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## TRAINING AND LEADING THE FUTURE ENTREPRENEUR: A FIELD EXPERIENCE

Session: EDUCATING FOR INNOVATION (educate / train for entrepreneurship)

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### Abstract

Can entrepreneurship be taught? How can we design and implement a training course in order to develop and support entrepreneurial attitudes and skills? What are the opportunities offered by an Entrepreneurship course within a university programme of studies? What are the constraints in implementing it and how could we assess its effectiveness?

These questions lead to an interesting ground of research, in pursuit of an empirical way for Entrepreneurship development. This paper aims at presenting a field experience that is an entrepreneurship course designed and implemented at Carlo Cattaneo University (Italy).

### **1. INTRODUCTION**

Can we teach someone to be an entrepreneur? While the role played by entrepreneurship in economic growth and regional development is widespread recognised, the debate on whether entrepreneurs can be taught is still lively (Garavan & O'Cinneide, 1994). Moreover, assuming that education might have a central role in identifying and nurturing those who can become entrepreneurs, a critical issue is emerging and concerns on how entrepreneurship can be thought. In fact, traditional methods of teaching entrepreneurship are beginning to give the way to new methods that are arising from an increased understanding of entrepreneurship. As suggested by Davies and Gibb (1991), using traditional educational methods and approaches to develop entrepreneurs could be seen as "to drive using the rear mirror".

Our belief is that the educational system can play an active role in fostering entrepreneurship, through the creation of an environment that enhances entrepreneurial activities. However a gap exists between the Italian economic environment, based on an industrial tissue of small and medium firms where entrepreneurship is a rooted tradition, and the Italian academic context that still tends to lay on offering traditional programmes. In other words, training on entrepreneurial matters is almost missing and new pedagogical methods that are best suited to an entrepreneurial learning style are not so widespread.

Moving from this debate and from the recent trends in entrepreneurship education and research, this paper mainly aims at presenting a field experience, that is an entrepreneurship course designed and implemented within an academic context at Carlo Cattaneo University (Italy). We will provide a brief overview of the phenomenon of entrepreneurship education in order to draw a conceptual framework where to set the case study here discussed <sup>1</sup>. In particular, our focus will be the description of the background and the academic setting of the course, its the design process, its structure, the teaching approach adopted, the results and the goals achieved. Finally, some concluding remarks will be developed, in order to assess the effectiveness of the course.

## 2. A BRIEF OVERVIEW ON ENTREPRENEURSHIP EDUCATION

Despite entrepreneurship is not new, entrepreneurship education has not been so diffused as nowadays (Vesper & Gartner, 1997). It is, in fact, a relatively young and emerging discipline. The last decade has seen a dramatic rise in the number and status of entrepreneurship programs in schools of business and management. The popularity of entrepreneurship courses has increased dramatically among both graduate and undergraduate students (Gartner & Vesper, 1993). Alumni and external constituencies of schools of business have generally been supportive of the development of entrepreneurship programs, and in fact in many instances it has been the demands of these constituencies that have led to the creation or expansion of entrepreneurship programs within these schools. The growth in entrepreneurship programs has been fostered by an increase in the popularity of entrepreneurship, an increase in the status accorded to entrepreneurship in the larger economy. Moreover, the growing interest towards entrepreneurship education is witnessed by the huge amount of many publications included in books, journals, proceedings and research reviews that have vastly considered this topic. While entrepreneurship education has grown within U.S. business schools context<sup>2</sup>, interest in this discipline in Europe is relatively new but it is rapidly emerging (Dana, 1992).

Despite the increase in popularity within the field, there has also been considerable resistance from the faculties of many institutions to the expansion of entrepreneurship programs. Faculties outside the

<sup>&</sup>lt;sup>1</sup> It is beyond the scope of this paper to review the whole economic literature on entrepreneurship education.

 $<sup>^2</sup>$  Myles Mace offered the first course in entrepreneurship at Harvard Business School in 1947. Peter Drucker then began offering courses at NYU in 1953. Babson College offered the first undergraduate major in entrepreneurship in 1968 and USC offered the first entrepreneurship major at the MBA level in 1972. From these humble beginnings the field has grown to the point where there are more than 400 U.S. and international schools offering courses in entrepreneurship (Finkle, 2001).

field have been, and many remain, very sceptical about the validity of entrepreneurship as an academic field, the quality and rigor of entrepreneurship research and the need to hire academic faculty to teach and research in the field. The results of some recent studies (Finkle, 2001) have shown that both the demand and the supply of entrepreneurship faculty have increased spectacularly during the last decade. Moreover, the field has clearly made significant progress toward being institutionalised within school of business and management.

Hence, according to former considerations that draw entrepreneurship education as relatively young phenomenon, research studies in entrepreneurship have begun to look at the education issue more deeply. The feasibility of actually teaching entrepreneurship has been the early focus of research on this field (e.g. Vesper, 1971). Then the focus has been shifted to subject contents of entrepreneurship courses (e.g. Vesper, 1988). Moreover, over the last twenty years some authors conducted surveys on entrepreneurship courses, on one way, in order to analyse and compare them, on the other hand, aiming at finding out what topics might comprise a program in entrepreneurship as well as other elements that might impact the quality of an entrepreneurship program, such as faculty activities, community outreach and so on<sup>3</sup>.

However, research is still fragmented and it is developing around concepts with a descriptive orientation. Following what happened in the field of business education in its early stages, the research focus of entrepreneurship education tends to lay on (Alberti, 1999):

- course contents and their appropriateness (Hills, 1988; Vesper, 1986);
- screening of possible course concepts and their usefulness (Sexton & Bowman, 1984; Vesper, 1988);
- efficacy of pedagogical approaches, learning process and environments (McMullan & Long, 1983; Sexton & Bowman, 1987 and 1998; Fiet, 2000).

Anyhow, findings from these researches seem to indicate a shared consensus on the fact that entrepreneurship can be taught to some extent and, moreover, that teaching methods may be enhanced through active participation. There seems to be also a preliminary evidence that entrepreneurship can be positively influenced by educational programs both at the individual and society level (Gorman & Hanlon, 1997). This latter aspect has been largely experimented by the field experience carried out by several Universities and institutions like those involved in the Alfa Columbus Project, successively discussed, from which the idea to design an Entrepreneurship Course at Cattaneo University has emerged.

## 3. A FIELD EXPERIENCE AT CATTANEO UNIVERSITY: THE BACKGROUND AND THE ACADEMIC CONTEXT IN DEVELOPING AN ENTREPRENEURSHIP COURSE

#### 3.1. The Alfa Columbus Project

The idea of designing and implementing an entrepreneurship course at Cattaneo University rose from the participation of Cattaneo University at the Columbus Alfa Project, started in the 1998. This has leaded our University to collaborate with several European and Latin American Universities. The aim was to develop a prototype of course and to create a network among the Institutions of the Alfa Group in order to facilitate exchange of teachers, researchers and students.

<sup>3</sup> For an extensive overview of course and programs in entrepreneurship, see the annual research reports realised by Vesper since 1974 (Vesper, 1993).

The Alfa Project belongs to the wider Columbus Programme<sup>4</sup>. It was launched in 1987 on the initiative of the European Conference of Rectors (Cre) and a group of Latin American academic institutions, with the main goal to promote the institutional development of university by improving management processes and structure essential for implementing long-term strategies and ensuring high performance standards. It proposed to obtain this objective by fostering multilateral cooperation between academic institutions.

As mentioned above, the Alfa Project is a 2-year development programme, funded by Columbus, that aims at building university network around very specific themes among which developing "entrepreneurship and small business development" in the curriculum. The project started with a first meeting held in Merida (Mexico) that brought the network together for few days within plenary sessions bearing on general topics that have enhanced the network's comprehension of problems and issues relating to entrepreneurship education. The network of institutions that mainly contributed to the project was composed by the following universities: University of Goteborg - School of Economics; University of Ulster at Jordanstown; Universidad de Sao Paulo; Pontificia Universidad Catolica del Perù; Università Carlo Cattaneo (Italy); Groupe HEC (France), ITESM (Mexico). Along the 2-years period, during which other meetings and plenary sessions have been held (e.g. in Paris in 1999), the contribution of each member was addressed towards specific topics mainly concerning the design process of a entrepreneurship course, the objectives of such a course, its contents and structure, the teaching methods and learning process to be implemented, the characteristics and profile of the teaching staff, the support materials to be adopted, the audiences to be addressed, the selection process to be followed. It has been carried out also starting from the analysis of the contents and the structures of the courses already running in some of the institutions involved in the project.

The Alfa Group came out with a sort of a prototype of an entrepreneurship course, a general and comprehensive framework shared by the members of the network and to be settled in each Country and academic context, as Cattaneo University did. Moreover, because designing, structuring and starting such a course requires large amounts of time and efforts, it has been critical to schedule visits to those institutions that had already run something about these training matters.

## 3.2 The Entrepreneurship Research and Development Centre (ERDC)

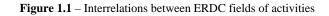
As suggested by some authors (Hood and Young, 1995), in order to achieve a maximum level of effectiveness, an entrepreneurship education program should be linked to a clearly defined strategy so that formal objectives, strategic, operating plans and programs can be defined. According to this perspective the entrepreneurship course is part of a more comprehensive academic project. In fact, in contrast with the rich entrepreneurial tissue characterizing Italian productive sector, the Italian academic environment is showing an inconsistent gap concerning topics on entrepreneurship. Moving from this consideration and from the role Cattaneo University aims at playing within the territory<sup>5</sup>, the idea of developing the *Entrepreneurship Research and Development Centre* (ERDC) has emerged. It represents a setting where to concentrate resources and efforts that move towards activities supporting the development of economical tissue of the area Cattaneo University is addressing to. The experience of the first two years of the entrepreneurship course at Cattaneo University and the shared experience within then international context have nurtured and fostered this initiative.

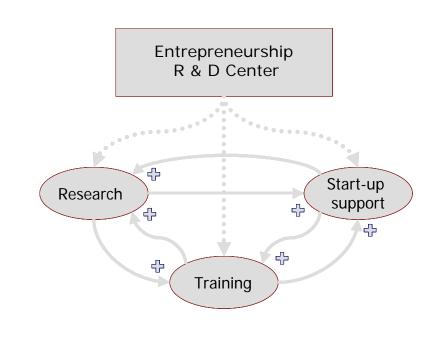
The objectives of the ERDC could be summarized as following: carrying out research activities concerning the more innovative topics on entrepreneurship, in order to acquire an international visibility and status; becoming a bridge between entrepreneurial environment and academic context in order to act as an incubator of business ideas rose from the training activity carried out by the ERDC within University or in the territory; starting relational network with firms, entrepreneurs, Venture Capitalists, Business Angels and with other Institutions that deal with entrepreneurship matters, in order to provide new ventures with a concrete support.

<sup>&</sup>lt;sup>4</sup> Columbus is the acronym of Collaboration in University Management: a Bridge between Universities and Scholars.

<sup>&</sup>lt;sup>5</sup> Cattaneo University was founded in 1991, thanks to the efforts of a group of entrepreneurs of the business association of local entrepreneurs (UNIVA) of the Province of Varese, located in the north of Italy.

In order to gain the goals previously settled, the activity of the ERDC is run along the following four mainstreams: training and teaching activities, research, publications, support to the start-up of new ventures, seen as the natural consequence of the whole cycle of activities carried out by the ERDC. In fact, a tight interrelation between these activities exists (see figure 1): research activity allows keeping knowledge and initiatives constantly up-to-date, towards both training and support activities for the start-up. On the other hand, the training context represents a potential field where new business ideas can rise. Meanwhile, activities supporting the start-up of new ventures as well as training initiative can engender new questions and requirements which research activity is asked to reply. Finally, the support to the start-up allows revealing possible needs of new ventures that could be met by the training activity itself.





Source: Authors' elaboration

As previously showed, the entrepreneurship course designed at Cattaneo University is a course scheduled at the second semester of the last year of the academic program of studies, but operates within a comprehensive framework that is the ERDC. Moreover such a course is only one of a broader spectrum of other training initiatives that the ERDC aims at promoting: one Master in Entrepreneurship addressed to post-graduated students, courses for executives, courses for young people with entrepreneurial aspirations, a Phd Entrepreneurship Program. Anyhow, it is beyond the scope of this paper to present the whole ERDC training offer. On the other hand, our aim is to focus on the experience carried out during the past two editions of the course and to present the main features of the course itself.

## 4. THE ENTREPRENEURSHIP COURSE: STRUCTURE, CONTENTS, LEARNING PROCESS AND PEDAGOGIES

#### 4.1 Structure, contents and outcome of the course

The entrepreneurship development course is a six-month course that foresees 60 hours classes and about 40 hours of group work, to reach a total amount of about 100 hours. The course is settled in the second semester of the last year of the academic courses programme. The course has been designed in order to develop a longitudinal approach to Entrepreneurship training. For this purpose it has been taught as an inter-faculty course. It means that the enrolment is open to students coming from the three different Faculties running at Carlo Cattaneo University: Business Administration, Business Law and Engineering. The course has been intentionally designed as an interfaculty course and it is not simply a faculty course opened to other faculties' students. This has leaded to a cross-fertilization of knowledge and experience among students that have attended the past editions of the course and among the teaching staff that has been involved. We can state that such an interdisciplinary character could be recognised as a first important feature of the course.

The design and the structure of the course move from the assumption that entrepreneurship is a behavioural characteristic of persons requiring entrepreneurial skills and qualities. According to Gartner (1989), "the entrepreneur is not a fixed state of existence, rather entrepreneurship is a role that individuals undertake to create organizations". It is worth that, unlike the traditional management courses, the focus is not on how to manage more effectively and efficiently but on creating a mind set - a more artful, insightful and innovative mentality - where uncertainty is exploited emphasising creativity, vision and innovation in the pursuit of new opportunities. In other words, what is needed is then how to assist individuals in order to lead and use their attitudes. In these terms the course could also be seen as a business lab. In particular students participating in the course work on their own business ideas, risen from the initiative of single students composing the class. This could be recognised as a second important feature characterising the course. In other terms, students that came out with a their own original business idea that they would like to pursue, present and debate it within a lecture intentionally and appropriately structured for this purpose. Within such a "guided context" each student that has discussed its business idea try to attract and channel other students towards his or her business idea. Following such a process, students tend to form by themselves groups that would work on their own business idea.

After the business idea has been consolidated, each group is asked to develop and write a business plan. This is an on-going process and it underlines the whole proceeding of the course. The purpose of developing a business plan is to be considered as a focusing device in order to minimise the trial and error approach and to better analyse every detail of the venture. In fact, to succeed as an entrepreneur one needs not only attitude and vision but also the ability to attract investors, market products, satisfy customers, structure complex financing, oversee operations, and manage people.

For what concerns the structure and the contents of the course it is possible to summarize some common elements that should be shared by a course like this. Each of these common elements represents one of the sessions of the course. The purpose is to provide students with a framework, based on Gartner's (1985) framework, that should help them to be confident with their individual characteristics, with the entrepreneurial behaviour, with the meaning of business modelling and of value proposition, with the opportunities and the threats that can rise from the environment in starting a new venture. The contents of the modules and the sessions of the course are briefly described as following.

- 1. *Module 1: "the poet society"*. The main goal of this first module is "to break the rules", that means to create a sort of treaty among teachers and students ("the poet society") in order to generate commitment towards the goals of the course. This module should be composed by three sessions and will aim at creating:
  - Commitment to be a different kind of professional: first element to be taught is the comprehension of the existence of a different way to act in one's own professional

life. This means to make people understand that they could be something different than an employee or a manager.

- Second step should be a self evaluation of the personal characteristics with respect to being an entrepreneur.
- 2. *Module 2: entrepreneur's role and profile.* This second module is aimed at giving to the students a "definition" of entrepreneurship, making them clear what an entrepreneur is, what his or her features are, how he or she acts and so on. Entrepreneur is studied and presented both from an ontological and phenomenological perspective.
- 3. *Module 3: developing entrepreneurial capabilities.* The last module of the course is considered to be the one into which the treaty is "put into practice". This module provides class activities as well as the business plan development. It should be composed approximately by nine sessions, that will deal with the following items:
  - Spotting Opportunities: this is considered to be a fundamental characteristic of an entrepreneur, that means curiosity, continuous questioning, collecting and analysing facts, select opportunities.
  - Building on opportunities: after identification of the existing opportunities it's necessary to build something on them, through creativity, problem solving, dealing with paradigms, identifying main necessary means needed
  - Working alone: it means asking when it is profitable, why it is profitable, how managing oneself
  - Working in a group (to be presented with particular reference to behavioural aspects): creation of the team; managing the team; animating the team; monitoring the team; being task-oriented
  - Risk and its evaluation: it deals with making hypothesis explicit, piloting test, creating scenarios, evaluation of the choices based on trust (trust vs. competence)
  - Developing negotiation skills: that involves argumentation as well as presentation skills (that means selling ideas, inside the group and to an external "buyer")
  - Finding resources: that is mainly focused on how to finance a new venture
  - Persistency and flexibility: persistency on the goals; being ready to alternative means; self confidence; accepting deviations from the original idea; learning from the failures; using the failures to redirect the activities.
  - Creation of business plan: in this session, teachers should present the basics of the construction a business plan.

As previously sentenced the course could be also defined as a business lab. Because the main object of the course is the real and effective development of skills and attitudes towards entrepreneurship, the final output of the course does not deal with a canonical class-examination: it is based on the discussion of the business plan carried out by each group and raised from a their own business idea. The business plan is discussed in front of a commission composed by professors, professionals and entrepreneurs. This is to be considered as a further important and distinctive feature of the course.

## 4.2 The teaching methods

According to Chamard et al. (1996) the programs orientation towards content rather than delivery process (teaching methods) is the main reason for training programs' failure. That is the main reason why teaching methods have received a great deal of attention along the process of designing and implementing the course. As Haines suggests (1988), entrepreneurship could not be taught by

traditional lecturing techniques, while a learning-by-doing technique is required. Moreover, a research of Hood and Young (1994) reveals 47 different teaching methods as suggested by successful entrepreneurs.

The aim of the course is to use a balanced mix of different approaches and techniques, consistently with the specific topics and the structure of each module and lecture. Anyhow, teaching methods should deal with the following macro-typologies: interaction, empowerment, development of commitment, role playing, games, simulations, creativity development, team work, case discussion, project developed by teams.

Particular relevance has to be addressed to the projects developed by groups of students. The development of a project work, that is a business plan, is a fundamental element of the course and represents the "backbone" of the teaching approach itself. Business ideas are discussed and then refined with the guiding staff during once week individual meetings. New business opportunities are suggested and evaluated. For this purpose all the groups have weekly assignments to be performed. Such assignments support step by step the development process of their business plan.

According to these different teaching approaches, the selection and the use of supporting material has emerged as a critical issue as well. Within a class context characterized by a high degree of interaction, teachers make a large use cases, exercise, videos, material for role playing, material prepared by students, technical notes (delivered only at the end of the lecture). The effectiveness of some of these materials used within the course has been previously tested in other institutions that have run entrepreneurship development programs.

The adoption of an "unusual" teaching approach, if compared with a traditional academic course, does not mean that theoretical concepts or models are not provided within the course. In contrast, as reported in Fiet (2000), the role of theory has not to be underestimated. A good theory will help aspiring entrepreneurs to make predictions about the consequences of their decisions. This position sides with Kuhn (1970) who argued that theory is the most practical thing that we can teach to students. According to such a perspective, teachers have to apply theory as a tool to answer students' questions.

## 4.3 The faculty

Classes are taught both by academic faculty and entrepreneurs recounting how they had launched their ventures. Teachers belonging to the departments of Business Administration and Engineering of Cattaneo University form the academic faculty. Besides, also teachers coming from Universities that have been involved in the previously described Columbus Alfa Project hold a significant number of lectures. These professors have actively contributed to the development of the framework and the prototype of the course and they still participate in the process of updating the course. In a different perspective they represents a concrete and lively *trait d'union* among the network of institutions belonging to Alfa Project.

Anyhow, in order to meet all the course requirements, the teachers' profile should presents the following features: they must be highly motivated in teaching matters previously described and dealing with entrepreneurship; they should have an "entrepreneurial spirit"; they should be open minded; they should be experienced in team work development and in project working.

The teaching staff is also formed by two Phd candidates belonging to the Department of Business Administration at Cattaneo University. Each one supports a maximum of three groups along the process of development of their business plan. They act as tutors and consultants in order both to facilitate the process (in any case without entering and influencing the internal dynamics of the group) and to point out inconsistencies within the structure of their business idea and within the contents of the final business plan. During the third edition of the course that is still running, an entrepreneur is assigned to each group. He acts like a mentor in order to help the group in the business plan development. As reported in Gartner et al. (1994), involving outsiders (industry expert, alumni, managers etc.) as mentors to students seems to lead to a successful experiment.

Besides "traditional" classes, seminars are scheduled in order to allow students to come into contact with entrepreneurs' and managers' experiences.

#### 4.4 The classroom composition and the selection process

The original approach characterising the course, the interdisciplinary character, the use of nontraditional teaching methodologies, the pursuit of a strong interaction between students, teachers, witnesses and groups, all are "environmental elements" that force the number of students in the classroom to be limited. For this reason the ideal number of students should be between twenty and thirty, while each group is supposed to be composed by a maximum of five elements. Moreover, the attendance of students coming from the three different faculties (Business Administration, Business Law, Engineering) should be equally balanced, in order to assure true interdisciplinary teams.

According to this general designing rules, during the first edition of the course the classroom consisted of 25 students divided into 6 groups, while the second edition has been opened to 24 students that have formed 6 groups. Because of the peculiarity of the course, the "quality" of the classroom, in terms of entrepreneurial behaviour, commitment, attitude towards strong interaction, seems to be a key element of the success of the course. For that reason the selection process plays a strategic role within the whole process that leads the implementation of each edition of the course.

Criteria used to measure students' capabilities in order to obtain access to Universities (usually aptitude and entrance tests) may not be a reasonable measure of student entrepreneurial capabilities: in fact, a measure that is used to predict success in school may be an inappropriate indicator to use to predict success at starting, growing and running a business.

Moving from these considerations, the selection process aims at identifying those candidates that potentially show the dominant traits and features of the entrepreneurs. According to literature contributions (Hyrskyi 1998a, 1998b) the entrepreneurial characteristics can be classified in four groups: internal locus and control, achievement motivation, innovativeness, attitude towards risk. Such characteristics can be useful in order to "distinguish" entrepreneur-oriented people from those who are not, although Gartner (1989) indicates that individual behaviour is not consistent over time nor personality traits can predict behaviour.

In order to select the proper profiles of students that show entrepreneurial aptitude and meet the needs of the course, the selection process is divided into three steps. In the first one students are asked to fill an application form where, besides some personal data, they have first of all to express their motivations and commitment to attend the course and, secondly, to describe their previous personal experiences that do not necessary deal with their academic path of studies. During the first two edition of the course about 60 application forms were submitted each year.

The second step of the selection process consists of a personal interview. Members of the teaching staff hold such an interview. The candidate is asked to express his expectations from the course and to describe in more detail some personal experiences and initiatives that he or she has promoted or where he/she has been involved. The candidate is also asked to describe personal interests, hobbies, and objectives for his and her future life: mid and long term goals, aspirations, willing of implementing a business idea and starting a new venture. The interview is deliberately not too structured: the aim is to have a deeper knowledge and feeling of the personal profile of the candidate, mainly in order to understand if he or she has a "proactive behaviour" and shows enthusiasm towards the course. According to this approach number of passed exams and gained results are not taken into account and, so, they do not represents preferential elements.

Finally the teaching staff meets in order discuss and compare the profiles of students emerged from the interviews and to classify the list of potential students that have been selected.

The above described selection approach is a time spending and its effectiveness can be evaluated only after its conclusion, while the course is running. Anyhow, as regards the two first editions of the course, it has showed an acceptable degree of confidence.

# 5. CONCLUDING REMARKS: THE ASSESSMENT OF THE ENTREPRENEURSHIP COURSE OUTCOMES

The methods for assessment of entrepreneurship education are not well defined, neither are any standardised means for measuring the results generally accepted. The lack of generally accepted measure is due to a various number of factors (Falkang & Alberti, 2000). The evaluation of a course is depending on the disparate educational needs of students the course is addressed to. Secondly, its effectiveness should be compared with the objectives and the purposes the course aims at gaining. Moreover, an entrepreneurship course effectiveness cannot be only limited to knowledge acquirable in classroom, but it should also look at the stimulation of new ventures and the increased capabilities of future entrepreneurs. Finally, time dimension is one of the most critical elements in the perspective of assessing the contribution brought by an entrepreneurship course. The fact that there is a little empirical evidence of the successful results of a course is probably not due to the lack of positive results. The time dimension of initiation of programmes and the expected results may be an important explanatory factor. Short-term output of a course might be the level of students' satisfaction and they enrolment or the demand for additional courses, and so on. Not so easy is the assessment of longerterm effects. Investigations on the number of start-ups, students who started a business, people who bought businesses, self-employed people, are all reasonable on a period of at least five years (Brockhaus, 1993), Moreover, Block & Stumpf (1992) indicate the measure of contribution to the economy may be analysed in a time perspective of ten years, as well as the assessment of firm performance, personal and career satisfaction, etc.

Concerning our experience, Cattaneo University is now implementing the third edition of the course, whereas about 45 students have attended the past two editions.

The success of the course could be analysed from different perspectives that reflect different dimensions of the students' learning process. One dimension deals with the effectiveness of the course in order to meet students' needs, in terms of contents, teaching methods, interaction between participants. Based on data collected at the end of the two editions of the course we found that one of the most recognised values is the proactive action towards entrepreneur, enabling the "potential" entrepreneur. Another dimension deals with commitment and motivation that students have showed towards the course. These evaluations rise from a personal feedback given by students. Data have been collected both in structured way, thanks to the use of an evaluating questionnaire delivered to students at the end of each lecture, as well as in a more unstructured and informal way, through the continuous interaction that the teaching staff had with students.

In fact, it has been possible to acknowledge the creativity, the sturdiness, the coherence and the practicability of the business plans developed by students. In particular, one of the business plans developed by a group of students of the first edition of the course won the first prize at an international contest promoted by the BYOUNG Foundation<sup>6</sup>. Furthermore, the second edition of the course offered the opportunity to a group of students to refine and implement a business plan, in order to develop the business of an already existing small firm.

Finally some of the participants think to use their entrepreneurial experience also in the case they do not decide to start-up a new venture, in order to fasten their career development within an existing firm. In fact, entrepreneurial activity do not only takes place in small firms and entrepreneurship does not only occur in the form of new small firms. According to Drucker (1985), "today's large businesses will not even survive unless they acquire entrepreneurial competencies".

To conclude, this kind of courses designed and implemented in a framework of regular university studies, represents a first opportunity for students in order to fill the gap between theory and practice. Furthermore, the present complexity of the competitive environment, the increasing importance of technology, the internationalisation of markets, the role played by competencies as source of a

<sup>&</sup>lt;sup>6</sup> BYOUNG is a foundation of BSI SA (the new corporate name of BSI-Banca della Svizzera Italiana). The foundation has the main purpose to carry out initiatives, as international contests, seminars and courses that foster the cultural and entrepreneurial integration among young people.

sustainable competitive advantage, the increasing importance of building and investing on human capital, ask for a higher level of education, as a premise of a more sustainability of new ventures.

The empirical experience developed at LIUC University represents a case study that sheds some useful suggestions in order to develop the Entrepreneurship training at university level. Nevertheless, some doubts are rising about the real sustainability of such courses, in terms of the large amount of costs required for implementing the course, if compared with the small number of trained students, and time-spending activities required for designing the course, selecting students, mentoring the groups and so on. On the other hand, the work and the commitment required to students could create a warped image of the course and can refrain them from engaging in it.

#### 6. REFERENCES

Alberti, F. (1999) "Entrepreneurship Education: Scope and Theory", in Salvato, C., Davidsson, P., Persson, A. (eds.), *Entrepreneurial Knowledge and Learning*. JIBS Research Report, n.5.

Block, Z. and Stumpf, S.A. (1992) "Entrepreneurship Education Research: Experience and Challenge", in Sexton D. L. and Kasarda J. D. (eds.), *The State of the Art of Entrepreneurship*. PWS-Kent Publishing Company.

Brockhaus, R. (1994) "Entrepreneurship Education and Research Outside North America", in Hoy, F., Monroy, T.G., Reichert, J. (eds.), *The Art and Science of Entrepreneurship Education*. The Project for Excellence in Entrepreneurship Education.

Chamard, J., Christie M., (1996) "Entrepreneurial Education Programs: a Change in Paradigm is Needed", *Entrepreneurship, Innovation and Change*, 5 (3).

Dana, L. P. (1992), "Entrepreneurial Education in Europe", Journal of Education for Business, 68.

Davies, L. G. and Gibb, A. A. (1991), *Recent Research in Entrepreneurship*. The Third International EIASM Workshop.

Drucker, P. (1985), Innovation and Entrepreneurship: Practice and Principles. Harper & Row, New York

Falkang, J., Alberti, F. (2000) "The Assessment of Entrepreneurship Education", *Industry and Higher Education*, 14 (2).

Fiet, J. O., (2000) "The Pedagogical side of Entrepreneurship Theory", *Journal of Business Venturing*, 16.

Fiet, J. O., (2000) "The Theoretical side of Teaching Entrepreneurship", Journal of Business Venturing, 16.

Finkle, T., Deeds, D. (2001), "Trends in the Market for Entrepreneurship faculty, 1989-1998", *Journal of Business Venturing*, 16.

Garavan, T.N. and O'Cinneide, B. (1994) "Entrepreneurship Education and Training Programmes: A Review and Evaluation – Part 1", *Journal of European Industrial Training*, 18.

Gartner, W.B. (1985) "A framework for describing the phenomenon of new venture creation", *Academy of Management Review*, 10.

Gartner W., (1989) "Who is an Entrepreneur? Is the wrong question", *Entrepreneurship Theory and Practice*, 13.

Gartner W., Vesper K., (1994) "Experiments in Entrepreneurship Education: Success and Failure", *Journal of Business Venturing*, 9.

Gorman, G. and Hanlon, D. (1997) "Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-Year Literature Review", *International Small Business Journal*, 15.

Haines G., (1988) "The Ombudsman: Teaching Entrepreneurship", Interface, 18.

Hills, G. E. (1988) "The Ombudsman: Teaching Entrepreneurship", Interfaces, 18.

Hood, J.N., Young, J. E. (1994) "Methods for Conveying Entrepreneurial Knowledge: Perceptions of Top Executives from Successful Entrepreneurial Firms", *Journal of Enterprising Culture*, 1.

Hood, J.N., Young, J. E. (1995) "Entrepreneurial Education and Economic Development: bridging the gap", *Entrepreneurship, Innovation and Change*, 4 (2).

Hyrsky, K., (1998 a) "Entrepreneurship: metaphor and related concepts", *Journal and Entrepreneurship Culture*, 6.

Hyrsky, K., (1998 b) "Entrepreneurship metaphor concepts: an exploratory study", *International Small Business Journal*, 18.

Kuhn, T. (1970), The Structure of Scientific Revolutions, University of Chicago Press, Chicago.

McMullan, W. E. and Long, W. A. (1983) "An Approach to Educationg Entrepreneurs", *The Canadian Journal of Business*, 4.

Sexton, D. L. and Bowman-Upton, N. B. (1984) "Entrepreneurship Education: Suggestions for Increasing Effectiveness", *Journal of Small Business Management*, 2.

Sexton, D. L. and Bowman-Upton, N. B. (1987) "Evaluation of an Innovative Approach to Teaching Entrepreneurship", *Journal of Small Business Management*, 25.

Sexton, D. L. and Bowman-Upton, N. B. (1988) "Validation of an Innovative Teaching Approach for Entrepreneurship Courses", American *Journal of Small Business*, 12.

Vesper, K. (1971) "Venture Initiation Courses in US Business Schools", Academy of management Journal, 6.

Vesper, K., (1986) "New Developments in Entrepreneurship Education" in Sexton, D.L. and Smilor, R. W: (eds.), *The Art and Science of Entrepreneurship*. Ballinger.

Vesper, K., (1988) "Entrepreneurial academics – How can we tell when the field is getting somewhere?", *Journal of Business Venturing*, 3.

Vesper, K., (1993) Entrepreneurial Education – 1993. UCLA, Center for Entrepreneurial Studies.

Vesper, K. and Gartner W. (1997) "Measuring Progress in Entrepreneurship Education", *Journal of Business Venturing*, 12.