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Entrepreneurship Education:
Innovative Contexts and Strategies

**Pilot Training Course for New Professors at the Faculty of
Entrepreneurship and Administration (FEAD-Minas Gerais - Brazil)**

**Professor Eric Dorion, DBA
Director – Post-Graduate Program in Administration
Universidade de Caxias do Sul (UCS)
Rua Getúlio Francisco Vargas, 1130, Bairro Petrópolis
Caxias do Sul (RS)
Brazil
Tel: 55.54.3218.2100
E-mail: edorion@ucs.br**

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ABSTRACT

The realities on entrepreneurship education, as a field of research, raise a lot of interrogations about the necessity of systemizing new education contexts and enhance the importance of developing new pedagogical strategies. The purpose of this Action-Research is to study the relations between innovative teaching strategies and pedagogical contexts in an entrepreneurial education perspective. This research is destined to professors who teach in a Graduate Institution (University or Faculty) where it is encountered a related Educative Mission on entrepreneurship. The results of this action-research will allow establishing new educative bases, developing a more adequate vision of the pedagogical contexts and strategies that may enhance the formation of more entrepreneurs in the universities of Brazil.

KEY-WORDS: Entrepreneurship, Education, Pedagogy, Context, Strategy.

INTRODUCTION

In the era of global economy, Brazil is actually transforming its socio-economical needs, creating a new base for local businesses that compete on the national and international markets. This global force is provoking pressure to local entrepreneurs in terms of effectiveness and efficiency. Considering that Brazil has, in the past, suffered many deficiencies; its socio-economical development profile is still showing many signs of weakness that seem to become latent.

In Freire (2004) view, the origins of a country are strongly related with the way it establishes and solidifies its educational base, and consequently, if it considers that education constitutes a clear determinant in which it may generate sustainable socio-economic development.

However, in a process of reorganization of education and in order to establish consistent educational practices that are promising for the future of our university students, from where emerges the importance of change? How is being elaborated a proper education program capable to introduce an entrepreneurial dimension? The first question is linked to the necessity of recognizing the importance of the entrepreneurial force in Brazil and not to accept in a simplistic way new educative norms to be implemented but. We then have to sow a ground reform of thinking, to create auto-consciousness within the educators and to provoke a multiplying effect of positive change. It is in that perspective that this action-research project was initiated with the Faculdade de Empreendedorismo e Administração de Minas Gerais (FEAD-Minas), offering an innovative common ground for the fields of Entrepreneurship and Education.

AIMS OF STUDY

This Action-Research, expressed by FEAD-Minas, achieves itself in the context of an established inter-academic collaboration between the author, of the Universidade of Caxias do Sul, Rio Grande do Sul, Brazil, and the *Pró-Reitoria de Extensão, Empreendedorismo e Inovação* of FEAD-Minas. The purpose of the research project is to study the relations between innovative teaching strategies and pedagogical contexts in an

entrepreneurial education perspective. The aims of study are to establish new teaching parameters considering the importance of the actors and their role in an entrepreneurial educative process.

THEORY BACKGROUND

The theory foundations refer to various fields of research. The first dimension deals about Globalization, Culture and Education. The globalization process stimulates access to information on a wide scale, providing disruption of the territorial borders. Through technology of information, access to knowledge is spread out in real time. Consequently, the era of information provokes time and space compression that makes viable interactions from all places of the planet.

The entrepreneurs, therefore, already perceive that the market must be analyzed in a global perspective. This fact requires that Brazilian companies has to become more efficient and effective to reach a superior performance, as a base of competitive advantage, to be suited to compete on a global scale.

As a socio-political entity, Brazil counts as the “Giant” of South America. Its internal diversity constitutes one of the strongest aspects of the Brazilian culture. As an economical entity, Brazil counts with a huge amount of micro and small businesses, representing for about 98% of the 4,1 millions of formal businesses, responding for 20% of PIB and use 45% of the work force that possess signed work card. According to Brazilian Institute of Geography and Statistics (IBGE, 2002), are added to this data 9,5 million informal companies, for a total of 14,6 million.

This data demonstrates that the majority of the 70 million Brazilians who constitute the Active Work Force (*PEA*) works or has some kind of labor link with the Medium and Small Businesses (MSBs), showing that the Brazilian population is intensely entrepreneur (GEM, 2000).

The MSBs are currently the main generating factor of work force because the major companies, with their necessity of increasing productivity and with the new requirements of the market, tend to automatize each time more and thus, hire less. Unfortunately, the Brazilian micro and small business culture seems to converge more toward interpersonal

and social interactions rather than scientific and business performance, provoking alarming rates of business mortality in Brazil and demonstrating that the entrepreneurial Brazilian culture is showing an obvious lack of core competency.

[...] The entrepreneur, unprepared, still learns by doing. Taxes, costs of finance, low level of education still are problems that obstruct growth and stanch the mortality rate of small businesses in Brazil. The Brazilian demonstrates that he wants to make things happen, but this is not enough. Beyond the "want to do", it is necessary "to know how to do" and also to "be able to do" [...].

(Free translation of the Conference at SEBRAE-RS, 2004
by Edgar Powarczuk).

The urgency of training the entrepreneurs and forming new entrepreneurs that have the capacity of acquiring competitive knowledge merges with the necessity to re-think Brazil educational system.

The second dimension involves the importance of Change, Uncertainty, Learning and Innovation in the entrepreneur's life. Morin (2004) refers to the necessity of reforming our way of thinking, in which the individual enhances his ability to "re-organize" knowledge, or "think". Morin's view basically constitutes a ground of educative transformation where cognitive stimulation offers a new dimension for the subject in a learning process and crucial in an educational context. Such pattern constitutes a key conceptual base for the making of a Pilot Training Course in Entrepreneurship. Morin's view is that it is possible to guide the student thru a real journey of discovery, which does mean encounter new lands but, to have a different view of the world (Morin, 2004).

Reforming our way of thinking may suggest, in a pedagogic perspective, that it is more accurate to train our student in a systemic perspective, with a broader intellectual view, able to reach the meaning of local culture, and also able to obtain a sufficient level of cognitive energy required to build an education that train generations capable of thinking (Morin, 2004).

A different perspective about education can suggest a permanent and constant process of review and actualization of learning. Consequently, it is possible to reconsider the concepts of student and teacher and review all levels of education without any absolute connotation (Freire, 2001). Such hypothesis can be characterized as a new paradigm of

pedagogy, where usually in Education, the actors actually do not allow themselves to be influenced by such a change of path.

From Freire's (2004) view, the learning process constitutes the result of our own recognition of the necessity of change, which happens when we allow space for reconstruction and maintain stimulus. Thus, the environment of the classroom can constitute an opportunity to the educator to recognize himself thru the stimulating experience of making decisions, of being responsible and of having his own liberty. His role is basically to assist in the analysis of the possible consequences of the decision being made.

[...] "Educators are like old trees. They have a face, a name, and their own story to be counted. They live in a world where what is worth is their relation with the students, considering the each and everyone of them in an "entity" *sui generis*, titular of a name and of a story, suffering sadness and feeding hopes. And the education is something that's happens in this dense and invisible world that is being established by both. [...](Free translation of Rubem Alves, *Conversas com quem gosta de ensinar*, 2000, page 19)

In Freire (2004)'s view, the wisdom comes from the ignorance, being a process for constant overcoming through critical conscience. The role of the educator who opts for change consists in acting and reflecting together with the individuals with whom he interacts to acquire his own conscience together with them of the real difficulties of society. This means the necessity of the educator to extend each time more its knowledge, not only under his own view of selecting such method and technique of action, but also thru the limits with which he faces in his activity.

"In a permanent training process of education, the basics moments are the ones where we can be critical and think about our practices. In fact, it is only by being critical about our practices of the day or the past that we can improve our future practices."

(Free translation of Freire, 2004, p.39).

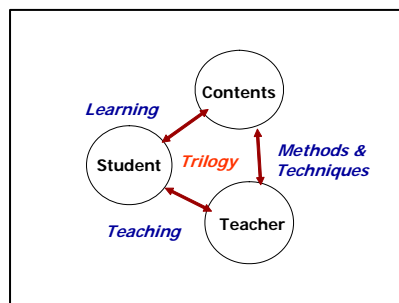
The third dimension involves the issues of Context, Strategy and Leadership in teaching at the university. In order to be able to judge the quality of the development of an existing training program, a review of the literature from different author on Education has

been realized. One refers to the concepts of training and experience (Barbier, 1996) and other refers to pedagogy as a base for understanding educational contexts and learning strategy (Legendre, 1988). This brief review shows the importance for the teacher to emerge with a reflection based on epistemological foundations on educational realities, referring to the notions of training, experience; or else tacit and explicit knowledge. It is also important to worry about the roles of the professor and the student; to develop teaching strategies that correspond best to the realities of the conveyed teaching project and, to recognize the essential character to work in an educational reality in order to develop projects of holistic character that responds to the needs of the students.

Contexts

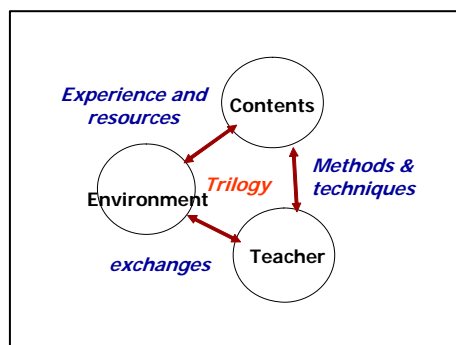
Legendre (*ibid*) educational model proposes a pedagogical situation evolving from a systemic pattern between the professor, the student, the contents and the problematic referring to the teaching, the methods and techniques of formation and the learning process. This model is considered as traditional in the field of Education (Figure 1).

Figure 1: The pedagogical situation



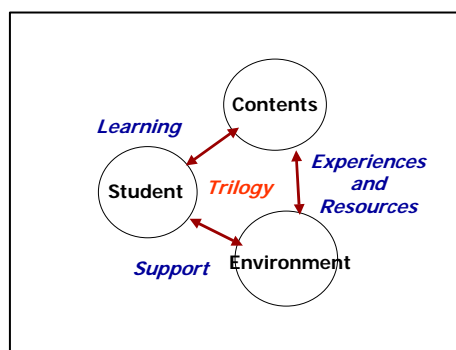
In Dorion (2003), the role of the professor is to question the realities concerning the teacher, the potential environments of formation, the contents, and the problematic referring to the experiences and resources that the environments can offer the exchanges that connect the teacher to the environments and the methods and techniques used. This educational context constitutes the prism that permits to recognize the situation allowing the teacher to bloom while conforming to the norms prescribed in the exercise of his work (Figure 2).

Figure 2: The role of the teacher



Also, the role of the student is to question the realities concerning the student, the potential environments of formation, the contents, and the problematic referring to the experiences and resources that the environments can offer, the supports that allow the student integration in the environments and the learning process as a strategy of acquirement of the knowledge (Figure 3).

Figure 3: The role of the student



This pedagogical context constitutes a prism that permits to recognize the situation allowing the student to bloom while conforming to the norms prescribed in the classroom. In a traditional model, the student is generally less involved and least aware of the pedagogical situation in which he evolves. The student shows a passive attitude, which is contrary to what is expected from a student learning in an entrepreneurial course.

According to Legendre (*Ibid*), the word «student» refers to the learners in quest of formation in an integrated process with the teacher. The student's learning platform

becomes in itself the reflection of the one of the educator, constituting its own identity. This situation is important in an entrepreneurial educative situation. The participant happens to be the center of its own educational reality, putting in dynamics the context that position him in relation to the other actors. The student in entrepreneurship comes out of this positivist reality that outdistances him of the professor and the contents formation and, let free course to the passions that guide him in the process of learning.

According to Rubem Alves:

[...] The passion is the secret of the judicious life. What other question could there be? [...]

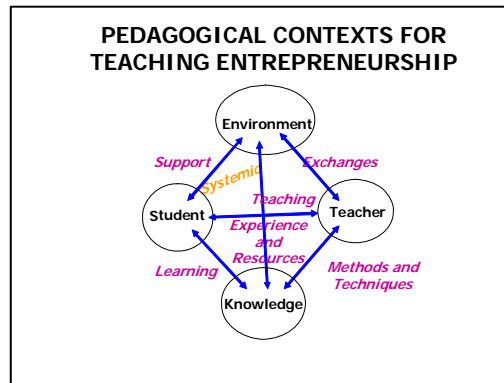
(Free translation of Rubem Alves, *Conversas com quem gosta de ensinar*, 2000, page 19).

The participant develops an attitude that implies a responsibility oriented to a process that he borrows. The actions that he achieves are at a time the result of personal initiatives, subject to a redefinition of his own contexts. This redefinition is hybrid, «contaminated» by the influence of the professor's model and the learning contents proposed to the student. The student's pedagogical context becomes symbiotic and dialectic with the role of the professor and the contents that are lavished.

In view of Morin (2004), the system of activities of both the student and the teacher, as he discerns it, is based according to the entity's own needs, disregarding the needs of the other actors involved. The author urges the necessity of changing such reality thru specified integrated contexts, freeing the fluxes of information available. People must work together and must share information, whatever the level of complexity that it draws.

Dorion (*ibid*) presents a model that establishes a systemized pedagogical situation that constitutes one of the pillars of the proposed research (Figure 4).

Figure 4: Pedagogical Contexts for Teaching Entrepreneurship



The author considers that the teacher of entrepreneurship becomes a model «entrepreneur» who detains the strategies and the leadership required «to transform» his class. The teacher is, in one hand, a researcher habilitated to identify and to interpret the theoretical foundations of the field of knowledge, and on the other hand, imprints himself of the entrepreneurial reality in order to allow the student to be able to integrate explicit and tacit knowledge in a constructivist way. He becomes an educator capable of guiding his student towards a world where interiority makes the difference, where people re-define themselves by their own vision, their passions, their expectations and their utopian horizons.

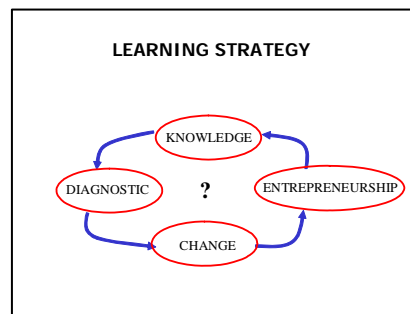
Learning Strategy

In view of Legendre (1988), teaching constitutes a unidirectional process between the professor and the student that permits a transfer of knowledge. In these terms, teaching requires a positivist approach. In an entrepreneurial perspective, teaching becomes an indefectible complement of the learning process. The works of Paulo Freire are explicit on this topic (Freire, 2004). The author, in one of his various works, mentions that: 1) there is no professor without student; 2) teaching is not a transfer of knowledge; and 3) to teach is a human specificity. The author refers to a multitude of behaviors and attitudes, which

explains that teaching can only exist if these educational values are put in evidence. The teacher, as a model, to the student's benefit, deliberately frees the values.

Learning pulls its existence in its complement with this proposed process of teaching. More specifically, experimental learning constitutes an avenue of training that answers to the needs of the entrepreneur. The work of Kolb (1976) helps to understand this reality. His approach enhances a redefinition of teaching strategies, which encourages a process of transformation (Figure 5); a process of change, based on the proper "history" of the student and the teacher. Caring about this incorporation of the daily problems and to join them to theory knowledge constitutes the most realistic solution in an entrepreneurial pedagogical reality.

Figure 5: Learning strategy



The proposed learning strategy constitutes not only a complex pattern of an original conceptualization of the entrepreneurial educational process, but also a tool of thinking and a clear and realistic educative strategy. It must remain innovative by integrating various contexts of formation and by setting up new educational strategies. It must become communal to offer to the student different tools of valorization of the entrepreneurial culture. It must be associative to permit the implication of the teachers and the students in concrete projects, with an approach of renewed partnership. Finally, It must be holistic because the systemic implies a global and reconsidered view. Learning strategy in entrepreneurship education has to offer an approach more likely humanistic than organizational, with actions more integrated than divided. Basically, learning strategy has to create a path for a social dimension of the educational environment and enhance a phenomenon of *transformation*.

METHODS

Thru a proposed Distance Education Case Study (Yin, 1994), the research was elaborated in three phases: 1) the design of the course based on the theory background exposed; 2) the execution of the Pilot Training Course with the community of teachers-participants (FEAD-Minas Brazil); and 3) the evaluation of the Learning Strategy used according to Minayo (1996) and Guba and Lincoln (1989).

Purpose of research

The purpose of the Action-Research is to study the relations between innovative learning strategy and pedagogical contexts in an entrepreneurial education perspective. The research is especially focusing on teachers who teach in a Graduate Institution where it is encountered a related Educative Mission on entrepreneurship and the main hypothesis is that the teacher himself has to learn to be entrepreneur to be able to transform it into teaching practice.

The first goal of the research is to scientifically ground a Pilot Training Course to participants permitting a converging stand between innovative processes of teaching within various pedagogical contexts. The second goal of the research is to evaluate the changes occurred in the teaching practices among the participants thru a differentiated pedagogical context analysis.

The partner Institution, FEAD-Minas, is interested in establishing a program of qualification for professors with the objective of transforming their work to incubate more entrepreneurial spirit among the students. Its objective is to stimulate a cycle of reflective and experimental thought (Randolf&Posner, 1979), to form professionals who, instead of entering in the labor market, can create their own business; or else, can form new enterprising leaders who act responsibly in the development of the Brazilian society.

The research variables come from the data collection and the analysis observed during the Pilot Training Course.

The Pilot Distanced Training Course

The Pilot Distance Training Course was built in three different stages. The first module deals about Globalization, Culture and Education, where the topics allow the participant to get a better understanding of the entrepreneurial reality in which he evolves (OECD,2004; De Masi,2003; IBGE,2002; GEM,2000) (Annex 1). The second module involves the importance of Change, Uncertainty, Learning and Innovation in the entrepreneur's life. From the moment that the participant questions the contemporary situation of entrepreneurship, he has to leave the observation perspective and establish a change of mind (Alves,2000; Morin,1999; Drucker, P.F.,1998; Freire,1996) (Annex 2). The third module involves the issues of Context, Strategy and Leadership in teaching at the university (Annex 1). This final stage allows the participant to clarify and focus, from what was established in the previous stages, the possibilities of change into a new educational Program. (Dorion, *ibid*; Alves, 2000; Barbier, *ibid*; Legendre, *ibid*; Kolb,1976).

The first module deals with globalization, referring to the deep and permanent transformations occurring in the Brazilian market. This phenomenon demands to the Brazilian companies a level of professionalism endowed with efficiency and effectiveness in its processes, capable of creating quality and performance. Entering in shock with this new trend, Brazilians lead the ranks of the most entrepreneur countries, and it is of no surprise, since the people of this country do have initiative, leadership and tolerance to the risk. However, the great question rests in the absence of technical abilities and qualification required to achieve efficient management.

This cultural dimension gives sequence in the first module and is suited to identification of some structural and historical problems that infiltrate the current reality, analyzing with conscience not the existing problems but yet the causes that do originate them. Giving end to this first step, the module reviews Superior Education, establishing a parallel between the histories of education in Brazil with the future challenges of the educators (Annex 1).

The second module gives sequence in the identification of the current context carried through in the first one, leaving the position of observer into actor of the process of the change, considering uncertainty as an imperative step of this educational scheme (Annex 1).

The evolution of this set of lessons involves the study of learning and innovation, which are enhanced thru act of tolerance and cognitive transformation strategies. Learning, as a construction process, values the attempt and the error as responsible elements for the development of creativity. In such way, it creates a rich environment of initiative and innovative actions.

The third and last module converges with what was already studied, the necessity of change with possible measures of action defined by the proper educators, in reason of the understanding of the numerous variables that affect such problematic. In this module, the participant discourses and dialogues with his trainer and his colleagues, in order to receive critics on his proposed alternatives of change in the classroom. At this moment, the Trainers put in practice the aptitudes that have been developed, without, however, presenting any scheme of action previously defined (Annex 1).

This module looks into elucidating the possibilities of change of a participant's new educational proposal. It then transforms in practice the benefits of a creative environment and guides the participant to a closer view of the education context, thru the transformation process in the classroom, allowing the establishment of new patterns that promote and support leadership.

The Pilot Training Course is designed to be practical, clear and flexible. The main preoccupation is about its evaluation, so that can be realized a clear monitoring of the transformation process, from one end, and that be identify clearly the education elements that will contribute to this transformation process in the classroom.

FINDINGS

In the academic perspective, the thus created Pilot Training Course in Entrepreneurship is based on an original conceptual combination, thru a mixture of innovative academic model from various fields of research. In terms of results, the activities of this action-research have permitted, up to now, a better understanding of the issue of Entrepreneurship Education, as a field of research. The future steps of this action-research are promising. First, because the conceptual scenario that has been developed is innovative, and also, because this proposal constitutes a «dog house» of more detailed

empiric studies concerning each unit of analysis. This will permit to closer the realities and the goals of the partner institution with entrepreneurship education.

Finally, let's hope that such work provides the most innovative tracks of research, bearer of results, which really can be useful to the ones who need the most.

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ANNEX 1:

MODULES	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5
GLOBALIZATION, CULTURE AND EDUCATION	Introduction to Entrepreneurship	In the era of globalize information	Brazilian Entrepreneurial Culture	Both sides of the Brazilian Education System I	Both sides of the Brazilian Education System II
CHANGE, UNCERTAINTY, LEARNING AND INNOVATION	Change and organizational capability	Change, Utopia and Reality	Uncertainty and the Reform of Thinking	Learning in Chaos	Importance of Innovation
CONTEXT, STRATEGY AND LEADERSHIP	Innovative Education thru Contexts	Contextual Educative Philosophy	Educative Strategy for Entrepreneurs	Course Plan Project	Leadership for teaching