

## **New Orientation on Entrepreneurship and Business Education at Petru Maior University of Tirgu Mures**

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*Abstract: Entrepreneurship education became very important in the last years, based on the entrepreneurs' importance for the knowledge based economy, taking into consideration more and more the local characteristics and the need of creativity, innovation, and new business ideas. At Petru Maior University of Tirgu Mures, there are more than ten years of continuing preoccupation regarding the entrepreneurship and business education development. In this paper, we intend to analyse the changes and the specific approach about entrepreneurship education.*

*Keywords: higher education, entrepreneurship, entrepreneurial intention*

### **1 Introduction**

Entrepreneurship education (EE) has an increasingly higher attention at the European level, and it was mentioned among the strategic initiatives of Europe 2020. Recently, the European Commission through „Entrepreneurship Action Plan 2020. Reigniting the Entrepreneurial spirit in Europe” (EC, 2013) has highlighted that the investment in EE represents one of the highest return investments, with the highest return that Europe can make. EE is defined as those activities of teaching and learning about entrepreneurship that involve "developing knowledge, skills, attitudes and personal qualities appropriate to the age and the development of pupils or students" (EC, 2002). Education, and especially EE could generate a positive effects on job creation, being a driving force in sustainable economic development and improvements in people's standards of living. (Acs et al. 2014; Singer et al. 2015; EU 2015). As a consequence, in our university we were focus in the last years to adapt our curricula and to adjust to the new orientation at international level regarding EE. Petru Maior University (PMU) was founded in 1960 as a Pedagogical Institute (he Order of the Ministry of Education and Culture no. 3243/1960), and over the years has evolved and, nowadays, its structure contains three faculties on fields as

follows: economics, law, engineering, literature and sciences. It is a public university and it offers studies of bachelor, master and doctoral programs. The first bachelor program on business education was created in 1993 as Enterprise Management, and only in 2000 was started the first master program on Business Administration. Based on the various study fields in our university, we have to assure the access to entrepreneurship education to all the students, regardless their main study field, such as engineering, literature, computer sciences or law. Our university was involved in numerous national and international projects, grants which were focused on entrepreneurship or business education, trying to cover many aspects of the process, in order to be approachable for students.

We have to underline that in Romania there are national standards that should be reached by all the universities and there are specializations very strictly established by the National Agency of or Quality Assurance in Higher Education (ARACIS). Based on the national list of possible specializations, the entrepreneurship doesn't exist for bachelor or doctoral programs, only in the master case, where there is a widely area of programs. The situation is different regarding business administration field of studies, because there are few specializations under the "business administration" domain, such as: "Business administration", "Economy of Trade, Tourism and Services", "Enterprise economy", "Business administration of trade, tourism, services", another domain proper to the subject of business administration is "management", and we can find as possible specializations, as follows: "Management" and "Management of rural sustainable development". Regarding the doctoral studies, the domains and the specializations are very similar with bachelor programs.

## **2 Evolution of entrepreneurship and business education**

The first initiative, at national level, in order to sustain students to become entrepreneurs was the Government Decision no 163/2003 regarding the fiscal facilities for students who want to start their own business, according to which the solicitors are remitted of initial costs of getting the authorizations. Based on this legal regulation, at our university level were organized studies about students' private initiative in the first period after the GD no 163/2003 was adopted.

Over the years, taking into consideration the market evolution and the recommendations of national and international evaluation of higher education quality institutions, such as ARACIS or European University Association (EUA) , we tried to adapt our curricula from all the specializations.

During 2003-2007, a study<sup>1</sup> regarding entrepreneurial initiatives of our students was realized, at the UPM. Some of the most important aspects discovered are as follows:

- 330 students applied to start a business based on GD no 166/2003;
- 280 enterprises were created, respectively 85% of all requests;
- 171 enterprises were still functioned in 2007.

The students' entrepreneurs were distributed by faculty and sex, as it is shown in Figure 1. Based on Figure 1, it can be observed that FEJAS registered the highest percent of entrepreneurs' students from the total, respectively, 41%, followed by the FE, with 36% and FSL with 23%. Regarding the number of female and male students, we can noticed that in the case of FEJAS and FSL female students are much more numerous than male students, 56% to 24% at FESAJ, and 27% to 16% at FSL. A different situation has FE, where the percentage for mare entrepreneurs students is 48%, and for female students only 8%. Thus, the gap between the two groups of students is very large at FE, comparing to the others two faculties.

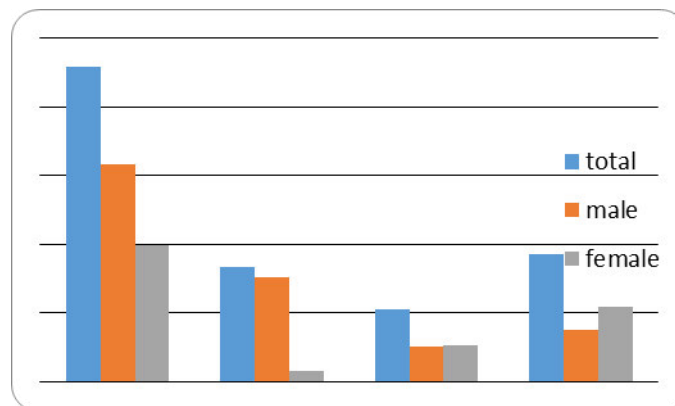


Figure 1  
Entrepreneurs students distribution

Source: our own calculation, based on data from [http://upm.ro/career\\_center/cc\\_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

When they were asked about the resources needed to start their own business, the answers obtained are presented in Figure 2.

<sup>1</sup> Boarescu G., Report regarding students' entrepreneurial initiative of Petru Maior University/ [http://upm.ro/career\\_center/cc\\_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

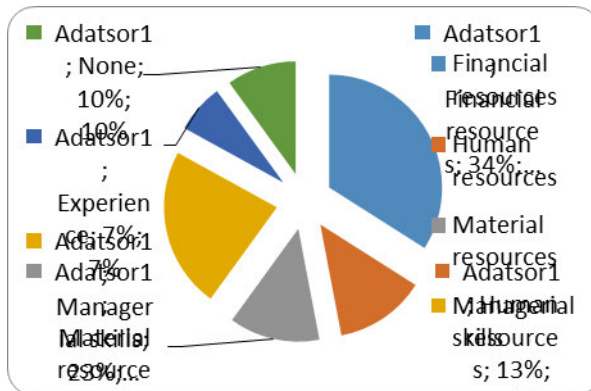


Figure 2  
 Resources needed to start a business

Source: our own calculation, based on data from [http://upm.ro/career\\_center/cc\\_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

Based on the students' answers we can observe they consider as main problem the financial resources, on second the managerial skills, and at the same level of importance, 13%, material and human resources.

The domains of the starting business, as we can see in Figure 3, most of them, 73% are in the services sector, 22% in trade sector and only 5% in the industrial field.

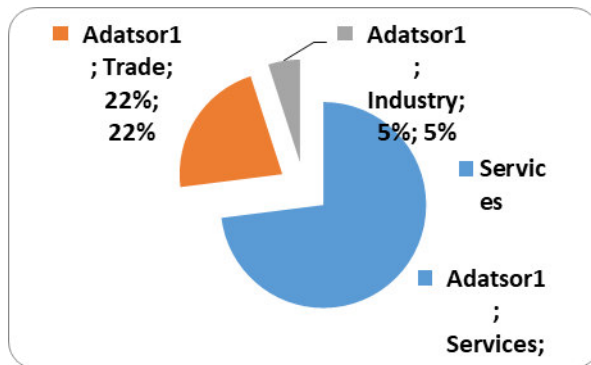


Figure 3  
 Fields of the new business creation

Source: our own calculation, based on data from [http://upm.ro/career\\_center/cc\\_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

The existing specializations accredited for the university year 2016-2017 are presented in Tabel 1, for all three levels: bachelor, master programs. The doctoral

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programs are organized only at Faculty of Letters and Sciences, in the domains of Literature studies and History.

Faculty	Bachelor specializations (3 or 4 years)	Master specializations (1 or 2 years)
Faculty of Engineering (FE)	The Technology of Mechanical Engineering	Quality Management Systems
	Economical and Industrial Engineering	Computer Graphics and Industrial Design
	Automation Applied Informatics	Computer Aided Design and Manufacturing
	Electro-Energetic Systems Engineering	Management of Energetic Systems Automatic Systems of Managing Industrial Processes
Faculty of Sciences and Letters (FSL)	Computer Science	History of Literature and Literary Criticism
	Romanian Language and Literature - English Language and Literature	Anglo-American Studies. Intercultural Perspectives
	Applied Modern Languages	Information Technology
	Communication and Public Relations	World History, International Systems and Relations
	History	Elites, Culture and European Construction
	Political Studies	
Faculty of Economics, Juridical and Administrative Sciences (FEJAS)	Accountancy	Business Management
	Finance & Banking	Business Administration of Trade, Tourism and Services
	Economy of Trade, Tourism and Services	Financial-Banking Administration
	Management	European Professional Master in Public

		Administration
	Public Administration	Accountancy and Audit
	Law (4 years, daily)	Judicial Institutions and Liberal Professions
		Human Resources Management

Tabel 1

Fields of specializations at PMU

Source: <http://iuniweb.upm.ro/> accessed at 14.03.2017

As it could be noticed in Table 1, there are many economics and business administration specialization at our university, but there are numerous other specializations from totally different domains. Thus, we cannot use the same approach to all the students, regarding entrepreneurship education.

In order to choose the proper approach regarding business and entrepreneurial education, for students from different specializations, we applied over the years questionnaires and we found out similarities but also differences between engineering and economics students. When they were questioned “If there is EE in their programmes of study”, as we can see in Figure 4, students from engineering and from business specializations consider the item correct. A higher percentage belongs to business students 84.67% comparing to 65.12% relative to the engineering students.

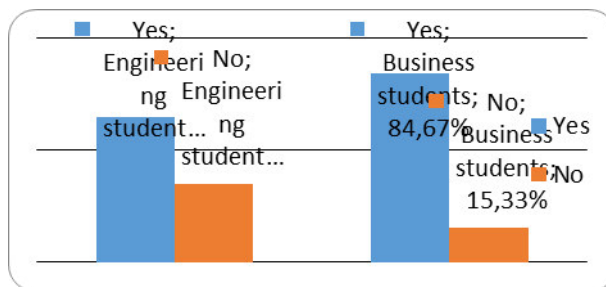


Figure 4

Is there EE in the curriculum?

At the question “Do you want to become an entrepreneur after graduation?”, the students answers are presented in Figure 5.

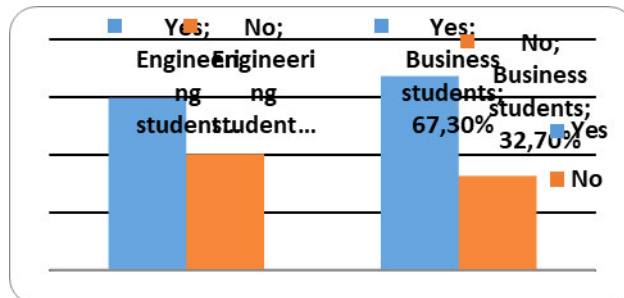


Figure 5

The intention to become an entrepreneur

As it was expected, the results regarding the intention to become entrepreneur after graduation are also in favour of business students, 67.30% from them answered affirmative to the question, comparing to the engineering students, who had positive answer in 59.70% from their total number.

We can observe that even if the difference between the business students and engineering students regarding the perception about EE in their curriculum is significant (19.55%), when they were questioned about their intention to start their own business, the answers distribution is not so significant anymore, being only 7.60%. Thus, we have to be able to assure entrepreneurship education in the same measure for both categories.

The initiatives taken by PMU regarding EE, over the last 12 years, can be placed within the broader framework, as follows:

a) Postgraduate programmes:

- European Integrated Rural Entrepreneurship (1 year) launched in 2002;
- Entrepreneurship and business development (2009-2011);

b) the inclusion of some courses having a significant entrepreneurial component in the Master's degree and bachelor programmes such as Entrepreneurial Creativity, Entrepreneurship (2004), Entrepreneurial Economy (2005);

c) Agreement signed with the organization Junior Achievement Romania. National contests for students have been developed based on this agreement such as Student Company, Business Ethics (since 2004);

d) National and international projects, such as:

- "Research regarding the harmonization of entrepreneurial education in Romanian universities with universities from European Union and Eastern Europe" (2006-2008) aiming to create a national network among Romanian universities and to elaborate a curriculum for entrepreneurship education at bachelor level;

- “European EE” (2007-2009) aiming to implement and elaborate an optional module of entrepreneurial education for students attending bachelor or master programs in Engineering, IT, Physics, Chemistry, Biology, etc. This optional program was also destined, through a system of continuing education, to higher education graduates who wish to acquire knowledge and skills in the field of entrepreneurship, in order to start their own businesses. There have also been developed curricula for entrepreneurship education, books, methodologies and teaching aids appropriate to the implementation of the created curricula;

- “Spread The ART of going UP – STARTUP” (2014-2016) has as main objective the development of entrepreneurship and the familiarization of the project participants with concepts such as startup businesses, innovation and entrepreneurship through the cooperation with entrepreneurial, educational and public institutions from Greece, Italy, Portugal, Romania, Slovenia, Spain and Turkey.;

-“EQVET-US European Quality Assurance in VET towards new Eco Skills and Environmentally Sustainable Economy” (2014-2016);

(e) The International Summer School BEST (2011-2016);

(f) Introduction in all curricula from non-economic studies at least 2 courses related to entrepreneurship education (since 2015).

## **Conclusions**

Thus, it more attention needs paid to the “development of metacompetencies in students studying engineering, allowing them to operate effectively, fostering entrepreneurship and employability” (Ling and Venesaar 2015).

Our paper highlights that within PMU, there is a perception of a high level of EE among our students. The difference in perception between the engineering and business students underline the need to align, to a greater extent, the engineering curricula towards more diversified forms of EE, according to the fact that they already have a practical component, much more proper to entrepreneurial activities.

At the same time, it is necessary to provide the required knowledge on entrepreneurship and, in particular, the development of entrepreneurial skills based on appropriate teaching methods. Under these circumstances, an important role is held by those universities which should encourage the development of students' creative side, and arousing their interest in becoming entrepreneurs, considering self-employment as a viable career. Our results have important implications for both teaching and research of entrepreneurship. A special



attention is needed to improve and develop higher entrepreneurship educations for engineering field.

Thus, universities are recognised to play an important role (EU 2012; Sieger et al. 2014; EU 2015) in increasing entrepreneurial intentions based on higher effectiveness of entrepreneurship education, as they can improve “human resource employability and the matching of skills to the labour market needs” (Herman, 2014).

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