

The Framework for Innovation and Entrepreneurship in Higher Education in Greece – The Hellenic Open University Case

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Abstract

This paper discusses the theoretical background for transferring innovation from higher education institutes to entrepreneurship actions. It presents a short literature review and studies and consequently focuses on Greece and discusses how within the National Strategic Reference Framework and the Operational Programme "Education and Lifelong Learning" a number of actions have been implemented towards supporting innovation and entrepreneurship in higher education institutes. Finally, it presents the Innovation and Entrepreneurship unit of the Hellenic Open University and the advantages of this unit related to the demographic characteristics of student population, such as working students willing to be involved into entrepreneurship actions while pursuing studies highly linked to their business.

1. Introduction

This paper discusses the issue of innovation in higher education and how innovative studies could lead into entrepreneurship actions. Entrepreneurship is definitely linked with some form of innovation, a significant investment, and a strategy towards expansion. Drucker (1993) states that innovation "*is the specific instrument of entrepreneurship*", and Schumpeter (1934) has set the grounds stating

that the embodiment of new knowledge in the innovation process is the core function of entrepreneurship.

While the relationship between innovation and entrepreneurship is highly acknowledged, in Greece the higher education institutes – although being the actual sources of innovation– had rarely lead their students into entrepreneurship actions. In order to foster changes in this, there is undergoing a large transformation of culture aided by the National Strategic Reference Framework and in particular the Operational Programme “Education and Lifelong Learning”, which fostered the creation and operation of various innovation and entrepreneurship units in most higher education institutes.

This paper discusses the organizational framework for innovation and entrepreneurship in higher education in Greece and emphasizes in the case of the Hellenic Open University. Hellenic Open University has approximately 30,000 students, the vast majority of them being employed (97%) and many of them actively involved in entrepreneurship actions, willing to transfer innovation from university to their immediate working environment.

The rest of this paper is structured as follows: Section 2 discusses innovation and entrepreneurship in higher education by presenting a short literature review and similar studies. Section 3 presents the organizational framework in Greece, as well as case studies of innovation and entrepreneurship units, while section 4 presents the particularities of Hellenic Open University that made this higher education institute an ideal ground for fostering entrepreneurship actions, as well as the strategic changes for facilitating this particular actions. Finally, section 5 summarizes the main conclusions of this work.

2. Innovation and Entrepreneurship in Higher Education

Several studies related to actions towards innovation and entrepreneurship have been put forth worldwide, as well as studies investigating perceptions of similar concepts. In such a study (Edwards et al. 2009) involving 119 students of an engineering university department investigated students’ general perceptions of innovation and entrepreneurship concepts, and the way students perceive that

competences related to these concepts are developed or improved by engineering education. The majority of the students that participated in the study reported that they did not receive adequate training in innovation and entrepreneurship competences. Based on their findings, the researchers argued that it is important to promote the development of innovation and entrepreneurship competences in, since *“an innovative and enterprise culture are vital to promote growth and development, increase productivity, create jobs and reinforce the knowledge based economy in Europe”* (Edwards et al. 2009).

In addition, Tymon and Stumpf (2003) conducted a review of business school offerings and extensive conversations with several corporations supporting business education, and concluded that that existing formal learning education does not sufficiently support the development of innovation and entrepreneurship competences. In another study (Chau, 2005) it was found that a problem-based teaching and learning approach could accomplish innovation and entrepreneurship of civil engineering undergraduates. Arvanites et al (2006) describe the design of two innovative courses that attempt to foster innovation and entrepreneurship concepts by engaging students in complex tasks requiring a cross functional solution, asking them to take decisions involving multiple diverse stakeholders under uncertainty, assigning work that by its very nature forces students to be entrepreneurial, and incorporating appropriately technology and e-learning tools.

In a similar work, Cooper et al (2004) argue that experiential learning needs to complement traditional lecture-based methods of teaching and learning in the field of entrepreneurship education. They present the evolvement and evaluation of a course in which students from various disciplines work with an entrepreneur on a business development project, and discuss its benefits and shortcomings from the perspectives of both students and entrepreneurs.

3. The Framework for Innovation in Higher Education in Greece

Recently in Greece under the *“National Strategic Reference Framework”* and the Operational Programme *“Education and Lifelong Learning”* a number of actions have been implemented towards standardizing a framework for supporting innovation and entrepreneurship in higher

education institutes. The National Strategic Reference Framework 2007-2013 constitutes the reference document for the programming of European Union Funds at national level for the 2007-2013 period. It was elaborated within the framework of the new strategic approach to the Cohesion Policy of the European Union, according to which the National Strategic Reference Framework “...ensures that the assistance from the Funds is consistent with the Community strategic guidelines on cohesion and identifies the link between Community priorities, on the one hand, and the national reform programme, on the other...”.

The Decisions of the European Council of December 2005, earmarking European Cohesion Policy funds for Greece until 2013, the new Regulations for EU Funds, as well as Cohesion Policy Strategic Guidelines have constituted the framework on which, among others, national authorities were based in order to approach the main parameters of development programming and to draw up the National Strategic Reference Framework. Furthermore, the main EU documents pertaining to the revised Lisbon Strategy and the National Reform Programme for Development and Employment 2005-2008, were taken into account in developing the main strategic choices-priorities, as they constitute central long-term choices for the European Union, to which the development policy of the new National Strategic Reference Framework is called upon to contribute.

Under the National Strategic Reference Framework was launched the Operational Programme “*Education and Lifelong Learning*”, which, like all Greek OP of the 4th Programming Period, is co-funded by the European Social Fund (ESF). The goal of the National Strategy for education is to increase the quantity, quality and effectiveness of investments in human capital, in order to upgrade the Greek educational and vocational training system. The Operational Programme Education and Lifelong Learning, is centered on four Strategic Goals, which correspond to its four thematic Priority Axes. Each thematic Priority Axis is repeated three times, once for each regional category (convergence, phasing out, phasing in). Thus, each Strategic Goal of the Programme corresponds to three Priority Axes with exactly the same content, one per regional category. The four priority axes are:

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1. Improving the quality of education and promoting social inclusion.
2. Upgrading the framework for initial vocational training and vocational training and linking the education with business.
3. Supporting the lifelong education and the adult education.
4. Supporting the human capital for promoting research and innovation.



Figure 1. Examples from the web sites of various Innovation and Entrepreneurship units

One of the goals of this programme (lunched under axe 4) is to include actions that offer to everyone basic education related to innovation and entrepreneurship, support new entrepreneurs and support innovative entrepreneur ideas and preparatory actions. Following this programme a number of Innovation and Entrepreneurship units have been created

in higher education institutes in Greece. In figure 1 are illustrated some examples from various web sites of such units.

4. The Hellenic Open University Case

Hellenic Open University is the sole Greek State University that provides distance education in both undergraduate and postgraduate levels. It consists of four Schools: Sciences and Technology, Humanities, Social Sciences, and Applied Arts and currently offers 6 undergraduate and 26 postgraduate programmes of study. As a tertiary educational institution, HOU's mission is largely identical to that of the other tertiary institutions of the country. However, its uniqueness lies in that it offers opportunities for undergraduate and postgraduate study to wider social groups of the population, thereby making continuing education and lifelong learning possible for all. The promotion of scientific knowledge is made possible by means of Distance Learning methodology, which is facilitated through the maximal exploitation of Information and Communication Technologies and the production of appropriately developed materials. Hellenic Open University pioneers new educational methods which are wholly based on the principles of distance education and offers innovative programmes of study.

Currently Hellenic Open University has over 30,000 students and according to the statistical records of the Registration Department, 97% of HOU students belongs to actively working population having a full time job. This is a major difference in comparison with the other conventional universities in Greece. In other universities the student population seeks for the first full time a job after the graduation, whilst in Hellenic Open University most students seek a carrier change or to start their own business. In order to address this aspect and in the context of initiatives relative to entrepreneurship, the Hellenic Open University has founded the Center of Student Entrepreneurship and the Carrier Office in 2003. Both of them have been founded in order to encourage Hellenic Open University students to take entrepreneurial actions and to support them in case of carrier shifting.

Nowadays, a new unit "Innovation and Entrepreneurship Unit" has been founded and it is operational from 2011. The mission of this unit is:

- To create specific educational material and entrepreneurship courses for students interested in transferring innovation to entrepreneurship opportunities.
- To present a record of successful practices of entrepreneurship in various regions of the country.
- To offer a portal, aiding into offering the courses (using e-learning tools), linking students with local agencies, presenting the best practices or facilitating the provision of tutoring towards setting up a business.
- To disseminate the actions of the Innovation and Entrepreneurship Unit to all regions where students of the Hellenic Open University live and work and to offer local seminars into specific regions.

The Innovation and Entrepreneurship unit of the Hellenic Open University has to deal with various particularities, related to the special character of the Hellenic Open University and the particularities of the students, such as:

- The involved student's population is not as young as the students of all the rest conventional universities in Greece. The average student of the Hellenic Open University starts the studies at the average age of 29.7 and graduate at the average age of 33.4 years old.
- The vast majority of the students of the Hellenic Open University are employed or self-employed. The 97% of the Hellenic Open University students work, unlike the students of the other universities that are seeking their first job after graduation.
- Despite the fact that Hellenic Open University students are employed, many of them are not satisfied with their current employment (Xenos et al., 2002) and they are using their studies in order to pursuit a better carrier either by seeking a carrier change towards a better employment, or willing to lunch their own business.
- There are a number of students that act as entrepreneurs, but some of them are seeking for further guidance for maintaining

or expanding their business. Furthermore, there are a large number of students willing to start entrepreneurship actions.

- The Hellenic Open University educational system is based on working assignments and graduation theses that are innovative and highly linked to business practices. In many cases the students select a thesis topic related with their business and there are willing to transfer the knowledge gained during their thesis to entrepreneurship actions.
- There is no intellectual property right claims from the Hellenic Open University, therefore the students are able to transfer innovation immediately to entrepreneurship activities.

Despite all these positive aspects that could aid towards transferring innovation into entrepreneurship from students of the Hellenic Open University, not many similar actions have been attempted by the students. Apart from the fear of risk in accordance with the economic recession, reasons reported explaining this included the lack of such a unit that will aid them towards starting entrepreneurship actions. It is expected that the Innovation and Entrepreneurship unit of the Hellenic Open University will aid into increasing the number of students willing to take the risk and transform innovative ideas incubated in the Hellenic Open University into entrepreneurship actions. Among the tasks of this unit is to record and report on the success stories of these attempts.

5. Conclusions

While entrepreneurship is definitely linked with some form of innovation and innovation is within the mission of universities, the examples of entrepreneurs that transferred innovation from universities to business are limited in Greece. In order to address this problem within the National Strategic Reference Framework and the Operational Programme “Education and Lifelong Learning” a number of actions have been implemented towards standardizing a framework for supporting innovation and entrepreneurship in higher education institutes. This has lead into the creation of units in local universities facilitating entrepreneurship actions.

One such unit is the Innovation and Entrepreneurship unit of the Hellenic Open University. This unit has a number of advantages related

to the demographic characteristics of student population, such as working students willing to be involved into entrepreneurship actions and with studies highly linked to their business. This paper reports on the particularities of this unit as well as the general framework and similar units in other Greek universities.

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