The micro and small enterprises in 2012 accounted for 99% of the total number of formal enterprises in Brazil, 57.2% of total employment and 26.0% of payroll. However, these percentages do not reflect a significant position of success in the Brazilian business market. The premature closure of micro and small businesses in the country has caused concern.

According Brazilian Statistics Institute – IBGE (2011), the cause identified as most significant for 48,2% of entrepreneurs who closed his business is related to fault management. Thus, it can be seen that the classification enterprise is the strong point for companies to remain on the market, by both the entrepreneur and the management team of the company.

As Dolabela (2007), you have to build a sense of entrepreneurship. Those facts improve the importance of Brazilian entrepreneurial education study. The economic Brazilian recession, 1990/92 period, caused open markets, increased competition among private sector companies, the plan of economic stabilization and privatization have significantly influenced the occupation, unemployment and income of individuals. (IBGE, 1996)

This scenario chosen is characterized by micro and small enterprises, which emphasizes entrepreneurship as a factor generating wealth for the country through those changes, Brazil has become one of the highest rates of entrepreneurial activity in the world. In 1997, he adheres to the Global Entrepreneurship Monitor (GEM), which aims to bring the research of common means of science. The focus is to develop studies on the theme "Entrepreneurship" in the world, to investigate the confusing and complex relationship between entrepreneurship and economic growth.

2 Research Problem, Objectives and Plan

Due to the changes in the relationship between company and employees, studies about the entrepreneurship theme can be considered relevant. The intension of this study is to discuss about entrepreneurial training. The central problem is: How do the Brazilian high school students perceive entrepreneurship education?

The objective of this article is to compare the perception about the teaching of entrepreneurship among freshmen students and graduates in a high school.

The current scenario is marked be the presence of micro and small firms, in which the entrepreneurship stands out as a wealth generating factor in Brazil. Through these transformations, Brazil has become one of the countries with the highest index of entrepreneurship activities in the world. In 1997, Brazil adhered to the Global Entrepreneurship Monitor (GEM), which has as its objective to approach the common environment scientific researches. The focus of this institute is to develop studies about the theme "Entrepreneurship" in the world, in order to investigate the confused and complex relationship between entrepreneurship and economic growth.

Despite the fact that micro and small firms mortality rate during the first two years has diminished from 28% in 2010 to 26% in 2011, this indicator is still considered high. (SEBRAE, 2012)

According to Dolabela (2007) there is a need to develop an entrepreneurship perception. That shows the importance of implementing an entrepreneurial education in Brazil. Nassif *et al.* (2008) argues that both the school as also the firm have a relevant role in the individual's formation, for it will be by this triple interrelationship that the development of abilities will occur and also the acquisition of knowledge and personal attitudes that will be used in everything that he will carry out.

The educational institutions should try to implement a pedagogical project that contemplates educating students to develop an enterprise and that this may be seen as an adequate alternative by the society (BERNHOEFT, 1996). In relation to this, Paiva & Cordeiro (2002) state that education institutions are orientated to train their students to become executives of large

corporations, instead of also preparing them to open and develop new businesses.

This research can be justified due to the demand of successful enterprises and professionals that are capable of overcoming the challenges that are imposed in a competitive Market.

3 LITERATURE REVIEW

The topics about literature review that based the main objective was entrepreneurship, entrepreneurial education, Brazilian context and innovation.

3.1 Entrepreneurship

The new significance of the word *entrepreneurship*, that is used both in the English language as in French, has its origin from the French *entrepreneur* (BURCH, 1986) and means "put into practice", "submit to experience", "qualify the activity of organizing, controlling and assuming risks of a firm or business". This terminology has been used to show the importance of people with specific capacities in the business' world, such as persistence, compromise, establishment of goals, search of information, initiative, self-confidence and creativity.

According to Drucker (1987), Pinchot (1989), Leite (2002), Dolabela (1999a), it was Jean-Baptiste Say, a French economist, which used the term entrepreneur for the first time in a scientific environment, this around the year of 1800, using it to designate an individual that transfers economic resources from a less productive sector to another that is more productive and with a larger income. Say also used the term *entrepreuner*, a French word to determine an individual that takes risks to create a new enterprise.

McClelland (1971a, 1971b, 1972) studied the civilization's history based on disputes between the Soviets and the Americans during the decade of 1950. He was in search of an explanation about this dispute and this led him to identify heroes in the literature that overcame difficulties. According to McClelland (1971a, 1971b, 1972), when under pressure, people developed a necessity of accomplishment; they were stimulated to act on the situation.

As for the entrepreneurial behavior, McClelland (1971a, 1971b, 1972) observed that the high levels of achievement in the communities were directly related to its economic growth.

From this perspective, it is possible to analyze the socioeconomic development of certain countries throughout history. McClelland (1971b) concluded that the rapid economic growth is not because of a favorable environment due to privileged natural resources. The true motives, according to the author, were in the human values that make it possible to identify opportunities, taking calculated risks.

For Santos (1983, p. 32), "[...] the entrepreneurship action includes initiative, innovation, desire for changes, leadership, flexibility, opportunism, dedication, control, selection and the use of competence".

Weber (2004) identified as transforming attributes the essential values that explain the entrepreneur's behavior. The author believes that entrepreneurs are independent and innovators, that command their businesses and their authority is formalized.

4 Entrepreneurial Education

The contemporary society's economic sectors are in need of a new type of individual and worker, and the schools have a fundamental role in the formation of this individual, from the time when they propitiate the development of multiple competences, team working and the capacity of learning and adapting to new situations. (BELLONI, 1999)

For Carvalho (1999), the capitalism's new moment imposes on the educational system an adequacy, introducing competences such as: preparing individuals to "knowing how to be". In other words, not only having knowledge, but also knowing how to transform it into actions, allowing them to move and interfere in the production process, proposing solutions.

According to Hansemark (1998, quoted by MA-CHADO; AÑEZ; RAMOS, 2005), the entrepreneurial education has to be planned in order to create a support system for firms, stimulating and facilitating entrepreneurial activities, helping, in this manner, to reduce the index of failed businesses, increase employment and create new businesses. This author defines entrepreneurial education as an education that propitiates the

creation of a new product or service, transforming it into a high economic value.

The so called "entrepreneurial school" is the one capable of defining a line of action that seeks a strategic education with visionary and proactive characteristics (MINTZBERG & QUINN, 2001). For Filion (1999), this strategic approach in the entrepreneur's education should have a differential, given that the training for the entrepreneurial activity has as its objective to lead an individual to imagine and identify visions, as also developing abilities for the realistic dreams.

According to Souza (2001), there are several studies that demonstrate that entrepreneurship learning, when developing a theory and when its implementation is in a orientated form, collaborates to prepare and form entrepreneur individuals that have proactive characteristics, learning to act and think by themselves, with creativity leadership and vision of the future.

In accordance with Bermúdez et al. (2001), the entrepreneurial education in Brazil started on technological bases. The entrepreneurial culture starts in 1981, in São Paulo, of the Getúlio Vargas Foundation's Business School, when the "New Businesses" course was created.

Chagas (2001) also points out that there is a difference among the students that had an entrepreneurship education and those that did not have this opportunity, for this course helps students to understand themselves, their personal characteristics that will be reflected in their firms, in how to learn to use tools that will help them to diminish risks and in the decision-making analyzes.

5 THE ENTREPRENEURIAL EDUCATION IN BRAZIL

According to Souza (2001), there are several studies showing that education in entrepreneurship, while developing a theory and its application in a targeted way, contributed to training and development of enterprising individuals as having a proactive, learning to act and think on their own, with creativity, leadership and vision.

Entrepreneurship is still a field of study is not consolidated. The methodology and development of

this jurisdiction are under construction, involving much more than acquiring the knowledge, learning to be undertaken, to be, do and live. Thus, one of the biggest challenges the school is to provide students develop a proactive relationship with learning. (FILION, 2001a)

In Brazilian academy, both professional courses many academics are mainly concerned with the formation of a person seeking a job. To Medeiros (2001), this situation will change, since the jobs are getting less and less. Thus, the universities, to develop their curricula, to prepare and introduce entrepreneurship education in all higher education courses offered: History, Music, Law, Computer Science, Engineering, Medicine or the Enterprise. Students should be prepared to undertake, and knowledge necessary to develop a business plan, implement it and monitor it.

According to Bermúdez et al. (2001), entrepreneurial education in Brazil began on the technological bases. The entrepreneurial culture begins in 1981 in Sao Paulo, School of Business Administration from Fundação Getúlio Vargas, through the creation of the course "New Business". But the important fact came to pass in 1996, with the implementation of two projects that encouraged the export of software practices, the program called Softex - the genesis of incubation in the university - and Sofstart in the area of entrepreneurship education. The most significant of these two projects was to bring academia, through its research centers, the enterprise, enabling the emergence of a new educational culture, helping the students to implement their innovative ideas. As posed by Chagas (2001), the Brazilian developments on the spread of the entrepreneurial culture in the university has discriminated against its track record in Table 1.

For Chagas (2001), Table 1 shows, in chronological order the movement of university teaching focused on entrepreneurship by demonstrating the optimism that government and private enterprise can come together.

This author also discusses the difference between students who passed through courses of entrepreneurship and those who have not had this opportunity is to know to prepare themselves, their personal characteristics that will reflect in your company, learning to use tools that will help reduction of risks and analysis for decision making.

Table 1: History of the spread of entrepreneurial culture in Brazil

Brazil	
1981	Introduction of the subject "New Business" in the graduate program in Business Administration Graduates (CEAG), in the School of Business Administration from Fundação Getúlio Vargas, São Paulo.
1984	Introduction of the subject "Creating New Business - Training of entrepreneurs" in the undergraduate School of Business Administration from Fundação Getúlio Vargas-SP.
1984	Introduction of the course "Business creation" in the undergraduate course in administration at the Faculty of Economics, Business Administration and Accounting from the University of São Paulo (FEA/USP).
1984	Introduction of the course "Business creation" in the course of Bachelor of Computer Science Federal University of Rio Grande do Sul.
1985	Introduction of the course "Business Creation and Entrepreneurship, technology-based" program in the Post - Graduate Management School of Economics, Business Administration and Accounting from the University of São Paulo (FEA / USP).
1990	Support SEBRAE Minas Gerais in the creation of GEPE - Study Group on Small Business, a partnership between the Department of Production Engineering, Federal University of Minas Gerais (UFMG).
1992	Start of the program "Training of Entrepreneurs", a partnership between SEBRAE - Sao Paulo's Faculty of Economics, Administration and Accounting from the University of São Paulo (FEA/USP).
1992	Introduction of the course "Business creation" in the course of Bachelor of Computer Science Federal University of Rio Grande do Sul.
1992	Creation of the School of New Entrepreneurs by the Federal University of Santa Catarina.
1992	Creation of CESAR - Center for Advanced Studies and Systems of Recife, the Department of Computer Science Federal University of Pernambuco (FACEPE), which was intended to be a core of support for the industrial utilization of academic results.
1993	Development of methodology of teaching entrepreneurship to be offered in the undergraduate course in Computer Science Federal University of Minas Gerais.
1995	Creation of the pre-incubator projects for export of software, the Center for Advanced Studies and Systems of Recife (CESAR).
1995	Creation of CEFEI – Business Center for Entrepreneurial Training Itajubá EFEI – Federal School of Engineering BH, Minas Gerais, aiming to enter the teaching of entrepreneurship in EFEI. In 1995 a partnership between SEBRAE – Federal University of Brasilia and the inauguration of the School of Entrepreneurs.
1997	The Catholic University of Rio de Janeiro launches the Genesis Institute for Innovation and Entrepreneurial Action.

1997	Emergence of the program includes – Education Network University of Entrepreneurship, with the purpose of disseminating education entrepreneur.
2008	Implementation and completion of the week global entrepreneurship involving 70 countries in order to spread the entrepreneurial culture among young people - IBMEC Sao Paulo.
2009	Started in 2009 UNIMONTES - Universidade Estadual de Montes Claros Minas Gerais in its curriculum fair entrepreneurship.

Source: Chagas (2001, p. 87-90) adapted by the authors

6 Innovation

Innovation can be described in several ways. From the organizational point of view means innovation for development or generation of new ideas (DAMANPOUR; SCHNEIDER, 2006; WISCHNEVSKY AND DAMANPOUR, 2006) or as a product, service, process or practice, and therefore, the result of the organization (Daft, 1978; Damanpour; Wischnevsky, 2006). You can also define innovation management as a precondition of human creativity which includes strategy or application of knowledge. (IGARTUA; GARRIGÓS; HERVAS-OLIVER, 2010)

It may also be noted that some studies seek to understand the causes and consequences of the adoption of innovation in organizations, including Boyne et al. (2003) and Tidd, Besant and Pavitt (1997) while other studies focus on the business scenario favorable or unfavorable to innovation were cited as Damanpour and Schneider (2006), Kearney, Feldman, and Scavo (2000), Kimberly and Evanisko (1981) and Moon DeLeon (2001).

The importance of studies on the quality of services has been increasing since the end of the 80s. Zeithaml, Parasuraman and Berry (1990), among others, added some elements to the proposed Garvin (1986) to reflect the challenges faced by quality service organizations.

Innovation, in general, is any change in industrial practice that improve productivity, competitiveness or answering market demand. (METCALFE, 2003)

According Burlamaqui and Proenca (2003, p. 6), innovations have multiple effects:

From the perspective of the innovator, they have led to downgrades of costs, productivity gains and quality, and often temporary monopolization of a market opportunity, the result of which is to obtain extraordinary profits. From the point of view of competition, involving the creation of competitive asymmetries, and configuration change of market structures. From the point of view of its macroeconomic impact, they provide aggregates and modifying system parameters

Hasenclever (2002, p. 7) points out that there are two important elements to the process of absorbing knowledge: one related to the tacit knowledge of the company and the other linked to the technical and scientific knowledge specific to each firm. And that is why, this author argues that the most competitive companies are those that introduce technological and organizational innovations, involving for such well-trained workers and engaged with the changes.

7 Research's Methodology

The research's methodology that was used in this paper was based on a quantitative case study with descriptive characteristic, having as its objective to compare the freshman student's perception with the graduate's one, taking into account the entrepreneurial education that was offered by a Brazilian school.

For Yin (2010), a case study can be considered a research strategy to examine contemporary events, making it easier to comprehend and discern individual, organizational, social, political and group phenomena.

The school that was selected started its activities in 1994 and was chosen due to the fact that it was the pioneer high school in Latin America that described its educational challenge as: develop and improve the students' entrepreneurial vision, since in all fields of human knowledge the opportunities are modifying rapidly, offering careers and professions that up to now were unknown and the new opportunities in the market.

The population was of 443 students with the accessibility sample being of 313 students. Of these, 175 were freshmen in the year that research was carried out, whilst 138 were graduate students.

The questionnaires were stored in a data base and receive a simple statistic treatment using the SPSS (Statistical Package for the Social Sciences) program.

8 RESULTS

The first aspect that was observed is related to the entrepreneurial competence. Table 2, by means of the sum of the indicators 4 and 5, shows that 91.6% of the 1st year students (freshmen) understand that Beta School contributed to this competence. For the students of the 3rd year, this percentage is of 90.4%. It can be noted that the percentages are highly positive, meeting with what the school proposes to stimulate the student towards entrepreneurial abilities. This is confirmed by Greatti and Senhorini (2000) when they mention that the entrepreneurial competence is influenced by systematic training procedures.

Table 2: Entrepreneurial competence

Entrepreneurial competence	FREQUENCE	%
None	1	0,4
None/partially	1	0,4
Partially	23	8,1
Partially /Totally	70	24,7
Totally	188	66,4
Total	283	100,0

Source: Data from the research

The second aspect that was observed, involves the school's contribution towards the creation of one's own business. According to Table 3, 55.4% of the 1st year students consider, totally, being prepared to have their own business, while in the understanding of the 3rd year students, 40.9% perceive totally this contribution. This percentage difference suggest that part of the 3rd year students consider the possibility of being intra-entrepreneurs, since the labor market is demanding ever more people that, when running the firm's business, are capable making changes, innovate, create and discover opportunities. To complement this line of reasoning, Hashimoto (2006) mentions the necessity of large companies to stimulate entrepreneur-

ship within the sectors that form the organization. Still following this line of thought, Filion (2004) considers the intra-entrepreneurs as people that perform an entrepreneur's role within the companies.

Table 3: Build my own business

Build my own business	FREQUENCE	%
None	3	1,1
None/partially	14	4,9
Partially	41	14,5
Partially/Totally	85	30,0
Totally	140	49,5
Total	283	100,0

Source: Data from the research

As the third aspect, it is possible to observer the contribution perceived by the students with regards to the innovating capacity. Table 4 shows that 63.7% of the freshmen students believe, totally, that the school is contributing to improve their innovating capacity, while 50.4% of the 3rd year students believe totally in this contribution. It is possible to verify that the percentages are highly positive, but there is a difference of 13.3% percentage points in the perception of the freshmen students in comparison with the 3rd year students. This may be due to the fact that new technologies are not being introduced in the school in the necessary speed, a tendency that was proved by McClleland (1972) when he argues that the development of new processes, services and products occur due to the necessity of innovation, which leads individuals to have creative behaviors.

Table 4: Innovatig capacity

INNOVATIG CAPACITY	Frequence	%
None	0	0
None/partially	4	1,4
Partially	35	12,4
Partially / Totally	79	27,9
Totally	165	58,3
Total	283	100,0

Source: Data from the research

A fourth aspect that was analyzed was about the Beta school's contribution with regards to the capacity of dealing with risk. Table 5, by means of the sum of the indicators 4 and 5, demonstrates that a positive perception, both from a freshman student (88.1%) as from a 3rd year student (77.4%). This item is acknowledged by the students as being an effective contribution offered by the school. Maybe it is due to the fact that the constant search for information in order to develop knowledge is included in the school's pedagogical project, via a simulated firm and mentoring projects with businessmen. Valente (2008) refers to knowledge when each individual can process, interpret and understand information. He complements saying that learning occurs with the appropriation of information, which minimizes risks, contributing to the act of undertaking.

Table 5: Capacity in dealing with risk

CAPACITY IN DEALING WITH RISK	Frequence	%
None	2	0,7
None/partially	7	2,4
Partially	37	13,1
Partially/Totally	86	30,4
Totally	151	53,4
Total	283	100,0

Source: Data from the research

As a fifth aspect that was examined, there is the professional maturity. For Dolabela (1999b, p.43), the entrepreneurial education should prepare people to learn "[...] to act and think by themselves, with creativity, leadership and a vision of the future, to innovate and occupy their space in the Market". According to Table 6, by means of the sum of the indicators 4 and 5, it is possible to see that the positive contribution offered by Beta school, is recognized by the freshmen students (94.6%) and by the 3rd year students (86.9%).

Table 6: Professional Maturity

PROFESSIONAL MATURITY	Frequence	%
Nenhum	2	0,7
Nenhum/parcialmente	3	1,1
Parcialmente	19	6,7
Parcialmente/totalmente	69	24,4
Totalmente	190	67,1
Total	283	100,0

Source: Data from the research

This perception demonstrates that the feeling of proximity by the student may be due to the fact that the school offers extracurricular situations aligned with leadership processes and decision making, such as: participation in fairs and congresses, lectures held by the students and social responsibility activities.

9 FINAL CONSIDERATIONS

The study indicated that the freshmen students and the graduates know that the education and formation that they obtained at the Beta school, contributed for them to reach an entrepreneurial competency.

As for developing their own business, the research pointed out a difference in the perception among Beta school's students. The freshmen students believe that the education that they received in the school contributed and ensured conditions to develop their own business. Now, part of the graduate students understand that it is not only education that will give them conditions to develop their own business, but it does give them conditions to manage a third party's business.

The Beta school's freshmen students perceived that the entrepreneurial education made available by the school did contribute to their innovating capacity. However, when compared with the graduates' perception, it is possible to verify that they also recognize the school's cooperation in developing this capacity, but cautiously.

As for the capacity to deal with risks, there is a highly positive understanding both with the freshmen students as with the graduates that the school did contribute for this formation.

It was possible to determine a concordance between the freshmen students and the graduates that the education received in Beta school did contribute significantly for their professional maturity.

9.1 Limitations and Further Research

Turning to the limitations of the current work, we must point out that this was a comparative case of study that might be expanded to a survey that could include multivariate analysis. Also the conclusions that were presented in this paper, indicates the need of future studies and suggests the comparison between different countries.

REFERÊNCIAS

Belloni, M. L. (1999). "Educação à distância". Campinas: *Autores Associados*.

Bermúdez, L. F, Ferreira, P. I and Silva, M. de L. da. (2001) "Um Brasil empreendedor construído sobre bases tecnológicas". Revista *SEBRAE*, Brasília, p. 96-101, out./nov. 2001.

Bernhoeft, R. (2005). "Como tornar-se empreendedor em qualquer idade". São Paulo: *Nobel*.

Boyne, G. A.; Farrell, C.; Law, J.; Powell, M.; Walker, R. M. (2003). *Evaluating public management reforms: Principles and practice*. Buckingham: Open Univ. Press.

Burlamaqui, L, Proença, A. (2003). Inovação, recursos e comprometimento: em direção a uma política estratégica da firma. Rio de Janeiro: *Revista Brasileira de Inovação*, Jan-jun/2003, p. 79-110.

Carvalho, C. P. F. de. (1999) "A educação cidadã na visão empresarial: o Telecurso 2000, polêmicas do nosso tempo". Campinas: *Autores Associados*.

Chagas, F. C. D. (2001). "O ensino de empreendedorismo: panorama brasileiro". In: *Instituto Euvaldo Lodi. Empreendedorismo Ciência, Técnica e Arte.* 2. ed. Brasília: *CNI*.

Damanpour, F.; Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization, and top managers. *British Journal of Management*. Nr. 17. 215-236.

DAmanpour, F.; Wischnevsky, J.; Wischnevsky, D. (2006). Research on organizational innovation: Distinguishing innovation-generating from innovation-adopting organizations. *Journal of Engineering and Technology Management*. Nr. 26. 269-291.

Dolabela, F. (1999). "Oficina do empreendedor". 6. ed. São Paulo: *Cultura*, 280 p.

Dolabela, F. (2007). "Ensino de empreendedorismo na educação básica como instrumento do desenvolvimento local sustentável. A metodologia pedagogia empreendedora". *Revista Factus*, São Paulo, 25 out.

Drucker, P. F. (1987). "Inovação e espírito empreendedor - entrepreneurship: práticas e princípios". 2nd ed. São Paulo: *Pioneira*.

Filion, L. J. (1993). "Visão e relações: elementos para um meta-modelo empreendedor". *Revista de Administração de Empresas da Fundação Getúlio Vargas*, São Paulo, V. 33, 50-61, nov./dez.

Filion, L. J. (2001a). "O empreendedorismo como tema de estudos superiores". In: *Instituto Euvaldo Lodi. Empreendedorismo Ciência, Técnica e Arte.* 2nd ed. Brasília: *CNI*.

Global Entrepreneurship Monitor – GEM (2012). "Empreendedorismo no Brasil: relatório global". São Paulo, *SEBRAE*.

Hashimoto, M. (2006). Espírito empreendedor nas organizações. São Paulo: Saraiva.

Instituto Brasileiro de Geografia e Estatística – IBGE. Educação e Trabalho. 2012. Retrieved on 25th May 2012. From the Website < http://www.ibge.gov. br/home/estatistica/populacao/ condicaodevida/ indicadoresminimos/suppme/analiseresultados2.shtm >.

Hansemark, O. C. (1998). The effects of an entrepreneurship programmer on need for achievement and locus of control of reinforcement. International Journal of Entrepreneurship Behavior and Research, v. 4, n. 1, 28-50, May.

Igartua, J. I.; Garrigós, J. A.; Hervas-Oliver, J. L. (2010). How Innovation Management Techniques Support an Open Innovation Strategy, *Research-Technology Management*, Vol. 53, Nr. 3, May-June.

Leite, E. (2002). "O fenômeno do empreendedorismo criando riquezas". 3rd ed. Recife: *Bagaço*, 2002.

Machado, M. R. L., Añez, M. E. M and Ramos, R.E.B. (2005). "A educação superior e o potencial empreendedor: um estudo de caso em uma instituição superior privada". *Revista Cent. Ciênc. Admin.*, Fortaleza, v. 11, n. 1, 30-38, ago.2005.

Mcclelland, D. C. (1971a). "Entrepreneurship and achievement motivation: approaches to the science of socio-economic development". In: Lengyel, P. (Ed.) Paris: *UNESCO*.

Mcclelland, D. C. (1971b). "The achievement motive in economic growth. In: Kilby, Peter. (Ed.) Entrepreneurship and economic development". New York: *The Free Press*, 109-122.

Mcclelland, D. C. (1972). "A sociedade competitiva". Rio de Janeiro: *Expressão e Cultura*, 1972.

Medeiros, P. (2001). "Empreendedorismo presente nas escolas". Revista SEBRAE, Brasília, 28-34, out./nov.

Metcalfe, J. S. (2003). Equilibrium and evolutionary foundations of competition and technology policy: new perspectives on the division of labour and the innovation process. *Revista Brasileira de Inovação*, Rio de Janeiro, v. 2, n. 1, p. 111-146, jan./jun. 2003.

Mintzberg, H and Quinn, J.B. (2001). "O processo da estratégia". $3^{\rm rd}$ ed. Porto Alegre: Bookman, 2001.

Moon, J. M.; Deleon, P. (2001). Municipal reinvention: Managerial values and diffusion among municipalities. *Journal of Public Administration Research and Theory*. Nr. 15. 43-60.

Paiva Junior, F. G. de and Cordeiro, A.T. (2002). "Empreendedorismo e o espírito empreendedor: uma análise da evolução dos estudos na produção acadêmica brasileira". In: Encontro nacional da associação dos programas de pós-graduação em administração, 26., 2002, Salvador. Retrieved from Anais... Rio de Janeiro: ANPAD, 2002. 1 CD-ROM.

Pinchot, G. III. (1989). "Intrapreneuring: porque você não precisa deixar a empresa para tornar-se um empreendedor". São Paulo: *Harbra*.

Santos, S. A. dos (1983). "A criação de empresas industriais: a figura do empreendedor e a influência da tecnologia do processo". 1983. Tese (Doutorado em Administração) – Universidade de São Paulo. São Paulo.

Serviço Brasileiro de Apoio às Micro e Pequenas Empresas – SEBRAE (2012). "Fatores condicionantes e taxa de mortalidade de empresas no Brasil: relatório de pesquisa". Brasília, 61 p.

Souza, E. C. L. de (Org.) (2001). "Empreendedorismo: competência essencial para pequenas e médias empresas". Brasília: Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas – *ANPROTEC*, 193 p.

Tidd, J.; Besant, J.; Pavitt, K. (1987). *Managing innovation*: Integrating technology, market, and organizational change. New York: John Wiley.

Valente, J. A. (2008). Educação a distância: ampliando o leque de possibilidades pedagógicas. *Revista Fonte*, Belo Horizonte, V. 5, n. 8,105-113, dez.

Weber, M. (2004). A ética protestante e o espírito do capitalismo. São Paulo: Cia. das Letras.

Yin, R. K. (2010). Estudo de caso: planejamento e métodos. 3rd ed. Porto Alegre: Bookman.

Zeithaml, V. A.; Parasuraman, A; Berry. L. L. (1990). *Delivering quality servisse*: balancing customer perception and expectations. New York: The Free Press.