

## **"Toward a Method for Evaluating the Teaching of Entrepreneurship"**

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### **Abstract**

*The aim of this paper is to propose a method for evaluating the teaching of entrepreneurship. Indeed, by studying the theory and international experience in the field of entrepreneurship education, we noticed the absence of a universal consensus on a clear and consistent evaluation method, which led us to propose a method based on three pillars namely: the fixed objectives to this teaching, the concerned public and the deployed pedagogy. It seems that this method is clear and easy to apply when compared to existing methods in theory.*

**Keywords:** entrepreneurship, education, teaching, pedagogy, public

### **Introduction**

The teaching of entrepreneurship is now a subject of debate on a large scale. It spreads in a spectacular way, to reach all branches and specialties, and gain all disciplines and universities of the whole world, in front of an economic and socio – politic environment in full storm. For one thing, ‘entrepreneurship is considered to be a core competence for growth, employment and personal fulfillment’ (EC, 2004, 2006 (in) Kailer (2009)).

Additionally, the teaching of entrepreneurship corresponds to all awareness-raising activities, training, and support of students’ support (Fayolle, 2001). Its focus is ‘to help students recognize business opportunities and act on these opportunities’ (Jones and English, 2004 (in) Desai, Ding and Fedder (2010)).

The challenges of this teaching are various and of very diverse nature. They focus on the definition of new contributions from students, society and environment. Without ranking, we can evoke – in briefly- some of them:

- the raising awareness of the student to start a business through the development of entrepreneurship and entrepreneurial spirit;
- the acquisition of management skills needed; to launch a business, to take an existing company, and to develop a project;
- the development of social and relational skills to learn how to initiate a project, to lead a team, and to work in network, in the environment of business;
- the analysis of the main challenges of entrepreneurship and the presentation of all activities allowing entrepreneurs to surmount them.

Furthermore, Zahra and Wright (2011) suggested that “studying entrepreneurship in context can enrich our understanding of the dynamics of entrepreneurial activities as well as their manifestations”.

Because of the diversity of approaches, the absence of definitive conclusions on this teaching, and its evaluation, otherwise a rather limited report, the authors are directed to two distinct pathways:

- is - it a separate discipline that should be taught within a specific training or an interdisciplinary subject which it is advisable to integrate into the classic trainings which already exist?
- the evaluation of this teaching can - it be made on the basis of qualitative criteria, difficult to measure or by the use of both quantitative and qualitative criteria, mostly non-operational?

But, few are the researches which were interested in the evaluation of the teaching of entrepreneurship. This article aims to meet this expectation. It is based on the following research question: how do we evaluate the success of the teaching of entrepreneurship?

To answer this question, a number of specific questions can be asked, how to judge the success of the teaching of entrepreneurship? Is it the number of companies recently created by students trained in entrepreneurship, or the degree of raising awareness of students to start businesses? Or, their entrepreneurial awakening? Or are there any other factors to develop?

Our thinking in this paper is to evaluate the teaching of entrepreneurship according to three axes: the fixed objectives to this teaching, the concerned public and the deployed pedagogy.

To address the raised issues, we will structure our article as follows: after presenting the three axes of evaluation, in the first paragraph, we will, in a second paragraph, do a critical analysis of the problem of the evaluation of the teaching of entrepreneurship, in order to expose our research proposal, in the last paragraph.

## ***1. The teaching of entrepreneurship refers to objectives, a pedagogy, and a public***

The teaching of entrepreneurship is a multi-faceted issue and refers to specificities.

### **1.1. The teaching of entrepreneurship refers to a variety of objectives**

Entrepreneurship can be taught to learn to the students how to undertake, even if the psychological element remains difficult to teach (Paraded, Has, 1999). But such teaching does not lead necessarily to the ‘creation’ of future entrepreneurs, but:

- to manage an initiative, new or already existing;
- to introduce an innovation;
- to develop capacities and abilities to create a company (Verstraete, 1999).

This development concerns:

- the propensity to undertake and the entrepreneurial skills;
- the attitudes and the entrepreneurial intentions;
- the entrepreneurial awakening;
- the entrepreneurial spirit among students (Fayolle, 1999).

The teaching of entrepreneurship is reflected in each of the entrepreneurial modalities: *ex nihilo* creation, spin-off, and resumption of a company, and is also justified in the goal:

- to help future entrepreneurs to actually set up a project, since the emergence of an idea or a motivation up to the opening of the company within realistic times and with the means calculated to facilitate the starting up;
- to acquire, to future entrepreneurs, skills to manage a small business;
- to facilitate the process of change among the entrepreneur, to help him to pass from an attitude of a passive reception to take calculated risks, in order to implement innovative conducts and to develop his potential of negotiation (Singery, Janvier, and Cottin, Courrent, and Fouchert, 1999). This process can be expressed in teaching situations (Léger - Jarniou, 1999) because it seems that in the experiment, there is learning, in the sense that the idea of undertaking, does not constitute an innate phenomenon, even natural, and that, the spirit and the entrepreneurial capacity refer to knowledge, capacities and attitudes which can be taught, worked, strengthened and exploited (Schieb - Benefaction, 1999, Hernandez, 1999).

In other words, we are not born entrepreneur, but we become by the learning as suggested by Hernandez (1999). Because, ‘the training in entrepreneurship and in small business management could help to develop other types of skills in students besides that those developed by the classical teaching’ (Fayolle, Has, and Castagnos, 2006).

Moreover, Hytti, and al. (2002), by repositioning the core issues of entrepreneurship training, evoke a representation of the objectives for which we try to reach. These are organized around three axes:

- improve understanding of what entrepreneurship;
- equip people who will join the working world of an entrepreneurial approach;
- prepare people to act as entrepreneurs and managers of new businesses.

The examination of the American experience allows us to note that the emergence of the entrepreneurial teaching goes back up to the sixties. It coincided with the appearance of large multinational companies which monopolized the innovation. The stake in the recourse to the entrepreneur and to the creation of small businesses to innovate, during this period, is unjustified and we registered ‘strong reluctances to accept a teaching which still had neither its conceptual tools, nor its field of research, and its autonomy within the training of managers and engineers’ (Béranger, Chabbal, and Dambrine, 1998). But, over time, ideas and behaviors have changed and Americans have discovered that, the structures and the economic growth would be organized around new business and thus, around numerous entrepreneurs.

Since 1971, there has been a constantly changing number of colleges and universities (Fayolle, 2001; Beranger, Chabbal, and Dambrine, 1998).

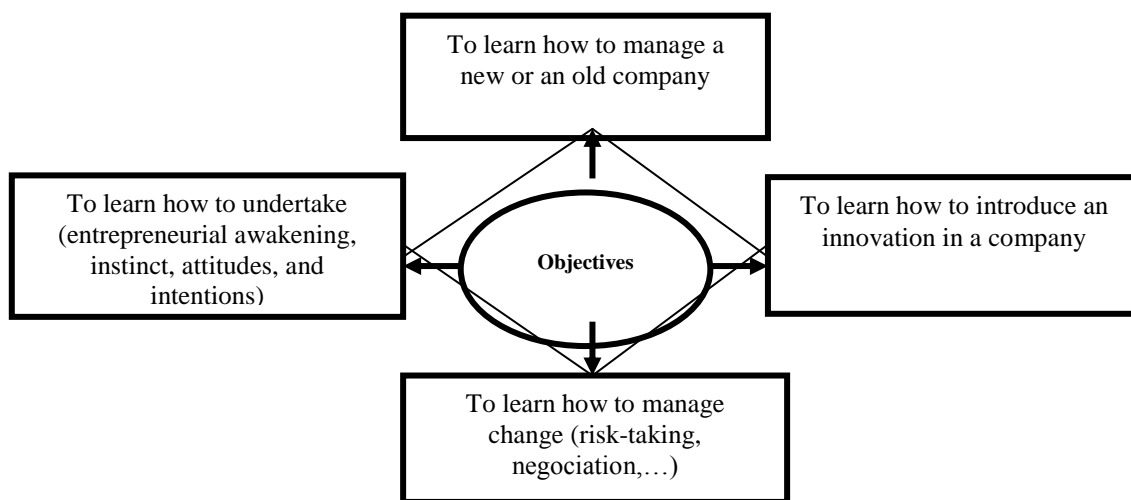
Today, this teaching is accepted by the academic community as an independent discipline. Four objectives of the teaching of entrepreneurship, in U.S. business schools, have been detected during a survey conducted by Hills in 1988 and presented by Desai, Ding and Fedder (2010) in 2010, namely:

- ‘increase awareness and understanding of new venture process;
- introduce entrepreneurship as an option of career;
- understand functional business relationships, and
- recognize or understand traits and characteristics of entrepreneurs’ (Desai, Ding and Fedder (2010)).

In Europe the teaching of entrepreneurship has been increasing noticeably over the past five years and is anticipated to continue growing (Kailer, 2009). For France for example, the objective of the teaching of entrepreneurship in specific environments or in the society, in general, is to promote and help to spread, more widely, entrepreneurship and entrepreneurial spirit. The first lessons of entrepreneurship have been produced at the end of 1970s (Fayolle, Has, 1999). They appear gradually as an appropriate response to a new situation, resulting from a series of mutations which affect the whole planet (Béranger and al. 1998). They have gradually evolved to become a separate discipline, characterized by a certain formalization and recent extent (Fayolle, 1999). The culture of creation passes, more by the family, than by the school. This allows, to better understand why new business start-up by students or young graduates of higher education, represent a very marginal phenomenon in French society, contrary to what has been happened in the United States of America (Fayolle, 1999).

Various ideas were moved forward, we can summarize the objectives of the teaching of entrepreneurship in the following four axes:

Figure 1: the objectives of the teaching of entrepreneurship



It appears clearly, that, the issue of the teaching of entrepreneurship consists of training individuals having of the motivations and qualities, which clearly distinguish them from other people and able to undertake, to live the change, to manage and innovate constantly.

The achievement of these goals can assess the effectiveness of such teaching. Indeed, criteria like, the importance of the decision (adoption of an operational and committed behavior), the degree of involvement of staff and the avoidance of blocking, the fostering of the gaining behavior and the path of expansion of the company, the vision, the arbitration, the propensity to undertake and the entrepreneurial intention, the apprehension of the situation, the choice, the degree of adaptability, mobility, flexibility and the innovation, can be adopted to appreciate the four axes of the objectives outlined above.

In addition, the implementation of an effective teaching, should lead to develop, in the future entrepreneur the ability for better knowing, i.e. it should learn how to know his objectives, his motivations, his background on the one hand, and his strengths, his weaknesses, and his assets and handicaps, on the other hand, in order to identify and seize opportunities at convenient time. Otherwise, to have at the same time, an entrepreneurial spirit and entrepreneurship.

But this teaching refers to a specific pedagogy

### **1. 2. The teaching of entrepreneurship refers to a specific pedagogy**

A teaching implies contents and a method, especially when the topic to be taught is multidimensional. We underline among some authors the whole in this that we can teach in the field of training in entrepreneurship: a set of knowledge, know-how, know - be and know- become, and many other qualities which will be essential to future entrepreneur to reinforce his behavior in order to allow the success of his company (Paraded, 1990). These various knowledge are transmitted by the teachers/researchers, experts, and representatives of the company and of its environment. The conclusive stage is operationalized in the opening of the company and is sanctioned by the attribution of a university degree (Singery, January, and Cottin, Courrent, and Fouchet, 1999).

When we observe the multitude of research, and publications produced in the discipline, we conclude that the content of the training, today, tend to be structured and adjusted, despite the existence of the clashes between thought schools, including the content school, which privileges the entrepreneur and his characteristics (personality traits, behaviors, ...) and the process school that focuses on entrepreneurial processes in their context (Schieb - Bienfait, 1999).

But it should be noted that there is no ideal content of the teaching of entrepreneurship. The content varies according to the needs of the student learning which can be incarned only in a business context and not in a context of school. In this perspective, Sénicourt and Verstraete (2000), by declaring their hostility to the idea that an individual can 'be born' entrepreneur, in other words, that there would be a registration of the genetic propensity to undertake, offer a four-level approach for the dissemination of an entrepreneurial culture within the educational system: sensitizing, training, advising and coaching.

Sensitizing refers to the preservation and stimulation of faculties of creativity and initiative. Contrary to the training which implies:

- encouraging the commitment of individuals carrying a project, *a priori*, considered to be interesting to pass to the act, if possible;
- identifying those with entrepreneurial skills.
- The accompaniment, on the contrary, consists of:
- supporting the entrepreneur;
- creating a climate of trust flawless. This support is related to advice given by professors and experts of the field.

In order to make clearer these views, we developed the following table.

**Table 1: teaching entrepreneurship: typologies and implications**

Types of knowledge	Contents	Reasons	Illustrations
Knowledge	Theoretical course.	Awareness of the issues of entrepreneurship.	Future entrepreneur develops intentions to start a business.
Know-how	Presentation of an experience, methodology, practical case studies.	Establishment of a process of business creation.	Future entrepreneur values in seizing opportunities.
Know – be	Social skills.	Learn how to manage a project, to lead a team and to build climates of trust.	Future entrepreneur values in intuition, creativity and innovation capabilities.
Know- become	Interpersonal skills.	Learn how to build relationships, attract and retain talent, negotiate, coordinate, network in the business.	Entrepreneur promotes his image in the market.

It is clear that contents of teaching can shape the entrepreneurial behavior of students, develop his sensitivity towards the seizure of an opportunity and a built of a business. The essence for contents is to be relevant, coherent and stimulant. In relation to pedagogy, Hjorth (2011) argues that the pedagogue, by his approach, ‘provides means for students to learn to know their knowledge, including this knowledge of how they learn’.

Content can be an important axis for assessing the teaching of entrepreneurship. But this whole of knowledge requires a particular method. From this point of view, many researchers did not fail to wonder about the manner of inserting the creation of a company in the teaching of management.

Hernandez (1999) presented his own experience in teaching entrepreneurship, experiment close to that of Santi (1994). It is a question of making work a group of students on a creation project, and provide him, as its request, the theoretical complements, missing to progress. This pedagogy makes it possible to the students to be well familiarized with the entrepreneurial approach. But its effectiveness remains dependant on the degree of provision and student motivation.

While underlining particularly the work of Canadian and Anglo – Saxon researchers, Schieb - Bienfait (1999) identifies two axes that need focus to develop a teaching of entrepreneurship:

- the structure selected to develop the program;
- the teaching methods: the teacher-centered methods, on one hand, and the student-centered methods, on the other hand.

Strong With their findings, De Carlo and Chevrier (1999), emphasize teaching methods such as tutoring and animation of seminars, intended not only for the training of students, in term, of acquisition of knowledge, but also for student interaction with the teacher and the group, if necessary, in the process of acquiring knowledge and perspective of the emergence of entrepreneurs.

If we refer to the American experience, the teaching of entrepreneurship depends on two main pillars of relevance to all stakeholders (students and researchers):

- a course that deliver a specific knowledge;
- an experience of a project that results in a business plan (Beranger, Chabbal, and Dambrine, (1998).

Let us note, that ‘training programs are characterized by little interactions in class and much connections with the environment, contrary to Asia which develops open programs both on the class and on the environment and it strongly enhances the type of program centered on further education’ (Béchar, 1998).

Moreover, the explanation of the essential characteristic of the act of creation from the stage of the sensitizing, i.e. a strong involvement of the entrepreneur in his work (in fact the company or the innovating product) is paramount. This one is done through testimonies and visits. But, which counts for a professor, is to cause the emergence of talents. Indeed, from the pragmatic approach consisting of framing creation projects, has gradually been emerged a set of doctrines: course contents, tools, teaching equipments, research areas,..., become clearer and consolidated over the years (Beranger, Chabbal, and Dambrine (1998).

It can be seen that pedagogy has been honed over the years that methods are:

- firstly, on the development of certain behaviors (*know-be*) in the project;
- secondly on the acquisition of knowledge and know - how.

In this perspective, one of the most debated educational options is the mode of choice of the creation project.

The current trend in business schools is to create teams - projects and to entrust to each of them the task to imagine itself the subject of the creation project (Fayolle, 1999 and 2001; Béranger and al. 1998).

In France, the teaching of entrepreneurship is diversified. It consists of giving courses, seminars and framings of projects at all the stages of schooling. According to a classification, suggested by the school of Management of Lyon, it unfolds along three dimensions:

- the ‘conceptual’ dimension: why undertake? Testimonies, visits, case studies presenting the various aspects of the creation of activity. The keyword is ‘*exemplariness*’. One of the goals is obviously to give a ‘taste’ for business creation, to demystify an act which proves that it is both exciting and mundane.
- the ‘instrumental’ dimension: how is it necessary to undertake? The student receives at the same time, theoretical and practical teaching on the techniques, on the know-how of an entrepreneur. The keyword is ‘*teaching*’.
- the ‘experimental’ dimension: if we do it through extensive projects and field experience, students, whose wish it, will carry out their ‘training’.

This teaching is addressed normally to those, whatever their age, who wish to create an activity, either immediately, or at short term’ (Fayolle, 2001).

Given the diversity of approaches, our review is focused on determining the value and limitations of each. We can offer to this goal the following grid.

**Table 2: evaluation of the methods of teaching**

Method	Interest	Limites
A group of students works on a project of creation and obtain a theoretical complements.	- . To become familiar with the entrepreneurial process; - . To simplify complex situations; - . To involve and engage all students; - . To receive a methodological contribution due to a significant professionalism	- . We present the reality in a reductionist way; - . We can be limited to a particular aspect; - . We limit the flexibility of the student in his thoughts.
Tutoring	- . To fully involve the project leaders; - . To benefit from a methodological and a great experience of the tutor; - . To accumulate some experience.	- . We can be limited to a particular aspect; - . We get lost, in a particular vision and culture.
Seminars	- . To ensure a development more easily controllable around the field of entrepreneurship; - . To stimulate the effects of the experiment; - . To animate specific goals; - . To acquire knowledge; - . To initiate a dialogue, between, professor and students, within the group.	- . We strength the dependence of a few specialists; - . We frustrate participants if the presentation is poor.

But, the French model of teaching entrepreneurship is a partial variation of the American model (Fayolle, 2000). We aim especially at the student. Recall that the training programs in entrepreneurship and SMEs in Europe, generally, are closed on the environment and on the class (Bechard, 1998).

It emerges that, from the educational method, it results, effects on students, and, consequently, on behavior, i.e., their desirability and their attraction degree to the creation of a company.

The teaching method can be considered as an axis of evaluation of this teaching.

Beyond the content and the method, there are challenges to rise by the participants to the teaching.

**1.3. The teaching of entrepreneurship supposes a public**

In our view, the teaching of entrepreneurship should be considered in its entirety, as a project which interests several parts, and each has a goal to achieve. The achievement of the objective implies the success of teaching. The various parts concerned with the teaching of entrepreneurship are the following ones:

- economic public authorities;
- universities, schools and training institutes;
- trainers or teachers;
- students.

The most be able to teach entrepreneurship should be experts in entrepreneurship training (people trained for this teaching) that should be the organizers and key stakeholders (Beranger, Chabbal, and Dambrine, 1998). These specialists, if they have the practice of creating innovative businesses, they will come with project management schools or university, as part of partnerships set up for this purpose. But their task would be too heavy (and their teaching can be too academic) if they were not assisted by other actors namely: professionals or practitioners (accountants, specialists in intellectual property, venture capital, lawyers, etc.), entrepreneurs and business leaders (preferably young companies). Each lecturer can play a special role, which can be beneficial.

In France for example, ‘interventions associate professors, entrepreneurs and creative professionals from a large company or small business’ (Fayolle, 2000). But, at what level of importance? The following table provides an answer.

**Table 3: assessing the importance of potential participants in the teaching of entrepreneurship**

Involved in teaching	Paramount	Important	recoverable	secondary	Illustrations
Specialist professor					- To structure spirits; - To produce and disseminate knowledge; - To dispel any confusion; - To engage in debates and facilitate access to information and analysis.
Former entrepreneurs					- To motivate people; - To shed light on the process of starting a business; - To present their experiences and their testimonies.
Professionals (lawyers, private equity - risk experts - accountants, consultants)					- To move towards the right path; - To simplify procedures and legal documents; - To advise.
Owners of small businesses					- To oversee the projects they are involved in the choice of subjects.

Ultimately, the teaching of entrepreneurship is growing in osmosis between field work and theoretical research. What about problems of its evaluation?

## 2. Problem of evaluating of the teaching of entrepreneurship and critical analysis of methods proposed in the literature

Scanning items below may, on the whole, only try to bring something to lean on for researchers in order to evaluate training towards learning entrepreneurship.

### 2.1. Evaluation is a difficult operation to do

The evaluation of entrepreneurship training seems difficult because many variables such as: people, knowledge, behaviors and efficiency come into play (Paradas, 1999).

- The variable; people or individuals; refers to the objective of detecting potential.
- The variables knowledge and behaviors relate to objective awareness of entrepreneurship (knowledge, know-be, and human characteristics);
- The variable efficiency implies the achievement of success for his company (Paradas, 1999).

Added to this:

- the definition given in this teaching and even the notion of entrepreneurship;
- the level of the entrepreneurial process;
- pedagogical approaches;
- the context of teaching (political orientations and economic imperatives of the country, regional specificity and constraints).

The evaluation requires criteria to be applied.

### 2.2. The evaluation criteria

Various criteria have been proposed by a large number of authors. Indeed, the intention or the preference of students starting a business was seen as an important evaluation criterion. This intention can be measured by qualitative criteria such as:

- the attraction to entrepreneurial careers (is it high or low),
- the interest of students for independent work (is - it strong or weak?)
- the development of an image of entrepreneurs (is -it positive or negative?)
- the desire to start a business (is - it strong or weak?)
- the fact of considering entrepreneurship as an excellent career path (is - it strong or weak?) (Fayolle, A. 1999).

But the development of such intent is contingent on:

- the importance of the quality of courses and programs;
- the importance of the institutional context;
- environmental conditions necessary (Santi, 1994; Chamard, 1989; and Singh, 1990) (in Fayolle, 1999).

However, the density of the courses and programs is not enough and remains a factor to prove (Robinson and Haynes, 1991).

For Bechard (1994), he proposed 51 criteria grouped into three families:

- those which measure the satisfaction of participating in the program;
- those which measure the program's impact on projects;
- those (the majority) which focus on quality management program.

De Vesper and Gartner (1997) have suggested a list of 18 criteria of evaluating the quality of educational programs in entrepreneurship. Among these criteria, we can list in descending order: the number and content of courses, publications for professors, the impact on the economic and social environment, start-ups by students and recent graduates, innovations newly developed (Fayolle & Castagnos, 2006).



In addition, criteria are not operational. An interesting approach sets the criteria over time, taking as a starting point, the period in which instruction is actually issued (Block and Stumpf, 1992). This view shows that some effects may be delayed or postponed. Block and Stumpf (1992) have decomposed the evaluation period into five sub - periods as shown in the following table:

**Table 4: Indicators and periods of setting**

Evaluation period	criteria
During the courses	<ul style="list-style-type: none"> <li>• Number of students enrolled;</li> <li>• Number of courses;</li> <li>• General awareness and interest for the student.</li> </ul>
Few times after the courses	<ul style="list-style-type: none"> <li>• Intentions to act;</li> <li>• Acquisition of knowledge and expertise;</li> <li>• Developing a capacity for self - diagnosis on entrepreneurship.</li> </ul>
Between 0 and 5 years after the courses	<ul style="list-style-type: none"> <li>• Number of business start-ups;</li> <li>• Number of takeovers;</li> <li>• Number of entrepreneurial positions; sought and obtained.</li> </ul>
Between 3 and 10 years after the courses	<ul style="list-style-type: none"> <li>• Sustainability and corporate reputation;</li> <li>• Degree of innovation and ability to change companies.</li> </ul>
Beyond 10 years after the courses	<ul style="list-style-type: none"> <li>• Contribution to the economy and society;</li> <li>• Business performance;</li> <li>• Satisfaction of criteria achieved.</li> </ul>

Source: Block et Stumpf (1992) (in) Fayolle, & Castagnos (2006).

Hence, criteria can be used to evaluate the teaching of entrepreneurship for the first sub - period which can be applied only when dealing with a specialized training in entrepreneurship. In other words, when entrepreneurship is presented as a subject to be taught among others, i.e. a matter to be followed obligatorily by the student, these criteria prove to be ineffective. The criteria, creation and / or resumption of a company, relating to the third sub - evaluation period cannot be considered relevant and measured because of the creative process and negotiation (in the event of recovery), generally, requires much time.

The criterion, sustainability, which can be used during the fourth sub - period between (3 and 10 years) after the course is difficult to measure.

Moreover, it should be added that, after the fifth year after the course, and before starting a business, it will be difficult to accurately determine the relative importance of the teaching of entrepreneurship because several factors come into play: psychological, economic, social and contextual.

Paradas (1999) provides another criterion, the motivation of the person after the training. He believes that the success of this training requires motivation. But he adds that 'the needs of recognition, social recognition also improve motivation'. But it is important to note that motivation is an endpoint: classic, relevant, and in relation to the student, but remains limited.

**Table 5: meaning and criteria for measuring the quality of entrepreneurship education**

Meaning	Criteria
Evaluate the quality of training is the evaluation of its success (the success of training).	<ul style="list-style-type: none"> <li>- The intention or the preference of students to entrepreneurship;</li> <li>- Business creation by former students trained in entrepreneurship;</li> <li>- General awareness/and interest for entrepreneurship;</li> <li>- Developing a capacity for self-diagnosis on entrepreneurship;</li> <li>- The motivation of the person after the training.</li> </ul>

Besides, criteria retained by authors are, either difficult to measure, or static, hence the problem of evaluation levels.

### 2.3. Evaluation levels

Numbers of researchers are looking at a collection of achievements. But this approach remains limited in scope. Paradas (1999), that for him, the traditional evaluations of training should be limited to measure participant satisfaction regarding the acquisition of knowledge and skills, joined Kirkpatrick (1976) on the evaluation process developed by the latter in the 1960s. This approach breaks down the evaluation into four distinct levels of significance evaluation:

- of satisfaction known as ‘hot’;
- of existing knowledge;
- of workplace behavior;
- of the results, which can here be described as a successful business based on business goals.

But it seems that this approach can be followed to assess training in general and therefore, it requires adapting to the nature of entrepreneurship education. But, it should be noted that Paradas (1999) emphasizes that the reliability of the assessment should be based on an imperative way to demonstrate that training must be clearly identified as the only parameter explaining the result. Note that this remark limits the ambition of the measurement of training effects.

The model proposed by Kirkpatrick (1976) has been taken so far by a large number of researchers for the same objective: the assessment of training. It remains limited in scope, among others, because its strict application can help us understand, or why training is effective or how it could be improved. This is why other researchers have provided important insights in this model. Among which include Haccoun et al. (1997) who provided an additional depth by putting forward the measure of four new dimensions:

- the self-efficacy;
- perceived control;
- motivation;
- perceived support, once in work situations.

The evaluation process should measure these four concepts, and the training should take into account the aspirations of everyone. Fayolle & Castagnos (2006) have, on their part, proposed a conceptual framework based on the theory of planned behavior, intended to evaluate educational programs in entrepreneurship. They designed a dynamic measurement tool that is intended. Indeed, for them, ‘the most important outcome of education programs in entrepreneurship is not entrepreneurship but obtaining changes in attitudes and mindsets of students trained’. But this evaluation method has limitations insofar as the intention to undertake can be enhanced or diminished by several other factors that further education, namely: the individual's personality, his family, his background, training and institutional environment. In addition, monitoring of the entrepreneurial intention over time is difficult.

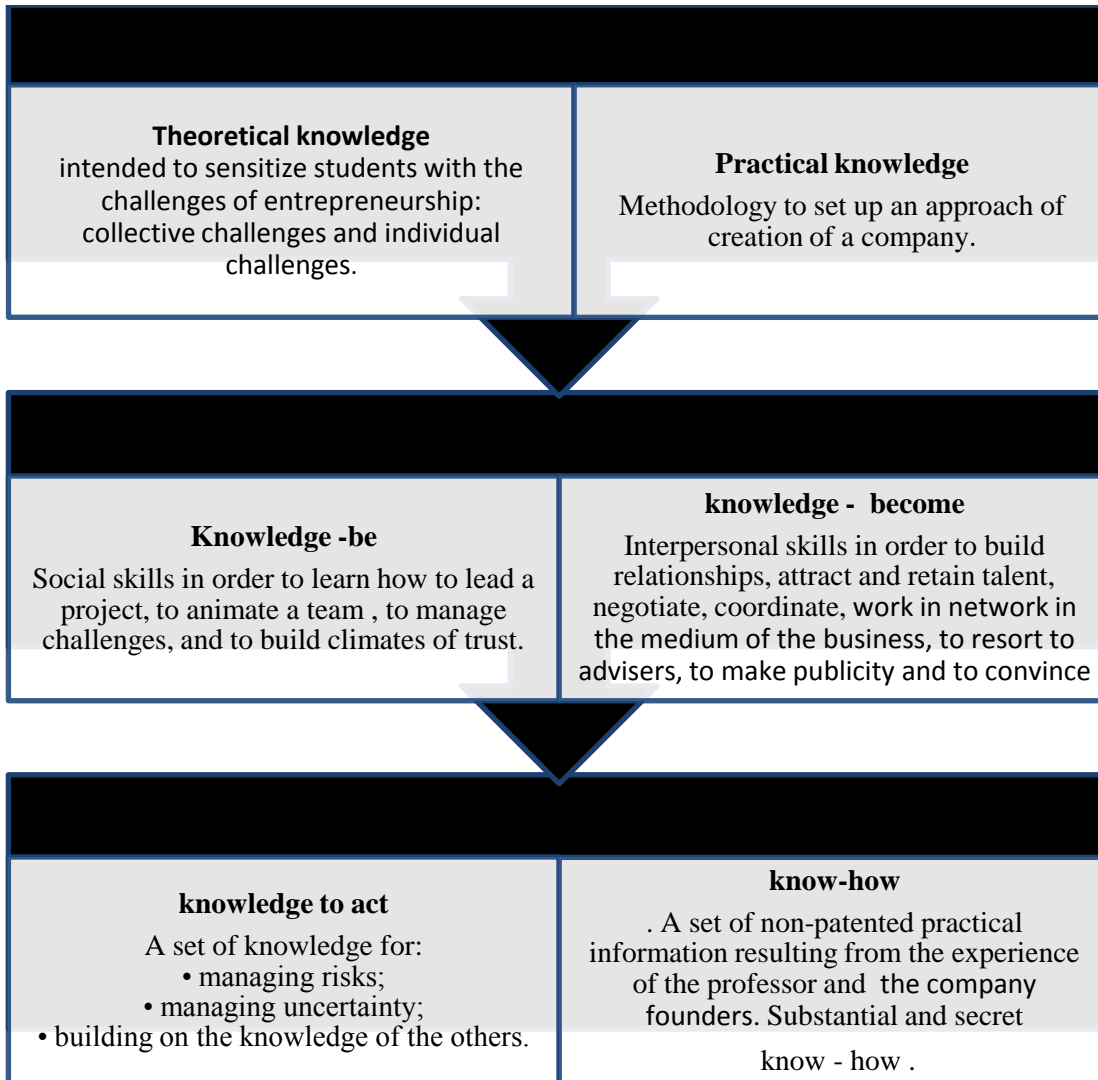
### 3. *Synthesis and research proposal*

The teaching of entrepreneurship is a combination of values, attitudes, mindsets and strategies for entrepreneurship. It aims:

- to initiate future entrepreneurs with the concept of self-employment;
- to identify how to disassemble and evaluate opportunities;
- to develop a business plan;
- to determine the essential resources;
- to, suitably, manage a company, lately created or already installed;
- to analyze the main challenges of entrepreneurship;
- to know the whole of the activities and skills allowing the future entrepreneurs to surmount them;
- to stimulate the creative spirit of the future entrepreneur, while allowing him to know his entrepreneurial potential and to develop an idea of business until the project of company;
- to sensitize the future entrepreneurs to the principal stages constitutive of a business plan while initially allowing them to understand what is a company and to analyze the environments in which it operates, and while allowing them to initiate itself with the necessary tools with the drafting of a business plan.

The study of theory and international practice let us to note that diverse knowledge that can be developed, highlighted by researchers are centered: from theoretical knowledge, know - be and know-how. But, it seems to us that to limit it to these three elements is insufficient, that's why we propose the following scheme with our senses, the different knowledge required by an entrepreneur.

Figure 2: various knowledge to be acquired by the entrepreneur



We can say that, it does not matter, this teaching, acquired as a separate discipline except for whole or a trans-disciplinary matter, provided that the student can acquire maximum knowledge of entrepreneurship. Such teaching should be structured around a lecture by a professor, specialist, in entrepreneurship, reinforced by obligatory or recommended readings, case studies and presentations. This course should take place in a small class size, and it should be also rely on past experience and expert advices, if possible with the opportunity to get students to work on a project, to prepare a business plan, and to think of a way how to manage a newly created company.

On the evaluation of the teaching of entrepreneurship, there is a fundamental issue of complexity. Some researchers have explored the tracks approaching the issue in terms of direct or indirect impacts on economic development. But it should be noted that the criteria developed in the literature are limited in scope, for two main reasons, namely: the difficulty of measuring and limiting the evaluation to some criteria which will be tainted by subjective evaluation.

However, the teaching of entrepreneurship should be considered as a whole which involves several parts and each has a goal to achieve. Achieving the objective implies the success of teaching. It should, also, be considered as a separate discipline or module to teach in a given specialty. The essential task is to determine the issue of using this teaching, and to measure its success, simply proceed through surveys to measure entrepreneurial intentions among students.

- A survey before training, to measure the presence of entrepreneurial intentions among students. If the intention exists, is it strong or weak?
- A survey during the training, to measure entrepreneurial awakening, the degree of sensitizing and the tendency of the intention of the student: is it towards work in a company or creation. If it is towards creation, is it strong or weak?
- A survey after training to measure entrepreneurial intention (is it emerging or developed?) (Immediately after training) on the one hand, and to see what is the entrepreneurial mode chosen, on the other hand (after the one period of the training from three to five years).

Thus, for all the cases, an investigation can be used to measure the intention or the motivation or entrepreneurial awakening in the student, because the objective of the evaluation is sometimes a better understanding - and not reaching a number. The number of companies created can be also regarded as an interesting criterion.

After training and starting a company, it seems useful to note that quantified factual information constitutes an important criterion. But the focus on employment levels or degree of employee satisfaction, policies on the presence or absence of conflict, the increasing number of employment positions, raising the level of productivity, should be reconciled to targets.

To complete this evaluation, we should also use more subjective measures, such as the satisfaction of the entrepreneur and personnel, his ability to negotiate and to advertise for his company, absentee rate, stabilization structures, rules and procedures that form the company, and the rate of survival of the companies (or mortality rate).

Evaluation criteria that we propose are the following.

### I. Criteria related to the goal of teaching

Criteria	Degree of appreciation				
	D	I	A	U	N
• Development of entrepreneurial intention and propensity to undertake.	+				
• Adoption of an operational and committed behavior.			+		
• Development of a winner behavior and organized work.			+		
• Ability to develop a vision to manage the dilemmas and to support the paths of expansion of the firms to be created.				+	
• Capacity to be able to change its current rhythm in order to follow the change.				+	
• Aptitude to modify the current situations to create differential.		+			

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

### II. Criteria related to the deployed pedagogy

Criteria	Degree of appreciation				
	D	I	A	U	N
• Relevance of the learning technique.		+			
• Consistency of the deployed pedagogy with the objectives, the background of the student and the postulates of the environment.	+				
• Stimulation of the creative imagination of the student.			+		
• Facility of understanding of the creation and resumption of company.		+			
• Valorization of the behavior of taking risk.				+	
• Concretization of the decisional spirit.				+	

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

**III. Criteria related to the concerned public**

**III. 1. Criteria related to the economic public authority**

Criteria	Degree of appreciation				
	D	I	A	U	N
• Economic development of a country.		+			
• Reduction in unemployment rate		+			
• The number of companies created by breaths formed with the entrepreneurship.		+			

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

**III. 2. Criteria related to the universities, schools, training institutes**

Criteria	Degree of appreciation				
	D	I	A	U	N
• Promotion of the entrepreneurship.	+				
• Promotion of the spirit to undertake.	+				

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

**III. 3. Criteria related to the professors or trainers**

Criteria	Degree of appreciation				
	D	I	A	U	N
• Capacity of conviction.		+			
• Ability to combine both heuristic aspects and analytical aspects.	+				
• Clearness of the message.		+			
• Quality of the demonstration.		+			

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

**III. 4. Criteria related to the learners or students**

Criteria	Degree of appreciation				
	D	I	A	U	N
• Degree of development of the entrepreneurial reflex.	+				
• Degree of development of creative and innovating faculties.		+			
• Justification of the issue of the decision choice (towards creation, recovery or management).			+		
• Control key tools and techniques.			+		
• Progression of knowledge.		+			
• Assiduity		+			
• Motivation		+			
• Satisfaction.	+				
• Class participation		+			
• Change of attitudes, feeling, belief and intention towards creation, the recovery or management.	+				
• Desirability (towards the creation of a company)	+				
• Ability to undertake	+				
• Ability to develop an idea of business until the project of company	+				
• Level of sensitizing at the stages of the entrepreneurial process	+				
• Creation or resumption of company	+				
• Development of the spirit of achievement and risk appetite	+				

**D: Determinant, I: Important, A: Appreciable, U: useful, N: Neutral**

Summing up, two ideas deserve to be highlighted:

**First idea:** the success of the teaching of entrepreneurship depends on the contribution of each factor. In other words, the success of the teaching of entrepreneurship =  $\alpha$  (fixed objectives) +  $\beta$  (deployed pedagogy) +  $\lambda$  (concerned public) +  $\varepsilon$

If  $\alpha = 0$ , success will correspond to the relevance of deployed pedagogy, the satisfaction of the concerned public and other contextual factors, which is not the characteristic of a successful teaching.

If  $\beta = 0$ , success will correspond to the achievement of the fixed objectives, to the satisfaction of the concerned public and other contextual factors, which is not the characteristic of a successful teaching.

If  $\lambda = 0$ , success will correspond to the achievement of the objectives (with this teaching), to the relevance of deployed pedagogy, and other contextual factors, which is not characteristic of a successful teaching.

If  $\alpha = 0$ ,  $\beta = 0$ , and  $\lambda = 0$ , success will correspond to the contextual factors, which does not coincide with the issue of this research.

If  $\varepsilon = 0$ ,  $0 < \alpha < 1$ ,  $0 < \beta < 1$  and  $0 < \lambda < 1$ , success will correspond to a relevant combination of the three elements: achievement of the fixed objectives, relevance of deployed pedagogy, and the satisfaction of the concerned public. Therefore, it is necessary to find the right mix for the success of teaching.

**Second idea:** the success of the teaching of entrepreneurship can correspond finally to the birth:

- of an entrepreneur;
- of a manager;
- of an intrapreneur.

The following table can also be used for assessing the success of the teaching of entrepreneurship:

**Table 7: appreciation of success of the teaching of entrepreneurship**

Success of the teaching of entrepreneurship	Appreciation	Weighting	Explanation
Birth of an entrepreneur	Permanent criterion	1	-
Birth of a manager	Provisional criterion	$0 < p < 1$	Tributary of other courses in addition to those of entrepreneurship
Birth of an intrapreneur	Random criterion	$0 < p < 1$	Tributary of the will of the individual, the social climate within the company and the enthusiasm of the head office

Finally, our research invites researchers, experts, and managers to intervene in the experimentation of these criteria in order to justify their importance degree. We think that the evaluation of the teaching of entrepreneurship can support creation of a favorable context for creation of companies, and development of entrepreneurial spirit to undertake among students. This research pleads thus, for deepening of the bonds between the various aspects of entrepreneurship and the placement of the indicators of measurement.

## References

- Albert, P., M. Bernasconi, and F – X. Boucand. 1999. L'enseignement de l'entrepreneuriat au CERAM : une histoire avec Sophia Antipolis, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 6-17.
- Asquin, A., M. Polge, and E. Reynaud. 1999. L'entrepreneur créateur de ressources ? Une contribution empirique, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS: 18-30.
- Ayadi A., J. Arlotto and P. Jourdan. 2005. Freins et performances de l'entrepreneuriat dans les entreprises innovantes: une étude exploratoire, 4<sup>ème</sup> congrès de l'Académie de l'Entrepreneuriat, 24 – 25 novembre, Sénat, France : 1-23.
- Barzucchetti., S. and J-F. Claude. 1995. *Evaluation de la performance de l'entreprise*, Editions Liaisons. 140 p.
- Bécharde, J. P. 1994. Les grandes questions de recherche en entrepreneurship et éducation, Cahier de recherche HEC Montréal, n°94 – 11 : 52 p.
- Bécharde, J - P. 1988. L'enseignement en entrepreneurship à travers le monde : validation d'unetypologie, Management international, Fall 1988; vol. 3, n° 1: 25-34.
- Bécharde, J - P. 2000. Méthodes pédagogiques des formations à l'entrepreneuriat: résultats d'une étude exploratoires, Gestion 2000, mai – juin 2000, n°3 : 165-178.
- Bellais, R. and B. Laperche. 2000. Entrepreneurs innovateurs, capital – risque et croissance des grandes entreprises, Innovations, Cahiers d'économie de l'innovation, n°12, Editions l'Harmattan.
- Béranger, J., R. Chabbal and F. Dambrine. 1998. Rapport sur la formation entrepreneuriale des ingénieurs, Ministère de l'économie, des Finances et de l'industrie, octobre 131 p.
- Blier, M. 1999. De la mission première d'une école d'ingénieurs, l'Ecole des Mines de Douai à l'accueil de créateurs d'entreprises, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 31-42.
- Boncler, J. and R. M. Hlady. 2004. L'entrepreneuriat en milieu solidaire : un phénomène singulier, Revue de l'Entrepreneuriat, vol. 3, n°1 : 21-32.
- Bouteiller, C. and H. Colas. 1999. Mise en œuvre d'un enseignement obligatoire de création – développement d'entreprise pour un public volumineux: une démarche sympathique, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 43-52.
- Boutillier, S. and D. Uzinidis. 1999. Entrepreneur, esprit d'entreprise et économie : un enseignement (supérieur) basé sur le triptyque structures – comportements – performances, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 53-67.
- Brechet, J-P. 1994. Du projet d'entreprendre au projet d'entreprise, Revue Française de Gestion, Juin – Juillet- Août, n° 99 : 5-14.
- Bruyat, C. 1994. Contributions épistémologiques au domaine de l'entrepreneuriat, Revue Française de Gestion, n°101, novembre – décembre : 87-99.
- Bruyat, C. 1999. Une démarche stratégique pour aider le créateur d'entreprise à évaluer la faisabilité de son projet, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 68-82.
- Bruyat, C. 2001. Créer ou ne pas créer ? Une modélisation du processus d'engagement dans un projet de création d'entreprise, Revue de l'Entrepreneuriat, vol. 1, n°1 : 25-42.
- Carrier, C. 1993. Stratégies intrapreneuriales dans les petites entreprises, Revue Française de Gestion, septembre – octobre : 96-103.
- Carrier, C. 2000. Défis, enjeux et pistes d'action pour une formation entrepreneuriale renouvelée, Gestion 2000, mai – juin, n°3 : 149-163.
- Carrier, C. and R. Jacob. 1999. Un mariage université – entreprises pour une formation en gestion adaptée aux PME, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 83-93.
- Chamard, J. 1989. Public education : its effect on entrepreneurial characteristics », JSBE, 6(2) : 23-30.
- Cossette, P. 2003. Méthode systématique d'aide à la formulation de la vision stratégique: illustration auprès d'un propriétaire – dirigeant, Revue de l'Entrepreneuriat, vol. 2, n°1 : 1-18.
- Cunat, F. and Y. Giry. 1999. Pour lire l'ancrage territorial des créateurs d'entreprise, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 94-106.

- Daval, H., B. Deschamps and S. Geindre. 1999. Proposition d'une grille de lecture des typologies d'entrepreneurs, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 125-149.
- De Carlo, L. et S. Chevrier. 1999. Comment former quels entrepreneurs ?, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 142-158.
- De la ville, V- I. 2001. L'émergence du projet entrepreneurial : apprentissages, improvisation et irréversibilités, Revue de l'Entrepreneuriat, vol. 1, n°1 : 43-60.
- Desai, H., H-B. Ding and D. Fedder. 2010. Teaching scientists entrepreneurship: a dialectical approach. Journal of Enterprising Culture, vol. 18, n°2, june: 193-203.
- Deschamps, B. 1999. L'ingénieur repreneur d'entreprise : un enseignement à développer Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 159-168.
- Deschamps, B. 2003. Reprise d'entreprise par les personnes physiques (RPP): premiers éléments de réponse à la question de son intégration dans le champ de l'entrepreneuriat, Revue de l'Entrepreneuriat, vol. 2, n°1: 59-71.
- Dolmière, D. et B. Vacher .1999. Former des entrepreneurs en France. Une expérience dans une école d'ingénieurs, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 169-179.
- Drucker, P. F. 1985. *Les entrepreneurs*, L'Expansion /Hachette/Editions Jean – Claude Lattès, Paris.
- Fayolle, A. and T.Versraete. 2005. Paradigmes et entrepreneuriat, Revue de l'Entrepreneuriat, Vol. 4, n°1. [http://asso.nordnet.fr/r-e/RE0401tv\\_af.pdf](http://asso.nordnet.fr/r-e/RE0401tv_af.pdf).
- Fayolle, A. 1994. La trajectoire de l'ingénieur entrepreneur, Revue Française de Gestion, novembre – décembre : 113-125.
- Fayolle, A. 1999. Orientation entrepreneuriale des étudiants et évaluation de l'impact des programmes d'enseignement de l'entrepreneuriat sur les comportements entrepreneuriaux des étudiants des grandes écoles de gestion française. Etude exploratoire, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS: 180-189.
- Fayolle, A. 2000. L'enseignement de l'entrepreneuriat dans les universités françaises : analyse de l'entrepreneuriat et propositions pour en faciliter le développement, Rapport rédigé à la demande de la Direction de la Technologie du Ministère de l'Education Nationale de la Recherche et de la Technologie, France, Mai : 101p.
- Fayolle, A. 2000. Processus entrepreneurial et recherche en entrepreneuriat : les aspects d'une approche conceptuelle et empirique du domaine, Vème congrès international Francophone sur la PME, 25 – 26 et 27 octobre, Lille : 1-26.
- Fayolle, A. 2000. L'enseignement de l'entrepreneuriat dans le système éducatif supérieur français: un regard sur la situation actuelle, Gestion 2000, mai – juin 2000, n°3: 77-95.
- Fayolle, A. 2001. D'une approche typologique de l'entrepreneuriat chez les ingénieurs à la reconstruction d'itinéraires d'ingénieurs entrepreneurs, Revue de l'Entrepreneuriat, vol. 1, n°1 : 77-98.
- Fayolle, A. 2001. Les enjeux du développement de l'enseignement de l'entrepreneuriat en France, Rapport pour la Direction de la Technologie du Ministère de la Recherche, Contrat Ministère de la Recherche – ESISAR – INPG, Décision n° 00 k 54 /2, 12 mars : 58 p.
- Fayolle, A. 2003. Quelques idées et suggestions pour étudier le processus entrepreneurial, Revue des Sciences de Gestion, Direction et Gestion, n° 200 : 15-31.
- Fayolle, A. and J – C. Castagnos. 2006. Impact des formations à l'entrepreneuriat: vers de nouvelles méthodes d'évaluation, Management international, été 2006, vol. 10, n°4 : 43-52.
- Filion, L J. 1997. Le champ de l'entrepreneuriat : historique, évolution, tendances , cahier de recherche n° 97 – 01. Janvier 1997, Ecole des Hautes Etudes Commerciales (HEC), Montréal: 129-172.
- Filion, L J. 1997b. Le métier d'entrepreneur », cahier de recherche n° 97 – 10. Ecole des Hautes Etudes Commerciales (HEC), Montréal : 29-47.
- Filion, L J. 2000. Carrières entrepreneuriales de l'avenir, espace de soi et essaimage, cahier de recherche n° 2000 – 04. Janvier 1997, Ecole des Hautes Etudes Commerciales (HEC), Montréal : 46 p.
- Fonrouge, C. 1999. Formation des créateurs d'entreprise à la stratégie : pour une description des facteurs cognitifs agissant à chaque étape de la décision, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 193-201.
- Gabrier, H. and J-L. Jacquier. 1994. *La théorie moderne de l'entreprise. L'approche institutionnelle*, Editions Economica, 321 p.



- Goglio, K. 2003. L'entrepreneur porteur de fausses représentations chez J- B. SAY, Economies et Sociétés, Série Economica, « histoire de la pensée économique », n° 33, 12 : 2101-2120
- Goujet, R. 2005. L'enseignement de l'entrepreneuriat en formation initiale : les preuves d'un doute, 4<sup>ème</sup> congrès de l'Académie de l'Entrepreneuriat, 24 – 25 novembre, Sénat, France : 1-21.
- Goujet, R. and S. Marion. 1999. Développer l'esprit d'entreprendre : bilan de quatre années d'expérience auprès d'étudiants en première année d'École Supérieure de Commerce à E. M. Lyon, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 214-233.
- Greiner, C. 1999. Réflexion sur les synergies entre Ecole Supérieure de Commerce et pépinière d'entreprises : le cas de l'ESC Troyes, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 202-213.
- Hernandez, E – M. 1999. Enseigner l'entrepreneuriat à une population étudiante : possibilités et limites, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 256-263.
- Hernandez, E – M. 2002. De l'entrepreneuriat au modèle entrepreneurial, Revue Française de Gestion, vol. 28, n°138, avril – juin : 99-107.
- Hernandez, E – M. and L. Marco. 2002. L'entrepreneuriat et les théories de la firme, Revue Française de Gestion, vol. 28, n°138, avril – juin: 127-144.
- Hernandez, E – M. 1999. Le processus entrepreneurial. Vers un modèle stratégique d'entrepreneuriat, Editions l'Harmattan.
- Hillairet, D. 2000. Innovations ex nihilo et entrepreneuriat dans le secteur sports – loisirs, Innovations, Cahiers d'économie de l'innovation, n°12, Editions l'Harmattan.
- Hjorth, D. 2011. On provocation, education and entrepreneurship. Entrepreneurship & Regional Development, vol. 23, n°1-2, January : 49-63.
- Isrich, R. D. and M. P. Peters. 1991. *Entrepreneurship. Lancer, élaborer et gérer une entreprise*, Economica, 585 p.
- Kailer, N. 2009. Entrepreneurship education: empirical findings and proposals for the design of entrepreneurship education concepts at universities in German – speaking countries. Journal of Enterprising Culture, vol. 17 , n°2, June: 201-231.
- Koffi, E. F. and al. 1999. Les dispositifs d'aide à la création d'entreprise. Etude comparative portant sur quatre pays, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 234-255.
- Laperche, B. and R. Bellais. 2001. Entrepreneurs, capital – risque et croissance des grandes entreprises, problèmes économiques n° 2. 704 – 2. 705, 14 – 21 mars :704-705.
- Lavoie, D. 1988. Créativité, invention, entrepreneurship, intrapreneurship – où est la différence ?, Revue Internationale de Gestion, Septembre : 1-35.
- Leger – Jarniou, C. 1999. Enseigner l'esprit d'entreprendre à des étudiants : réflexions autour d'une pratique de 10 ans, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 264-274.
- Moviatt B. and P. P. Mc Dougall. 2000. International entrepreneurship : the intersection of research paths, Academy of Management Journal, vol. 43, n° 5. : 902- 906.
- Marchesnay, M. 1999. Diversité des pédagogies de l'entrepreneuriat : l'exemple de Montpellier, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 275-286.
- Marchesnay, M. 2000. L'entrepreneur face à ses risques, Innovations, Cahiers d'économie de l'innovation, n°12, Editions l'Harmattan.
- Messeghem, K. 2002. Peut-on concilier logiques managériales et entrepreneuriales en PME?, la Revue des Sciences de Gestion, Direction et Gestion n°194 :35-49.
- Papanayotou, K. and N. Zagouras. 1998. La petite unité innovante en Grèce, Innovations, Cahiers d'économie de l'innovation, n°8, Editions l'Harmattan.
- Paradas, A. 1999. Réflexions sur l'évaluation des formations à l'entrepreneuriat », Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS :285-295.
- Paturel, R. 2004. Les choix méthodologiques de la recherche doctorale française en entrepreneuriat. Remise en cause partielle d'idées préconçues, Revue de l'Entrepreneuriat, vol. 3, n°1 : 47-67.

- Paturel, R. 2005. Pistes de réflexions en vue de l'élaboration d'une grille de positionnement des pratiques de l'entrepreneuriat, 4<sup>ème</sup> Congrès de l'Académie de l'Entrepreneuriat, 24 – 25 novembre 2005, Sénat, France : 1-25.
- Philippart, P. 2003. Le transfert de la recherche publique par le chercheur fonctionnaire: le cas de la loi sur l'innovation, *Revue de l'Entrepreneuriat*, vol. 2, n°1 : 43-57.
- Pincon, M. and M. Pincon – Chariot . 2002. Nouveaux entrepreneurs : naissance d'une vocation, problèmes économiques, n° 2. 765, 12 janvier.
- Romano, J. 1998. La construction sociale de l'innovation : une nécessaire mise en débat, *Innovations, Cahiers d'économie de l'innovation*, n°8, Editions l'Harmattan.
- Sabonnadière, J-C, M. Vernet and S. Humbert. 1999. Module création d'activité et création d'entreprise à l' I.N.P.G. (Institut National Polytechnique de Grenoble ), Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 296-307.
- Sammut, S. 1999. Création d'entreprise : business plan et grille d'analyse systémique, deux outils complémentaires, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 308-320.
- Sammut, S. 2000. Démarrage de la petite entreprise, crucialité, grille d'analyse et scénarios, *Innovations, Cahiers d'économie de l'innovation*, n°12, Editions l'Harmattan.
- Sammut, S. 2001. Processus de démarrage en petite entreprise: système de gestion et scénarios, *Revue de l'Entrepreneuriat*, vol. 1, n°1 : 61-76.
- Santi, M. 1994. L'entrepreneuriat : un défi à relever, (in) l'école des managers de demain (ouvrage collectif des professeurs du groupe HEC), *Economica*, (in) Fayolle, A. 1999. Orientation entrepreneuriale des étudiants et évaluation de l'impact des programmes d'enseignement de l'entrepreneuriat sur les comportements entrepreneuriaux des étudiants des grandes écoles de gestion française. Etude exploratoire. Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 401-422.
- Saporta, B. 1994. La création d'entreprises : enjeux et perspectives, *Revue Française de Gestion*, novembre – décembre : 74-86.
- Saporta, B. 2003. Préférences théoriques, choix méthodologique et recherche française en entrepreneuriat : un bilan provisoire des travaux entrepris depuis dix ans, *Revue de l'Entrepreneuriat*, vol. 2, n°1 : 1-14.
- Saporta, B. and T. Verstraete. 1999. Réflexions pour une pédagogie de l'entrepreneuriat dans les composantes en sciences de gestion des universités françaises, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 321-335.
- Schied – Bienfiat, N. 1999. Du projet de création comme pratique pédagogique : témoignage autour d'une expérience, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 336-354.
- Senicourt, P. and T. Verstraete. 2004. Apprendre à entreprendre. Typologie à quatre niveau pour la diffusion d'une culture entrepreneuriale au sein du système éducatif, *Reflets et perspectives*, XXXIX, 4 : 131-140.
- Singery, J. and al. 1999. Accompagnement à la création ou à la reprise et formation au management d'une très petite entreprise : un partenariat original Université – Métiers – Région – Etat, une ingénierie adaptative, une formation diplômante, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS : 355-368.
- Singh, J. B. 1990. Entrepreneurship education as a catalyst of development in the third world, *JSBE*, 7(4), 56-63.
- Thibault, R. and al. 1999. L'enseignement de l'entrepreneuriat technologique dans une école d'ingénieurs. Réflexions sur une expérience pédagogique, Actes du premier congrès de l'Académie de l'Entrepreneuriat, Editions le Pôle Universitaire Européen Lille Nord - Pas de CALAIS: 368-381.
- Tounes, A. 2006. L'intention entrepreneuriale des étudiants : le cas français, *la Revue des Sciences de Gestion, Direction et Gestion* n°219, mai – juin : 27-33.
- Zahra, S A. and M. Wright. 2011. Entrepreneurship's next act. *Academy of Management PerspectiveS*, November: 67-83.