Higher education, innovation and entrepreneurship: a combined Italy-Colombia Master's degree

Abstract

University and economic growth are closely related: the university impacts on the development of entrepreneurship through the implementation of its third mission. A new and improved education system aiming to foster entrepreneurship thus becomes a key factor in the revitalization process. In this paper we will stress the importance of collaboration between universities in different countries by means of common educational programs characterised by a high level of interdisciplinarity and capable of meeting the needs of a dynamic and digital labour market. We will therefore explore the relationship between academic entrepreneurship, economic growth and innovation by presenting the case of the Master's degree in *Entrepreneurial Innovation Management* created through the joint collaboration of the University of Salerno (Italy) and the Universidad Católica de Pereira (Colombia).

Keywords entrepreneurial innovation · higher education · international collaboration · Master's degree

Conceptual framework: training, entrepreneurship, innovation

Entrepreneurship and innovation generate economic and social value. According to Schumpeter (1934), these two concepts have common roots but over time they have been presented separately, as Landstrom et al. (2015) report. Brem (2011), on the other hand, emphasizes that both are situated along a continuum, where innovation expresses the creation of novelty and lies at the beginning of the process, while entrepreneurship expresses the creation of value and lies at the end.

The university impacts on the development of entrepreneurship and innovation through the fulfilment of its third mission. According to Audretsch (2014), the university should not limit itself to generating technology transfer, patents and start-ups but should generate *entrepreneurial capital*,

i.e. it should train learners in entrepreneurial thinking, which will lead local actors to set up new businesses. Entrepreneurship-driven training, that is attentive to the new and emerging labour market, should facilitate the acquisition of innovative competences. What is needed is *intelligent capital*, equipped with knowledge, practical experience and networked relationships (Fajardo et al., 2016). Hoppe (2016) recalls the policies of the European Commission (2007) regarding the "spirit of initiative and entrepreneurship", underlining how this competence should not be interpreted as the ability to start a business but, rather, refers to "proactive project management", i.e. the ability to plan, organize, manage, delegate, analyse, communicate and evaluate. Neck and Greene (2011) underline the importance of offering training in business environment uncertainty, in opportunities identification, in the decision-making process and in the business design for creating economic, social and personal value. Kucel et al. (2016) point out that graduates trained in entrepreneurship are more attentive to job opportunities and more creative in aligning their expectations. The factors that facilitate entry into the labour market are therefore related to the competences acquired at university.

In the era of globalization and highly aggressive markets, an undisputed competitive advantage can be obtained from new web technologies and the use of big data, which make it possible to find novel ways to tackle entrepreneurial challenges in an interdisciplinary perspective. The learning path of the Master's degree in *Entrepreneurial Innovation Management* is founded on these principles, which have been established through the joint collaboration of the University of Salerno (Italy) and the Universidad Católica de Pereira (Colombia). The interdisciplinary course aims to explore economic and business knowledge as well as innovative aspects of the web. Decision-making processes within organizations are brought up to date, as the ability to manage information extracted from data using analytical methods has to be added to consolidated knowledge.

In order to design a training path in line with the most advanced developments in the field of entrepreneurship and innovation in the digital market, we have explored the market for the Master's degree program in Colombia, the country where the project was to be implemented.

Methodology

Our first step was to investigate the Master's degrees on offer in the capital of Colombia, Bogotá, where the majority of the country's universities are located. In this way we were able to analyse the competition's offers with regard to entrepreneurship and innovation in the digital market. In particular, we analysed the Master's degrees in the field of economics and business management, which included management of new information technologies in order to support decision-making processes. We then collected data on universities from official websites: in each section dedicated to the proposed Master's degree, we examined the title of the final qualification, which is a good summary of the course offered and the contents expressed in the study plan, if available online.

Results

We considered 60 universities, 53 privately run and 7 in the public sector. Of these, only 17 offer Master's degrees in the disciplines we are interested in, namely economics and IT. However, these are always offered separately and never as part of an interdisciplinary programme. In particular, we found that the scientific areas can be grouped into 8 macro-areas: administration, economics and management, innovation and business, accounting and finance, IT engineering, business creation, marketing, environment and sustainability. Each scientific area is associated with different educational objectives: analysis, planning, strategic evaluation and management; communication, creativity and innovation; proactive leadership; entrepreneurial vision; international vision; integrated vision of the environment; project management; ethics and social responsibility; teamwork; vision of the future: people aware of global change; transparency; value creation; strategic thinking; contextual intelligence.

The new professional skills and competences, that may be obtained from the analysed training paths, are always considered a strategic resource for the development of the country.

Conclusions

Development of entrepreneurship and economic growth require the commitment of various stakeholders, from governments to educational and training institutions. The construction of a new entrepreneurial mentality is also driven and supported by adequate education systems: the role of universities in a new and dynamic economic context is crucial in countries around the world. Thus, joint collaboration between nations and common training programs will allow both cooperating entities to achieve regeneration and renewal, regardless of their stage of development. Although Italy and Colombia find themselves in different phases of economic development, *innovation-driven* and *efficiency-driven* respectively (GEM, 2018), they can revitalize higher education and achieve a new vision that adds value to innovation, entrepreneurial culture, the building of alliances and networking, interaction and open-door approaches of research centres, academic institutions and the business world.

The results of our analysis point out the predominance of a sector-based educational offer, which does not valorise the interdisciplinary training required by today's labour market. Our proposal for a joint Master's degree in *Entrepreneurial Innovation Management* satisfies the objectives of economic, social and cultural development for the two countries and issues a double qualification. Economics and computer engineering, two traditionally distant disciplines, are well balanced on a single path that meets the needs of the labour market for new professional figures.

In the future, the analysis carried out may be developed and extended through the construction of a data set in which other variables are analysed, such as the competences to be developed, the teaching methodology, the type of final product, the possible presence of internships, the type of qualification issued, the credits recognized, the costs and so on.

References

Audretsch, D. B. (2014). From the entrepreneurial university to the university for the entrepreneurial society. *The Journal of Technology Transfer*, *39*(3), 313–321. https://doi.org/10.1007/s10961-012-9288-1

Brem, A. (2011). Linking innovation and entrepreneurship: literature overview and introduction of a process-oriented framework. *International Journal of Entrepreneurship and Innovation Management, 14*(1), 6–35. http://doi.org/10.1504/IJEIM.2011.040820

European Commission. (2007). Key competences for lifelong learning: European Reference Framework. Luxembourg: Office for Official Publications of the European Communities.

Fajardo, R.V., Delgado, M.R., González, D.S., & Vargas, O.G. (2016). *Emprendedores en crecimiento: el reto de la gestión del talento*, Universidad de los Andes, Facultad de Administración, Centro de Estrategia y Competitividad, Ediciones Uniandes, Bogotá. Retrieved from http://goo.gl/1XWz3F Accessed 10 June 2018.

GEM (2018). Global Report 2017/2018. Global Entrepreneurship Monitor. Retrieved from https://www.gemconsortium.org/report/50012Accessed 25 May 2018.

Hoppe, M. (2016). Policy and entrepreneurship education. *Small Business Economics*, *46*(1), 13-29. https://doi.org/10.1007/s11187-015-9676-7

Kucel, A., Róbert, P., Buil, M., & Masferrer, N. (2016). Entrepreneurial Skills and Education-Job Matching of Higher Education Graduates. *European Journal of Education*, *51*(1), 73-89. https://doi.org/10.1111/ejed.12161

Landström, H., Åström, F., & Harirchi, G. (2015). Innovation and entrepreneurship studies: one or two fields of research?. *International Entrepreneurship and Management* Journal, 11(3), 493-509. http://doi.org/10.1007/s11365-013-0282-3

Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: known worlds and new frontiers. *Journal of Small Business Management*, *49*(1), 55-70. https://doi.org/10.1111/j.1540-627X.2010.00314.x

Schumpeter, J.A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*, translated from the German by Redvers Opie, New Brunswick (U.S.A) and London (U.K.): Transaction Publishers.