

Entrepreneurial education and training in the tertiary level institutions of Greece

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Abstract: Technological Educational Institutions play a particularly important role in the tertiary education in Greece. Their paramount elements are a) applied research and b) materialization of study programs aiming to provide knowledge about the needs of the labor market as well, as about the direct implementation of that knowledge. Technological Education Institutions have developed important activities in the section of education, research and technology so that they can facilitate the mobility of educational personnel and students.

Education and training should contribute to the encouragement of entrepreneurship, through the appropriate mentality and sensitivity, regarding the professional opportunities being offered by the entrepreneurial quality. Since personality and administrative skills compose the basic factors of success, personal abilities related with entrepreneurship should be taught from the early levels of education and carry on up to the tertiary level. Encouraging entrepreneurship is fundamental for creating jobs and improving competitiveness and economic growth throughout Europe.

The most effective way to deliver entrepreneurial education is to experience business life by creating a real or virtual company during the school year. The European program, promoted by the Junior Achievement-Young Enterprise Europe association, is an important action that can help towards improvement of entrepreneurial activity in Greece. However this is a relatively new area and learning from each other's experience is crucial.

The basic aim of this paper is to determine the basic characteristics that will allow technological education to establish a competitive position in the context of the European Union. The findings show that the various entrepreneurial education programs, implemented by the Technological Educational Institutes for the education of the students, have already some positive results. We already have the first business actions of graduates who attended the courses. But it would take them many attempts to change their basic entrepreneurial mentality.

Keywords: *Entrepreneurial education, training, entrepreneurship.*

1. INTRODUCTION

Technological Education and University Education constitute the two pillars of the Superior Tertiary Education of Greece. Paramount elements of the Technological Education are the applied research and the materialization of programs of study that aim in the approach of the provided knowledge to the modulated needs of the labor market, as well as in the optimized direct implementation of that knowledge. This last element constitutes an important parameter of the Bologna statement. The Bologna statement points out the necessity for studies of short duration, the student mobility

and the flexibility of the programs of study as basic parameters for the convergence procedure of E.U. Educational Systems. The Technological Education Institutions (T.E.I., POLYTECHNIC COLLEGES, Technological Institutes, Technological colleges, Academic Institutes of Technology) that are included in the higher education, in various countries of Europe, existing for certain decades, they have developed important activities in the section of education, research and technology and moreover they collaborate so that they facilitate the mobility of educational personnel and students.

Encouraging entrepreneurship is a key factor in creating jobs and improving competitiveness and economic growth throughout Europe. In Barcelona's summit in 2002, the European Council presented the Green Book for Entrepreneurship. According to the Green Book, for the people to be incited to become entrepreneurs they should become fully aware of the meaning of entrepreneurship. The people should possess the appropriate skills that will enable them to convert targets into successful undertakings. Education and training should contribute to the encouragement of entrepreneurship, through the appropriate mentality and sensitivity, regarding the professional opportunities being offered by the entrepreneurial quality. The establishment of an enterprise requires dynamism, creative power and strength, while its gradual growth requires more administrative abilities as well as effectiveness and credibility. Since personality and administrative skills compose the basic factor of success, personal abilities related with entrepreneurship should be taught from very early and carry on up to the tertiary level. The European Commission considers that the member states of the European Union (EU) are committed towards embodying the entrepreneurial teaching in their educational systems. At the university framework, training in entrepreneurial topics should not be limited only to students of economics and business studies, but should also be offered to students of other field, such as science, technology and arts.

Most European countries have a policy commitment to promote education related to entrepreneurship. However this is a relatively new area and learning from each other's experience is crucially important. In 2002, a Best Procedure project explored ways to promote the teaching of entrepreneurship from primary school to university. Experience shows the importance of well-structured cooperation between different government departments, notably industry and education, and the need to include teaching of entrepreneurship in the national curriculum, as it is in the Czech Republic, Spain, Ireland, Luxembourg, Poland, Finland and Norway. However, schools and teachers also need incentives and support in introducing these programs into the classroom

One of the most effective ways to deliver entrepreneurial education is for students to experience business life at first hand by creating a real or virtual company during the school year. For instance, some 600,000 students in Europe now participate annually in the Student Company program promoted by the Junior Achievement-Young Enterprise Europe association. They create and run their own companies, making and selling real products and services, and taking all the decisions needed to make their business venture successful.

The aim of this paper is to determine the basic characteristics that can allow technological education to establish a competitive position in the context of the European Union, to discuss the necessary adaptations of the educational system in the path of the convergence of Europe's educational structures, to record the profits of student mobility and to appoint the importance and value of entrepreneurship courses

as a tool for the approach of the technological education in the needs of the labor market and the improvement of the prospects of employment for the graduates.

2. CREATING ENTREPRENEURIAL CULTURE IN THE E.U. COUNTRIES

Encouraging entrepreneurship is a key to creating jobs and improving competitiveness and economic growth throughout Europe (Prahalad 1993). Although the rate of entrepreneurship may be influenced by a number of different factors, there is certainly a cultural aspect (Scott 2012) that needs to be taken into account. In this respect, education may offer an important contribution. The development of an entrepreneurial attitude should be encouraged in young people, starting at school. If entrepreneurial values (Rajaei, Yaghoubi et al. 2011) are cultivated at school, Europe will gradually create a new generation of people for whom exercise of entrepreneurial activity will be something absolutely normal.

The European Union is not fully exploiting its entrepreneurial potential. It is failing to encourage enough people to become entrepreneurs. According to the 2009 Euro barometer (Luo 2007, Verheul, Thurik et al. 2012) on Entrepreneurship, only 45% of European citizens would like to be self-employed. In the United States these figures are different: 55% of the population would like to be their own boss, while only 36% believe that dependent employment is the best option.

According to a 2009-2010 world survey of the "Global Entrepreneurship" Monitor (Aidis, Estrin et al. 2008, De Clercq, Danis et al. 2010, Troilo 2011, Ștefănescu 2012, Stefanescu and On 2012), 28% of the total entrepreneurial activities in Greece concern "necessity entrepreneurship" (Gries and Naudé 2011, Koelewijn, Ehrenhard et al. 2012, Mortazavi and Bahrami 2012, Talmaciu 2012) when the respective percentage in other European countries does not surpass 18%. On the other hand the Greek society seems to underestimate the "opportunity entrepreneurship" (Nicolaou, Shane et al. 2009, Hulbert, Gilmore et al. 2013, Langer, Fuller et al. 2013, Rosen and Olsson 2013) which is based on new technologies, research and innovation. The change of this attitude, mainly through the interventions of the educational system, is an important action that can help towards improvement of entrepreneurial activities in Greece.

In June 2008, the Small Business Act (SBA) for Europe was adopted. The objective of the Act is 'to improve the overall approach to entrepreneurship, to anchor the "Think Small first" principle permanently in policy making from regulation to public service, and to promote SMEs' growth by helping them tackle the remaining problems which hamper their development'. The Act includes a framework of measures carried out at EU and Member States levels. The most relevant principles on which it is based in the context of this study are:

Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded

Make public administrations responsive to SMEs' needs

Promote the upgrading of skills in SMEs and all forms of innovation

Encourage and support SMEs to benefit from the growth of markets.

In February 2011, the SBA review was presented. The most relevant new actions were suggested in the area of promoting entrepreneurship, job creation and inclusive growth.

The commission already supports the organization of entrepreneurship events in a number of EU cities. To foster entrepreneurial attitudes and skills among young people, the Commission will continue to promote entrepreneurship education.

As response, the EU 2020 strategy highlights the need to embed creativity, innovation and entrepreneurship in education and it proposes a number of actions to unleash Europe's entrepreneurial and innovative capabilities through the flagship initiatives of "Youth on the

Move", "An Agenda for New Skills and Jobs" and "Innovation Union". There is a need to stimulate the entrepreneurial mindsets of young people and to create a more favorable societal climate for entrepreneurship, as the EU is not fully exploiting its entrepreneurial potential. In the European reference framework, 'Entrepreneurship and a sense of initiative' is one of eight key competences for lifelong learning which citizens require for their personal fulfillment, social inclusion, active citizenship and employability in a knowledge based society. Education has an important role to play improving this entrepreneurship key competence.

Entrepreneurship education (Gunes 2012, Karlsson and Moberg 2013, Martin, McNally et al. 2013, Wu, Kuo et al. 2013) in universities should be available in technical universities. Matching scientific potential with entrepreneurial skills (Oliver 2004, Cooke 2005, Rialp, Rialp et al. 2005, Krabel and Mueller 2009, Rossi, Hallett et al. 2009) will contribute to better commercialization of research results through spin-offs and more start-ups in knowledge-based sectors (Andersson, Baltzopoulos et al. 2012, Åstebro, Bazzazian et al. 2012, Bosma, Hessels et al. 2012, Rezaei, Ortt et al. 2012). As far as university education is concerned, Belgium has created an entrepreneurial center in the Free University of Brussels in order to support and promote the setting up of new enterprises among members of the university society. Denmark supports corporate relations between Universities and organizations which promote entrepreneurship. Ireland has worked hard in the Tertiary education sector to improve systems and procedures through which entrepreneurship research is developed. A very good example of an entrepreneurial training program aiming to support and accelerate graduate entrepreneurs in developing a business from a very early stage, is the Irish "Genesis Enterprise Program" (GEP). Candidates may participate in the GEP if they have a knowledge-based innovative idea with export potential and are looking to develop that potential into a business. It is specifically targeted at graduates who have several years of working experience and are looking to start their own business. The partners of the Program are the Cork Institute of Technology, the Institute of Technology Tralee, the Cork Business Innovation Center, University College Cork and Enterprise Ireland. The program is funded by the Department of Education and Science and Enterprise Ireland under the National Development Plan, 2000 to 2006. This 12 month program offers to its participants a minimum annual income, 30 days of business training, office space and facilities, an experienced mentor for each participant, the opportunity to work in an environment with other entrepreneurs as well as the opportunity to access the facilities and capabilities of the Program partners. Finally, Italy has introduced a series of two-year postgraduate programs using a new teaching method, at Schools, which is the business simulation.

3. ENTREPRENEURIAL EDUCATION IN GREECE

Responsibility for meeting the objectives of EU for the Charter for Small Enterprises (education and training for entrepreneurship) lies mainly with the Greek Ministry of Education and Religious Affairs, which have already been integrated and carried out by 28 higher-education institutes, since 2003. Most concern the incorporation of courses on entrepreneurship in Institutes where there were previously none, elective courses and a cross-curricular approach as well as support for carriers-offices and the organization of events and meetings for contact, awareness and interconnection with the real world outside the university or the technological educational institute (TEI).

According to the last world study of the GEM, 28% of the entrepreneurial activities in Greece concerns "necessity entrepreneurship" in contrast to other European countries where the "necessity entrepreneurship" is an exception compared to the "opportunity entrepreneurship". On the other hand the Greek society seems to underestimate the "creative entrepreneurship" which is based on new technologies, research and innovation. The change of this attitude, mainly through the educational system

interventions, is an important action that can help towards improvement of entrepreneurial activity in Greece.

There are strengths and weaknesses in the implementation of the activity: “Entrepreneurial Education at the Tertiary Level Institutions of Greece”. Strengths such as the economies of scale arising from the collaboration between institutions and the initiatives from the employers’ associations aiming at establishing a system of awards for students. Weaknesses such as the lack of coordination among the involved ministries and other governmental bodies, bureaucracy and delays in the outflow of finance, lack of cooperation even between departments within the same Institution, lack of experienced teachers to run entrepreneurship courses and lack of motivation among administrative and teaching staff which is not directly involved with the particular activity.

For a more efficient use of financial resources and a better implementation of entrepreneurship education in Greece, we need to:

1. Enhance cooperation between different departments in the public administration that need to be involved in promoting entrepreneurship education (notably, Ministries of Development, Education, National Economy and Finance, Employment, as well as the Secretariat General of New Generation)
2. Introduce concrete schemes and initiatives that will help towards increasing the provision of specific training to the teachers on entrepreneurship, including opportunities to gain practical experience through direct relations with businesses
3. Increase the application of programs based on practical experience
4. Incite regional and local authorities so they can play an essential role in promoting entrepreneurship education in local communities
5. Raise the awareness within the education departments in the administration at all levels of the importance of entrepreneurship as a new basic competence, not just as a means of creating more business but also as a way of stimulating the development of personal qualities
6. Step-up activities of dissemination of good practice and the exchange of information between public administrations and other EU member states
7. Encourage private parties (business associations, chambers of commerce, companies, business consultants etc.) to become more involved in education programs, both by sponsoring specific initiatives and by participating directly in the teaching (e.g. as tutors or mentors)
8. Reduce bureaucracy and delays in the outflow of money concerning the financing of different entrepreneurship projects.

The project: “Entrepreneurial and innovation center of Thessaloniki” it aims at training, giving guidance and supporting people who will undertake new knowledge-based ventures through the following activities

- (a) delivering a number of elective courses focused on knowledge intensive entrepreneurship
- (b) providing support and consulting for the creation of new knowledge based ventures
- (c) innovating and developing new ways of inspiring and informing future entrepreneurs

- (d) awarding entrepreneurial prizes to students elaborating, during their studies, the best business plans
- (e) participating in the annual national competition for business awards in higher education

In the syllabuses of the departments participating in the project there are three optional courses: “Entrepreneurship I”, which aims to inspire students to develop entrepreneurial skills studying the management issues surrounding SMEs, “Entrepreneurship II” which is focusing on the process of business planning and “Mentoring” in which groups of students are guided and encouraged by experienced business professionals (mentors) to materialize their business plans and to start their own business as an option after graduating. Entrepreneurship courses have a multi-disciplinary character and they are addressed not only to students of business studies but also to students of other curricula (Rajaei, Yaghoubi et al. 2011), (informatics, engineering, automation, electronics, clothing technology etc).

The syllabus of the courses fulfills the real needs of the economy, since apart from theoretical knowledge we are using practical methods (case studies, visits to business, projects, laboratory work). “Students, who actually write a business plan, take part in a game where they have to make some decisions or even set up a real business venture will learn much more than those attending traditional classroom lectures”. General-material books and case-studies have been produced on entrepreneurship and on how to start a new business.

There is a continuous provision of information on entrepreneurial issues through the website of the Center and printed material. The Center is organizing seminars and conferences with topics related to entrepreneurship, corporate social responsibility and innovation.

Higher Technological Education, with the assistance of such a kind of entrepreneurship programs, can play an important role in competitiveness, economic growth and new jobs’ creation.

4. CONCLUSIONS

The European Committee aims at cultivating entrepreneurial culture (Yıldırım and Aşkun 2012) among the young people in Europe (van Valen, Wekking et al. 2009) , and in doing so it promotes entrepreneurial courses in the secondary and tertiary education of its member countries. There are some very good examples promoting the entrepreneurial spirit in European Universities.

“Necessity entrepreneurs” and not “opportunity hunters” comprise the majority of young people who decide to develop entrepreneurial activity in Greece. To advance “creative entrepreneurship” in Greece we have introduced at Universities and TEIs entrepreneurial courses which is financed by EU structural funds and the Greek Ministry of Education and Religious Affairs.

Within the framework of the above measure, we are implementing the act: “Entrepreneurial and innovation Center of Thessaloniki”, which embraces teaching of entrepreneurial elective courses, mentors’ training, seminars, visiting speakers, visits to business and students’ participation to competitions for business awards. This

synergy has been characterized as a “good example” in the 2004 progress report for Greece to the European Committee.

In the last few years, we took steps to make private funds more available and ease regulatory burdens on start-up companies, but it will take time for a more entrepreneurial culture to catch on. Culture can be changed and the answer to that is education, which is the first and most important responsibility the state should assume.

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