

TEACHING ENTREPRENEURSHIP IN INNOVATIVE WAYS

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Abstract

Usually teaching entrepreneurship includes business plans, economic theories and accounting analysis, subjects that they do not answer questions which are crucial for students, i.e. *how can I create an innovative idea for a new business and how can I convert this idea into business?* Questions of this kind are especially important in an era where new ideas are the most valuable capital and new business models based on low initial capital, but with innovative character, are the norm. In our contribution we seek to answer these questions by presenting a course which combines teaching innovation, creativity and entrepreneurship in an appropriate way. During this course that has been taught for some years until now, we have organized some qualitative research projects with our students ending to valuable conclusions. The most important is that, under specific conditions and circumstances, the combined teaching of creativity, innovation and entrepreneurship proved to be very challenging, but achievable.

Keywords: teaching entrepreneurship, teaching innovation, teaching creativity

JEL Classification: A2, O3, Y8

1. Introduction

Teaching entrepreneurship is not a new phenomenon but it has a long history despite the fact that nowadays many universities design, organize and offer courses concerning teaching entrepreneurship, innovation and creativity as new and interesting courses. Indeed, entrepreneurship education has a big history, especially in the United States, where the first entrepreneurship class held at Harvard Business School in February 1947. It seems that American business schools have caused the broader acceptance of entrepreneurship as a discipline of value in academia according to the chronology of the three domains such as courses, supplemental infrastructures and publications through which the growth of the discipline has been described (Katz, 2003). The increasing number of undergraduate and postgraduate courses imprint on the

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one hand, the emerging interest of students to learn about entrepreneurship and on the other hand, the growth of students wanting to be entrepreneurs.

Initially, teaching entrepreneurship was focused on finding the ways to teach it under the belief that entrepreneurship is teachable, later on promoting the best practices and finally, on measuring the impact of entrepreneurship (Katz, 2014). But for decades and even today, there is a debate about which are the most suitable methods for teaching entrepreneurship. On the one hand, there is the perspective of entrepreneurs to teach entrepreneurship as they have real world practical experience. On the other hand, there is a more scholarly approach with the perspective of theory to prevail like all the other business disciplines taught at the universities.

Taking into account the decreasing number of new ventures and novice entrepreneurs we can easily presume that teaching entrepreneurship is rather inefficient and ineffective, too. More precisely, in the United States the proportion of young adult businessmen has fallen to the lowest level of the last twenty four years (Simon, 2015) and almost only 3.6% of adult younger than 30 were shareholders in private companies in 2013. Also, in the European Union even though it has been announced a lot of integrated strategies and programmes for enhancing entrepreneurship not many goals have been achieved. Thus, internationally there is an imperative need for a more effective entrepreneurship education.

To this vein, the present study seeks to give a flexible framework on which a university course of teaching entrepreneurship, including that developed in the web environment, can be designed. Through this framework emphasis was put mainly on teaching objectives, teaching methods, learning outcomes as well as on creativity and innovation enhancement in an attempt of answering the questions such as ‘how can I create an innovative idea for a new business’ and ‘how can I convert this idea into business?’.

2. Teaching entrepreneurship, creativity and innovation: A brief overview

The interest of researchers of any field in entrepreneurial education is increasingly strengthened. One of the reasons is that entrepreneurship is presented as a new career path and as an interesting solution to the unemployment and other emerging problems due to the economic crisis. Additionally, the fostering of entrepreneurship through European strategies, programmes and unions significantly affects the rising interest in entrepreneurship and its teaching.

The European strategies are concentrated on promoting entrepreneurship in all levels of formal education such as primary, secondary and tertiary. The establishment of the European

Youth Union and the EU Youth Strategy (2010-2018), the main objectives of which are the provision of equal opportunities for young people in education, in labour market and in their participation in society (European Commission, 2010) stresses the importance of entrepreneurial education and put an emphasis on the teaching that can help young people to gain entrepreneurial skills.

Teaching entrepreneurship, creativity and innovation is the first priority of the European strategy of 2020 easily emerging from the programmes entitled 'Youth on the Move', 'An Agenda for New Skills and Jobs' and the 'Innovation Union' (Eurydice, 2012) as well as from the establishment of both new Entrepreneurship Hubs for Young Entrepreneurs and Innovation and Entrepreneurship Units attached to higher education institutions.

The question whether entrepreneurship is teachable has already been answered. Certain facets of entrepreneurship or entrepreneurship itself can be taught (Vesper & Gartner, 1997), entrepreneurship is not a magic but a discipline and like any other discipline it can be learned (Drucker, 1985) and entrepreneurship can be taught, or at least encouraged, by entrepreneurship education (Gorman, Hanlon, & King, 1997) are the most common evidences that entrepreneurship is teachable. Furthermore, this particular question concerning the teaching of entrepreneurship can be considered as obsolete (Charney & Libecap, 2000) because modern researchers not only have accepted that it is teachable but they are more concerned on whether entrepreneurship can be characterized as a science or an art. Hence, from its scientific dimension entrepreneurship deals with the acquisition of business skills while from its artistic dimension with the creativity and artistic skills of people (Lee & Wong, 2007).

Current trends of entrepreneurship education have pointed out the importance of adaptability to rapid and frequent technological changes whereas matching of students' educational needs to selected teaching methods is a key factor of successful teaching (Arasti, Falavarjani & Imanipour, 2012).

Concerning the teaching and learning methods and the objectives of entrepreneurship education there are many suggestions. The categorization in traditional and non traditional methods can be determined by two distinct areas of entrepreneurship education (Laukkanen, 2000) where the first refers to education about entrepreneurship and the second to education for entrepreneurship. The education about entrepreneurship includes developing, constructing and studying the theories related to entrepreneurship and its contribution to economic development,

and firm creation and thus, it is mainly based on the transfer of knowledge about the field. The education for entrepreneurship includes the training of present and potential entrepreneurs on the entrepreneurial process, the provision of all the necessary tools for the start-up of a new venture and thus, it focuses on learning experience and the development of entrepreneurial competencies, skills, attitudes and values.

The objectives of teaching entrepreneurship can determine the appropriate ways through which entrepreneurship education can be offered (Hytti & O’Gorman, 2004). For example, if the objective is to increase the understanding of what entrepreneurship is about the best way will be the provision of information through public channels such as media, seminars, or lectures. If it is to help students to acquire entrepreneurial skills applicable directly to work the education and training based on the involvement of students directly in the entrepreneurial process could be the appropriate way. Finally, if the objective is to prepare students to act as entrepreneurs the most effective practice can be the facilitation of experiments in a controlled environment through business simulation and role playing.

In order to accomplish the various objectives of teaching entrepreneurship active learning can be the appropriate way. Active learning, the main elements of which are talking, listening, reading, writing and reflecting, can help students learn and acquire the appropriate new knowledge (Meyers & Jones, 1993, p. 21) or beyond the knowledge transmission it can help higher order thinking of students and their exploration of values and attitudes through their involvement in activities such as reading, discussing and writing (Bonwell & Eison, 1991, p. 2). Therefore, active learning can transform students to become high order thinkers who are capable to explore new opportunities of learning for entrepreneurship.

A new way of teaching entrepreneurship has been suggested (Brush, 2013), where doing entrepreneurship is the keypoint of teaching and learning entrepreneurship without considering theory as sideline since theory and practice are interdependent and also, influence each other. Doing entrepreneurship is compared with the Montessorian method where a child selects a toy, plays with it and usually finds new ways to play with it. Thus, practice prevails. Using the same analogy, practice is very important to teaching entrepreneurship as it helps students develop their entrepreneurial thinking through play, empathy, experimentation, creation and reflection (Fayolle, 2007) and also help them to learn how to act entrepreneurially by exploiting opportunities of all kinds in an uncertain world (Neck, Greene, & Brush, 2014). Through this

perception, entrepreneurship is taken as a method that forces students not only to understand, know and talk but also to use, apply and act through a portfolio of practice-based pedagogies (Neck & Greene, 2011).

Taking into account all these teaching and learning methods, their objectives and learning outcomes as well as the importance of linking theory, practice, research and quality of learning through serious assessments an innovative framework of teaching entrepreneurship was shaped. This framework came from a course which combines teaching innovation, creativity and entrepreneurship in an appropriate way. During this university course that has been taught for some years until now, we have organized some qualitative research projects with our students ending to valuable conclusions. The most important is that, under specific conditions and circumstances, the combined teaching of creativity, innovation and entrepreneurship proved to be very challenging and helpful to students who are interested in creating innovative ideas for a new business or in converting their ideas into business.

3. A description of the innovative framework of teaching entrepreneurship

Taking into account that entrepreneurship can be defined as a dynamic process of vision, change and creation which mainly combines risk-taking, ability of building venture team and creative skills concerning finding the necessary resources, building a business plan and recognizing and taking advantage of opportunities (Kuratko & Hodgetts, 2007), we tried to shape a framework of teaching entrepreneurship by applying different, flexible, attractive and innovative ways of teaching and learning. This framework was based on a university course entitled 'Informatics and entrepreneurship 2.0', the teaching pattern of which was intended to provide a bridge between traditional way of teaching and the emerging way of teaching where technology and its applications and expansions play a crucial role on the active role of students and the quality of learning outcomes (Giossi & Dagdilelis, 2014).

In many courses of teaching entrepreneurship lectures of invited speakers and visits of students to different enterprises complete the traditional way of teaching. But the uniqueness of this particular course was the decision of co-teaching where the first teacher was the major teacher in teaching e-learning and the second was an expert business consultant who simultaneously adopted the twofold role of a teacher and a post-doctoral researcher.

The main focus of teaching was to help students develop an entrepreneurial mindset, entrepreneurial skills and entrepreneurial culture besides the knowledge transfer associated to

entrepreneurship. But before getting to this point we started by teaching creativity and innovation. The main reason for this decision was the new perspective of entrepreneurship where innovative ideas are of great value to both, the creator and the one who will take advantage of the innovative idea that is likely to be someone else except from the creator (Dagdilelis & Giossi, 2014). Another reason was that there are different kinds of competitions concerning business innovative ideas, including those referred to startups, where innovation is closely linked and depended on technology and thus, the development and enhancement of the creativity level of students as potential entrepreneurs are of great importance. Finally, the existence of open innovation, where creators of innovative ideas not only can share their ideas in a community shaped by the use of social media and networks but also can accept their idea evaluation of its members, was considered as crucial to the preparation phase for those students of dreaming themselves as start-up entrepreneurs.

One of the main learning objectives of teaching entrepreneurship was firstly to help students to be aware of entrepreneurship and secondly of e-entrepreneurship and then establish an entrepreneurial mindset which through the intervention of technology could be a technology and innovation-driven approach of teaching entrepreneurship. Thus, the first focus of the proposed approach of teaching entrepreneurship was to connect creativity to innovation. But as creativity includes the inventiveness or the creation of a new idea whereas innovation refers to the commercial application of a new idea or invention, its dissemination and its exploitation (Deakins & Freel, 2006), we moved further to technovation. Technovation involves creativity, the successful implementation of ideas in an organization (Amabile et al., 1996) or better the bringing of creative ideas into life (Davila, Epstein & Shelton, 2006) as well as the influence of technological changes. Thus, we developed a teaching entrepreneurship framework relying on the synthesis of creativity, innovation and technology, which was constituted an evidence of innovative teaching.

Firstly, we have tried to change the way of students' thinking and acting. We have motivated them to change some of their routine habits or to do them in a different way and then to concentrate on studying the effects of this change to their way of thinking and acting. In an attempt of enhancing their creativity we offered students different stimuli in order to help them create innovative ideas by finding out new solutions to their daily problems or to what is considered to be a main trouble to them. Secondly, under the supervision of the teacher who had

a serious experience on business consulting students became able to understand how an innovative idea can be reflected into a business context and then, to shape a business plan or better a more flexible pattern named business canvas or at least a business scenario.

But the central point that identifies all the above mentioned innovative approaches of teaching entrepreneurship was the focus put firstly, on the teaching methods and learning outcomes and secondly, on the new role of the graduate learner. In most cases learner-centered methods overcame teacher-centered methods under taking into consideration the matching of learning outcomes and learning methods and the transformation of students from passive listeners to active participants. Students were prepared to adopt self-managed learning with the aim to take initiatives and enhance their autonomy because this perspective was characterized as the main requirement and preparation of thinking themselves as potential entrepreneurs.

4. Research design, data collection and findings

Observations and critique by the two teachers, the main responsible teacher for the course 'Informatics and entrepreneurship 2.0' and an entrepreneurship consultant acting as co-teacher and post-doctoral researcher on innovation and e-entrepreneurship as well as students' interviews and assessment sheets of four years completed by the students attending the course were the main research methods and the resources of data collection of the present research study.

The analysis of the first year teaching where visits of successful entrepreneurs, including those of startups, accompanied by business simulation, apart from the traditional methods of teaching entrepreneurship, resulted in a deep understanding of entrepreneurship and e-entrepreneurship by the attendants. Students' interviews revealed that they felt insecure to start a business while they really enjoyed their participation in the particular course. The second year curriculum enriched by the presentations of innovative ideas from students who took awards in competitions concerning innovative business ideas. This learning intervention was ended to an increase in the interest of students to attend the particular course, and in the possibility to participate in teams that expected to participate in similar innovative ideas' competitions in the near future. The analysis of the third and fourth year teaching of entrepreneurship showed that students have identified several business skills which they themselves and their fellow students possess and they began to shape an entrepreneurial culture as they seemed to feel confident that they could create innovative ideas, participate as team members in innovative ideas' competitions and accepting the idea that the creation of a start-up might be one of their entrepreneurial plans.

In addition, the longitudinal analysis of the four years teaching of the course entitled 'Informatics and entrepreneurship 2.0' was accompanied by a series of assessment where the assessment of each year determines the improvement of the next year teaching approach. Also, the findings of each year research, the observations and the critique of the two teachers as well as their openness and availability of accepting students' proposals and interventions in teaching and learning activities were expected to enhance the quality of teaching and learning.

5. Conclusions

To the path of fostering innovation-driven entrepreneurship in Europe with the aim of enhancing its competitiveness, we can easily admit that the suggested teaching entrepreneurship course is convergent to these objectives. More precisely, according to the life cycle approach of fostering innovation-driven entrepreneurship which has been described by the three phases stand up, start up and scale up (World Economic Forum, 2014) the suggested ways of teaching can support and develop the "stand up" phase. Through the above mentioned innovative teaching approach the main factors of fostering innovation-driven entrepreneurship such as attitudes, skills and entrepreneurial culture seem to be easily established. Raising awareness of entrepreneurship, risk-taking and the entrepreneurial thinking, where recognition and creation of opportunities are accompanied by the sequent exploitation, may end to the creation of a positive attitude towards entrepreneurial initiatives.

The recognition of students' skills such as managerial and social ones can be readily accomplished through their acting either independently or cooperatively, in the case of individual or teamwork respectively, where distribution of responsibilities, setting priorities, time management, taking initiatives, creativity, determination, leadership, self-efficacy and public presentation of oneself in class count. The lectures of successful entrepreneurs acting as role models, the presentation of innovative entrepreneurial ideas by students who gained any competition concerning innovative ideas of any kind and the incitement concerning students to think of themselves as potential entrepreneurs with a focus on innovation can create a flourish class climate where an entrepreneurial culture can be built. As a result from this strategy students are expected to choose entrepreneurship as a career, become founders or members of start-ups, or even to enhance their creativity by acquiring the tendency to generate innovative ideas that can provide solutions to problems related to the economy, environment and society.

On the other hand, teachers can embrace different roles compatible and in line with the innovation-driven entrepreneurship teaching. The role of a mentor with high expertise, the role of a change agent and the role of a leader who is committed to enhance students' confidence and autonomy in order to be capable of creating innovative ideas and taking entrepreneurial initiatives could be valuable options (Giossi et al., 2014). In addition, teachers should also develop entrepreneurial skills such as the risk-taking of the course design, the selection of teaching methods compatible to the expected learning outcomes and the type of assessment to measure the quality of education as well as the development of their creativity in order to contribute to the teaching effectiveness.

Finally, the linkage of research, practice and innovation in entrepreneurship education can flourish when students feel responsible for their learning, free to take initiatives and capable of making decisions by considering seriously the value of risk-taking (Giossi et al., 2014, p. 40). In addition, taking under consideration the value of the creation of innovative ideas, the advantage of the recognition and exploitation of opportunities as well as the importance of adopting roles compatible to the innovation-driven entrepreneurship and envisioning the creation of start-ups either individually or collectively where the latter seems to be more appropriate to the start-ups creation students could effectively be prepared for becoming entrepreneurs of any kind.

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