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## ENTREPRENEURSHIP EDUCATION IN THE UNIVERSITY: A FACTOR OF SUSTAINABLE DEVELOPMENT

Mihaela Diaconu (a)\*, Amalia Duţu (b), Bogdan Gabriel Georgescu (c)
\*Corresponding author

- (a) Pitesti, Arges, diaconu\_m2005@yahoo.com
- (b) Pitesti, Arges, pandelica.amalia@yahoo.com
- (c) Pitești, Arges, bogdan.georgescu@upit.ro

#### Abstract

The economic and social evolution of recent years has highlighted the need to act more coherently in education and training to meet the challenges posed by new technologies, increased competition in the market, economic crises. Entrepreneurship education is considered by specialists as an activity through which the potential of each person can be developed. Entrepreneurship training programs included in the entrepreneurial ecosystem make it possible to educate the process of stimulating personal initiative, proactive attitude towards life and self-esteem, developing the entrepreneurial spirit that is useful in everyday life and at work. The environment conductive to the entrepreneurial education process must be built with the support of teachers and entrepreneurs as mentors using modern methods of developing entrepreneurial skills. The level of development of the entrepreneurial education is low compared to the current needs of the labour market, and in the higher education in Romania the entrepreneurial education is an approach that needs to be substantially improved so that the number of graduates who initiate and develop a business grows. Through this paper we aim to present a model for approaching the entrepreneurial ecosystem within the modern university in order to better respond to the recommendations of the European Commission and the current requirements of the labour market.

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**Keywords:** Entrepreneurship education, entrepreneurial ecosystem, entrepreneurial skills, sustainable development, enterprise education.



#### 1. Introduction

Over the past 10-15 years, universities in the European space have undergone significant changes in their mission, with a focus on their role in promoting innovation in enterprises and the development of small businesses, on promoting the concept of enterprise in the structure of the university and the entrepreneurial spirit as a component of the quality culture and the organizational culture of the university.

The university can gain competitive advantages through a holistic, dynamic and effective approach to entrepreneurship, as in recent years European universities have become major players in the process of regional, national, public and business development. Economic and social development through the involvement of the university alongside the other strategic actors has led to the emergence of third generation university and to Triple helix model.

European enterprise education policies are backed, according to a study entitled "European approaches to enterprise education" (Katja, Timo, & Ruskovaara, 2018), by the following aspects:

- enterprise education is the means by which the culture of business is formed and implemented at the company level;
  - enterprise education is a solution for competitiveness and unemployment issues;
- enterprise education is the way to support, develop a knowledge-based society, and create added value for society.

Currently, the outcomes entrepreneurial models are: student start-up, entrepreneurship learning and entrepreneurial networks.

In order to cope with the continuous changes in the European economy, it is imperative to support young people in the process of acquiring entrepreneurial skills. According to the European agenda established by the *European Commission Communication* entitled "Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources" (European Commission, 2013), all educational institutions need to improve their adaptability, promote innovation and exploit the potential of technologies. This approach is linked to the assumptions of the Entrepreneurship 2020 action plan, according to which education and training play an essential role in the cultivation of new generations of entrepreneurs and university entrepreneurial education can stimulate the implementation of high technology, support for business ecosystems, partnerships and industrial alliances.

A study conducted by Gănescu (2014) on the entrepreneurial ecosystem in EU countries, by analysing the relationship between entrepreneurial behaviour among young people and the unemployment rate, highlighted the fact that at EU level the entrepreneurial ecosystem is not favourable for young people and that rapid and adequate policies are needed for this sector in order to reduce unemployment among young people.

In the study of the Barometer of Romanian Entrepreneurship (The Barometer of Romanian Entrepreneurship, 2016, p. 53), startup entrepreneurs believe that Romanian school does not prepare young people to become entrepreneurs. It is stated in the document (The Barometer of Romanian Entrepreneurship, 2016, p. 54) that entrepreneurial training is different from traditional academic education and implies the siting of aspirations and unique attitudes to entrepreneurs who can develop only through the contact with the stories of successful business people.

#### 2. Problem Statement

### 2.1. Entrepreneurial education, a necessity for developing the innovative potential of young people

In the last two decades, entrepreneurial activities are considered essential for economic development. Promoting entrepreneurship has become an absolute priority for governments and organizations, since education and support for business development initiatives will lead to growth, job creation and innovation.

Entrepreneurial student education has become an increasingly important role. A Special GEM Report on entrepreneurship training & education performed in 38 countries Coduras, Levie, Kelly, Saemundsson, and Schott, (2010) highlights the importance of young people's entrepreneurial training.

Entrepreneurship education is considered by specialists as an activity through which the potential of each person can be valued and developed. The entrepreneurial skills and youth skills developed by stimulating the initiative can contribute to creating an entrepreneurial culture at the society level in response to a culture of passivity identified today. Stimulating personal initiative, proactive attitude towards oneself and towards society applicable in personal and work life, critical thinking, analytical thinking, personal development through the cultivation of entrepreneurial spirit based on trust, self-esteem, creativity, responsibility, stimulating problem solving capacity, cooperation and adaptation to roles are results that can be achieved through education and training to be successful in society.

The environment conducive to entrepreneurship education should be created and supported by teachers, entrepreneurs and entrepreneurship specialists as mentors to support entrepreneurial attitude towards themselves and towards society.

In order to achieve the expected results in the training of entrepreneurial skills it is necessary for the teachers to adopt new ways of working, becoming facilitators of learning. In the opinion of the Council of Europe, a facilitator is the one who helps the group to discover concepts, knowledge and then apply them, being encouraged and helped to explore their own potential and to value them. Entrepreneurship must be maintained by integrating theoretical learning with practice by using those methods and approaches that lead to building self-confidence, the ability to manage mistakes by learning from mistakes.

Vaidya (2014) appreciated the fact that the entrepreneurship curriculum underlines the processes of constructing knowledge by learners.

In the specialized literature we have identified the following concepts: entrepreneurship education, enterprise education and entrepreneurial effectiveness. The Quality Assurance Agency for Higher Education-Enterprise and entrepreneurship education: Guidance for UK higher education providers has defined the terms so: "enterprise education is defined as the process of equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen. Entrepreneurship education equips students with the additional knowledge, attributes and capabilities required to apply these abilities in the context of setting up a new venture or business. All of this is a prerequisite for entrepreneurial effectiveness, that is, the ability to function effectively as an entrepreneur or in an entrepreneurial capacity, for example within small businesses or as part of 'portfolio careers, where multiple job opportunities, part time work and personal ventures combine'. Enterprise and entrepreneurship are transdisciplinary, with a

strong connection to issues of employability, innovation, knowledge transfer, commercialisation, and intellectual property" (Quality Assurance Agency, 2018, p. 2).

Mwasalwiba (2010) has conducted a meta-analysis of the specialized literature on entrepreneurship education and found that in over 30% of articles on entrepreneurial education, this is defined as a process based on individual attitudes, entrepreneurial behaviour, values and intent, skills, intentions related to identifying opportunities, creating new businesses and managing small businesses, creating and developing entrepreneurial attitude, spirit and individual culture in within the community. Many authors approached in Mwasalwiba's study associate entrepreneurship with new ventures and job creation, others highlight the contribution of entrepreneurship to the development of society.

Youth entrepreneurship education must be perceived by responsible actors according to the literature, as a complex process that facilitates the recognition, evaluation and exploitation of business opportunities, the development of entrepreneurial skills based on competencies able to ensure the use of innovation and creativity as entrepreneurial success elements. It is a traditional approach to learning what entrepreneurship is, followed by a cross-cutting approach, namely the shift from knowledge gained on entrepreneurship (to learning) to the implementation and experimentation of acquired knowledge.

Tounes (2003) has proposed educational practices in teaching entrepreneurship, an integrative model for entrepreneurship education, respectively:

- The reproduction practices- controlled learning process conducted by the teacher, based on exercises, oral presentations, documentation;
- The construction practices a component in which the learner can manage the learning process by engaging with professionals or experts in the filed of entrepreneurship within an individual project on entrepreneurship;
- Co-construction practices- the learning process is carried out by the professor and the student through the use of case studies, role-plays, focus groups with student participants, entrepreneurs and experts in the field of entrepreneurship.

The levels of the integrative model proposed by Tounes (2003) are as follows:

- 1. awareness and information (knowledge of the steps needed to create a startup, difficulties, success factors in creating a business);
- 2. specialization in entrepreneurship (acquiring the skill of business risk assumption, responsibility as an entrepreneur or as an entrepreneur in a firm with the support of teachers and experts based on innovative real projects where students work in the group);
- 3. orientation and support session for students who want to create a startup (business plan developed and implemented).

Mwasalwiba (2010) has identified in the reviewed specialized literature methods of learning entrepreneurship, respectively: business/computer or game simulations, role models or guest speakers, business plan creation, project works, games and competitions, setting of real small business ventures, workshops, presentation and study visit.

Through modern learning methods who support the development of entrepreneurship, we can also include student-centred learning, experiential learning, learning through one's own life experiences as well as learning by doing. Academic and business partnerships make it possible to use experiential learning contexts with important achievements in supporting business ecosystems.

Bjornali & Anne Storen (2012) have conducted studies that have been aimed at examining the effects of innovation development processes through educational programs. These highlighted three models of successful entrepreneurial behaviour, respectively:

- technical innovator behaviour based on the ability to identify opportunities through creativity, analytical skills, the ability to identify new ideas and solutions. People with such behaviour have the ability to coordinate activities;
- the knowledge broker behaviour based on the ability to establish links between information and knowledge from various internal and external sources;
- the executive champion behaviour based on the ability to provide the resources needed to mobilize the capabilities of others through appropriate communication to implement innovations

The coordination of the entrepreneurial university, the processes within the modern university that lead to the obtaining of higher value for its stakeholders were outlined by (Aranha & Garcia, 2014). This model is made up of the following structural components:

- *The entrepreneurial vision* of the university characterized by a mission designed within a flexible internal environment made up of efficient structures that make it possible to efficiently allocate resources within the specific processes in order to successfully fulfil their teaching, research and role as economic, social agents and cultural.
- *Committed strategic leadership*, respectively a commitment to design and implement the entrepreneurial vision for efficiency and flexibility of activities at all levels of the university.
- Generation of innovative knowledge which involves the development of programs, projects to develop entrepreneurial skills, stimulate the creativity of young people and the ability to identify opportunities and solve problems, successful elements of the entrepreneurial education system.
- *Capitalization and innovative knowledge*, respectively valorisation of the results of the fundamental and applicative scientific research activity by transferring them to the organizations.
- *Economic, social and cultural development of the region* by re-conceptualizing products, services, redefining the value chain within the university entrepreneurial environment.
- *Integrated entrepreneurial culture* by developing tools and mechanisms to help raise employees 'and students' awareness of entrepreneurial behavior, setting incentive strategies for developing entrepreneurial attitudes within and outside the university.

Katja and the collaborators (2018) has studied how enterprise education is designed, thought out, supported and implemented in European universities. In the view of the authors, the organizational framework of entrepreneurial activity in universities includes four components: the institutional strategy, contextual relationships within the entrepreneurial ecosystem, entrepreneurial movement, acts of enterprise.

#### 3. Research Questions

The questions we have been asked to answer in this paper are:

1. Is the third mission of the modern university the only one able to lead to the development of entrepreneurial culture as a component of the culture of modern universities?

2. How should the other two modern university missions be addressed in the institutional strategy,

namely the education and scientific research activity, so that modern universities become important players in the sustainable development process according to the recommendations of the European

Commission and the 2020 Strategy? (European Commission, 2013).

3. What are the elements that can support the modern university entrepreneurial ecosystem?

4. Purpose of the Study

Through this paper we aim to identify a model for approaching the entrepreneurial ecosystem within

the modern university in order to better respond to the recommendations of the European Commission and

the current requirements of the labour market. (European Commission, 2013) In constructing the model,

we will consider models identified in the literature as well as the expertise of the University of Pitesti

regarding the way of fulfilling the mission assumed within the Recovery Strategy 2016-2020 with emphasis

on the contribution to the economic and social development, the third mission of the modern university.

5. Research Methods

In the proposed approach we started from the specialized literature, namely from the identification

of the key terms used in the entrepreneurial ecosystem of the modern university, from the establishment of

the processes considered to be the pillars of the entrepreneurial ecosystem and from the models created by

the researchers who approached the subject.

6. Findings

We considered the components of the internal and external environment specific to the modern

university that we analysed from the perspective of their contribution to supporting the accomplishment of

the mission assumed by the modern university on the three components: education, scientific research and

involvement in the development of the community approached from the perspective of the university

entrepreneurial ecosystem.

The modern University operates in the concrete conditions of the environment in which it exists

and operates, being influenced by factors that are in constant change and that make up the environment

with an influence on the strategy and the expected results.

The intern environment specific to the modern university should include those resources, capacities

and competencies designed to support the development of the entrepreneurial ecosystem through the three

assumed missions.

The institutional strategy on education, university education in the context of the entrepreneurial

ecosystem, we consider it useful to address the following objectives:

- The first objective of understanding the concept of entrepreneurship should be thought to be

achieved with the support of teachers as learning facilitators to help young people discover concepts and

knowledge that they then apply, and thus be encouraged to explore their own potential. The notions should

be included in study modules structured according to the requirements identified among young people

according to EY2014, respectively: introduction to entrepreneurship, development of a business plan, small

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business financing, legislative issues related to small businesses, small business case studies, high business growth management.

- The second objective, *developing the entrepreneurial spirit* must be taken into account that the potential of each young person can be valued and developed by stimulating initiative, proactive attitude towards oneself and towards society, by developing critical thinking and analytical thinking, by stimulating the empowerment and the capacity to identify solutions problem-solving solutions, by stimulating the process of identifying opportunities. Trust, flexibility, diversity, excellence, equity, transparency, well-being are values supported by the Romanian Academy within the School and Education Strategy in Romania (Vlad, 2015) as fundamentals requires to achieve performance. Specialty studies have highlighted the fact that entrepreneurial success is related to certain characteristics and abilities, namely: passion, self-confidence, perseverance, ability to complete tasks and work hard, ability to take risks, vision, desire of continuous improvement of performance, creativity, availability for continuous learning, ability to achieve predictions, communication skills, marketing skills, interpersonal skills, general management knowledge, personal effectiveness, team building skills.

Young entrepreneurship spirit must be maintained by integrating practice with education, using modern methods and approaches such as pupil/student learning and experiential learning, including learning through their own life experiences as "learning by doing".

- The third objective, undertaking the approach by which an entrepreneur is formed, must be designed with the involvement of teachers, industry specialists and entrepreneurs as mentors to support the entrepreneurial attitude in student start-ups, entrepreneurial networks by developing cooperative and adapting capacity to roles within the network capable of creating added value, through the creation and management of small businesses, networks of mentors created by connecting entrepreneurs with young people who want successful business, financing networks, respectively the pursuit of investor search and obtaining financing, the organization of community events in which to develop competitions ideas and business for students and graduates who may even be mentors for their younger colleagues.

The development of entrepreneurial ecosystems in universities in the context of the modern university's microeconomics and microeconomics must be substantiated on: education and training through university education, entrepreneurship courses, informal education; coordinated support: mentors, associations and clubs of entrepreneurs, business incubators, parks and business centres; entrepreneurial culture built on tolerance to risk and failure, preference to be entrepreneur and not manager, culture of innovation and research, the appreciation of the added-value of entrepreneurship through their own strengths; access to seed financing, start-up, expansion, growth capital; tax incentives and public policies that support entrepreneurship.

Returning to the questions underlying the study and to the results obtained from the analysis of the specialized literature as well as the expertise in this field of the University of Pitesti, some important aspects can be resulted. The third mission of the modern university can lead to the development of entrepreneurial culture as a component of the modern universities' culture, but in correlation with the other two missions, that of the education and research. The modern University, in particular the University of Pitesti, has the mission designed within a flexible internal environment made up of structures that make it possible to efficiently allocate resources within the specific processes in order to successfully fulfil the teaching, research and role of economic, social and cultural agent. University of Pitesti carries out the activity

promoting a proactive attitude regarding the training of young people and the involvement of the academic staff in generating the knowledge and its transfer to the economic agents in the area. Within the university was created the organizational framework - the Consultative Council of the Rector composed of representatives of the economic environment who expressed their interest to join the university in order to jointly realize activities with added value for the community and for the stakeholders of the university. This council is the result of the work carried out by the Centre for Collaboration with the Socio-Economic Environment with the mission to provide the interface between the University of Pitesti and the socioeconomic environment by creating a framework corresponding to the development of collaboration between the two components. The centre's main tasks are to carry out ongoing analyses to identify potential socio-economic partners, the skills requirements of the graduates required by employers, the degree of correspondence between the competences of the higher education institution and the requirements existing on the workforce market; takes the steps to link the educational offer to the existing labour market requirements and its trends; provides the necessary framework for the elaboration, access and implementation in partnership with representatives of socio-economic environment of projects funded by European funds that contribute to the development of the University of Pitesti; provides the appropriate framework for the implementation of bachelor and dissertation projects on topics proposed from and in collaboration with socio-economic partners; organizes and facilitates meetings between socio-economic partners and faculties / academic departments / study program representatives; ensures the development of partnerships between the University of Pitesti / faculties / academic departments / study programs and socio-economic environment partners; contributes to the development and implementation of the Regional Cooperation Plan for Vocational Education and Training. (www.upit.ro)

In order to become an important player in the sustainable development process, as recommended by the European Commission and the 2020 Strategy (European Commission, 2013), the institutional strategy foresees actions identifying the resources, suppliers, staff motivation measures, strategic alliances, a new system of governance, management and organization, a system that also includes actions related to the training of entrepreneurial skills. In the organizational structure of University of Pitesti there are components that have as an assumed mission the involvement in the development of the university entrepreneurial ecosystem. In the University of Pitesti chart there is the Technological Transfer Center of University of Pitești, in which various activities were carried out, including issues related to applied research and technology transfer as ways of involvement in regional development. Also, the Research-Development-Innovation Centre (RDIC) of the University of Pitesti is a support centre that has the mission to ensure the operative management of support actions for scientific research and university creation at the level of University of Pitesti. Its role is to support the strategy for research, development and innovation activities according to the University of Pitesti mission; consultation of the academic community through faculty representatives for the implementation of the mission assumed through the research strategy; planning of research-development-innovation activity, identifying financial resources for research projects, supporting the implementation of project proposals for the award of grants and scientific research contracts, both within national and international programs; organizing and conducting in optimum conditions the support activities for research, development and innovation; developing an institutional culture in the field of intellectual property.

The Institutional Strategy identifies the other two modern university missions, namely education and scientific research, so that modern universities become important players in the sustainable development process according to the recommendations of the European Commission and the 2020 Strategy, as well as the elements that can support the modern university entrepreneurial ecosystem. (European Commission, 2013).

#### 7. Conclusion

Under the current conditions of the higher education market where a crucial role lies in the finality of the training of young people in line with the employers' needs, it is a necessity to approach the training of entrepreneurs from the perspective of entrepreneurship.

The university can gain competitive advantages through a holistic, dynamic and effective approach to entrepreneurship, as in recent years European universities have become major players in the process of regional, national, public and business development. In order to cope with ongoing changes in the economy, it is imperative to support young people in the process of acquiring entrepreneurial skills through a favourable entrepreneurial ecosystem for young people, including rapid and adequate policies for this sector in order to reduce youth unemployment

The entrepreneurial eco-system we recommend should be made up of: educational practices in teaching integrated entrepreneurship, an organizational framework that highlights the entrepreneurial vision of the university and an institutional networking efficient within the community, an culture of entrepreneurship – supports universities to develop and implement comprehensive strategies for building a culture and spirit of entrepreneurship, the Business Start-up Grant – provides support for students, graduates or researchers in the development of innovative technologies or business based on knowledge transfer (Startup business barometer in Romania, 2017).

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