

REALITIES AND CHALLENGES CONCERNING ENTREPRENEURSHIP EDUCATION IN ROMANIA¹

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Abstract: Today more than ever, we are witnessing a strong need for school to be more open and close to real life from the perspective of the role that education has in the development of a socially active and responsible behavior, adequate to a society that suffers continuous change, dominated by turbulences.

Competence, tacit or explicit knowledge, intellectual capital become normal expectancies from companies and this expresses an openness towards new, towards change, promoting innovative projects and fostering the continuous growth. We all, as individuals, but also as groups, have to develop the ability to permanently learn, which offers us the choice to adapt to a society that is constantly changing.

It is obvious that the success of an economic system is strongly influenced by the quality of its human resources. From this point of view, the education system has a crucial importance for delivering those programs that are able to develop to the students the competencies required by a very dynamic business environment. The paper emphasizes these complex connections between the education and the economic development of a region or country.

Keywords: entrepreneurship, higher education, business, economic growth

JEL Classification: L26, I25

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1. Education – a priority for economic growth

The purpose of education, particularly entrepreneurial education is to build a strong, solid, wide edifice in which we can identify and implement the initiatives that sustain obtaining and rising a company's performance.

In this context, a challenge of the contemporary society is that of rethinking of school, formal education, alongside the non-formal and informal one, in their different ways of manifestation.

Rethinking the way of business, reinventing your own business allows you to value opportunities; exploration of the economic environment's limits can't be done without an entrepreneurship education, without an adaptive and reactive way towards the changes of the economic environment and not only. Being pro-active is a necessary quality that can be educated by attending different educational programs and developing specific competencies.

Globalization influences the education, the training system, the specific institutions in different ways, directly (i.e. in the USA financing the research and development activities amplifies the necessity of great investments in this domain) or indirectly, by asking to form those abilities and competences necessary for obtaining and keeping job in an economic and technological environment that is rapidly changing.

From the perspective of the impact that globalization has and the acceleration of competition, the investment growth in education and forming as well as a rethinking process are mandatory, in parallel for rising quality and relevance of school, university, adult education, professional forming system and coherency of the educational European system, for updating their changes to be acknowledged abroad.

Investment in education is different. It is obvious that an authentic, evolved, performing educational system cannot be done without strong financial support. Today, a quality educational system does not exist without investing important sums, the sources of which are largely private.

The American system of education regarding higher education is the best example and in Europe higher education in Great Britain can be a possible landmark. Universities like Oxford and Cambridge are present in all international charts.

These states are accompanied by north states - Finland, Norway, Denmark but also Canada and New Zealand, which admit that education has a great impact in economical growth, of productivity and is an important

investment regarding alternative expenses both at a microeconomic level and at a social level.

According to OECD 2011 data (<http://www.oecd.org>), the percent of the GDP allocated for higher education in Great Britain, Denmark and Sweden compared to the average in the EU shows that Denmark overcame Great Britain with 1.6% of the GDP- also higher than the average in the UE- 1.1% (Table 1). On top of the chart created by OECD is USA and Canada, with 2.7% and 2.5% of the GDP. Interesting to notice that in the USA private financing sources overcome the public ones (1.7% private sources compared to 1% from public sources), which makes the American private university system to be highly competitive, private companies investing important sums in education and research.

Table no. 1

Percent of the GDP allocated for higher education (%)

States	Public funds (%)	Private funds (%)
Danemarca	1,6	0,1
Suedia	1,4	0,2
Marea Britanie	0,6	0,6
SUA	1,0	1,7
Canada	1,5	1,0
UE	1,1	0,2

Source: done by the authors based on OECD data, taken from *Education at a Glance- OECD Indicators, (2011)*, pg.231 (www.oecd.org/edu/eag2011)

Also, regarding investment in education, OECD data in 2011 show that regarding the total annual sum spent by learning institutions in Great Britain, Denmark, Sweden for a student (for all the services offered to him/her) overcomes the average in the EU. (see chart 1)

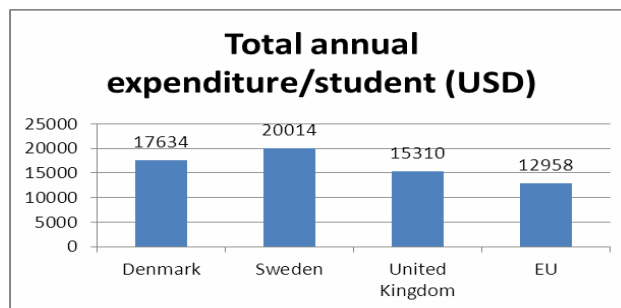


Figure no.1. Chart 1-Total annual expenditure per student allocated by the higher education institutions

Source: done by the authors based on OECD data, taken from Education at a Glance-OECD Indicators, (2011).

Referring to 2020 Europe, the president of the European Commission, J.M. Barroso (<http://ec.europa.eu>), in the informal reunion of the European Council from February 11, 2010, regarding innovation and education, as a base for economic development, states: “In Europe, the expenditures for R&D are lower than 2%, compared to 2.6% in the USA and 3.4% in Japan. Our share of high technology enterprises half explains the gap from the USA”.

“If we do not take measures, we will record very little economic growth at the end of the decade, at European level. (...) We have to take realities on a long term: globalization, pressure for resources, aging, technological tendencies- and capitalize our full potential. 2020 starts now: our efforts of recover must to create necessary conditions for a durable growth and fiscal consolidation”.

In conclusion, focalization on knowledge, innovation and education is a priority for economic growth.

2. Considerations regarding entrepreneurial education. Finland, Norway, Germany, USA and Japan model versus the Romanian

Building new societies and economies of success, based on knowledge requires the formation of new attitudes and capacities, new skills for new jobs which means increased qualifications, level of education, training and lifelong learning.

Research shows that the countries that included in the national strategy the policy of modernizing the educational system are in top of economic development (<http://www.imdb.org>). They have been able to adapt and respond quickly and efficient to challenges of a complex, turbulent, constantly changing environment.

What was the basis of this adaptability?

Educational programs related to the needs of the business environment, providing an important role to entrepreneurship and business culture, creation and development partnerships between the academic area, business and administrative, promoting innovative projects from the education domain, the ability to finance the purchase of new technologies, high level training to increase efficiency in the use of emerging technologies, development of training programs and lifelong learning etc.. Therefore talk of a new type of education: entrepreneurship education.

In general terms, entrepreneurial education implies taking new attitudes towards knowledge, development, life and highlights the

importance of participating and taking initiative in front of real, concrete issues of society. Entrepreneurial education implies achieving excellence, obtaining great results, commitment and implication, a strong motivation for succeeding, accountability and risk taking.

In 2011 an interesting study belonging to Romanian researcher Roja Al. *Emerging virtual organizations. Features and forms in Romania*, captures distinctive facts of culture and entrepreneurial education from 21 states (Roja, Al., 2011).

A few features regarding educational system in Finland, Norway, Germany, USA and Japan are presented in Table 2, these countries being known for having a significant growth and economic development funded by a strong entrepreneurial culture.

Table no. 2

Culture and entrepreneurial education

States	Finland	Norway	Germany	USA	Japan
Characteristics of entrepreneurship culture and education	<ul style="list-style-type: none"> -Performing educational system -Adapting the education curriculum to the need of high performing sectors -Developing entrepreneurial abilities -Lifelong learning programs -Collaborative partnerships between the academic environment in Finland and the one in Russia 	<ul style="list-style-type: none"> -Educational programs adapted to the business environment -High learning capacity -Developing competences and growth of the level of specializing -Promoting a collaborative attitude -Promoting research and development in niche technologies 	<ul style="list-style-type: none"> -High level of professional training -Numerous institutions of biotechnological research -Educational networks for know-how transfer between regions -Entrepreneurial and collaborative business culture development -Public research project convergence with the strategies of private companies -Lifelong learning programs at a regional level 	<ul style="list-style-type: none"> -Sustaining and developing collaborative projects between universities, public institutions, business organizations -Promoting and sustaining SMEs - Recruiting and attracting science people- the main knowledge generators -Developing entrepreneurial attitudes -Continuous growth of qualification for human resources -Commitment for achieving excellence -Redefining the strategy of the educational system beginning with the primary cycle and creating a complex network of competence, abilities and continuous development forming institutions 	<ul style="list-style-type: none"> -Increasing the level of specializing -Promoting entrepreneurial programs in universities -Strategies and complex policies in the educational domain -Forming employees in virtual excellence centres -Forming research and development networks -Collaborative business culture

Source: adapted from Roja Alexandru (2011) - Emerging virtual organizations. Features and forms in Romania, PhD Thesis, Timișoara.

Of the data provided we also see that these companies have invested heavily in research, development and innovation, in education, conscious that support creative industries development will give the value and flexibility in a business environment more complex.

Training and development of new skills strategies and educational training programs, related educational, entrepreneurship focused on innovation, developing the potential creative government through programs, collaboration between educational institutions and research institutes- the business-administrative environment have led their rapid growth and increase in the competitiveness at either a local, regional, national and international and at the level of organization, group, individual.

If in the case of Finland, Norway, or the U.S.A. we can speak of a performance educational system, continuously adapted to the requirements of a society in change, a system which can facilitate and support transformations that take place in the business environment and not only, in the case of Romania culture and entrepreneurship education is located in an incipient phase.

According to a research (<http://www.vallalkozz.ro>) conducted by the Institute for Quality of Life Research about the social capital and social values within the European project European Value Survey 2009, Romania's population encourages values that support business development field: honesty, hard work, diligence, respect for social rules and decent behavior.

In our national system of values we meet characteristics who don't fold the entrepreneurship model: avoiding conflict and risk, short-term thinking and greater desire for stability and safety.

According to a study from 2011-*Analysis diagnosis: Universities and the socio-economic environment* (<http://www/edu2025.ro>), in the case of Romania entrepreneurship culture is characterized by:

1. *weak development of business incubators, technology parks- they are not enabled or not have capability to capitalize facilities made available to you;*
2. *multinational companies were not interested to cooperate with local universities in research, development and innovation;*
3. *no poles of competitiveness centers around;*

4. *inefficient mechanisms for the financing of innovation / regional clusters;*
5. *the number spin-offs at the national level is insignificant;*
6. *inadequate accent on the training human resource in matters of creativity, management innovation, entrepreneurship.*

More than that, in Romania, reduced the percentage of funding for the education, research and development will lead to a precarious innovative culture at national, regional or local level.

Just as an example, state funding for higher education in Romania is done differently than countries like U.K., Denmark and Sweden. If in this countries public subsidies for public higher education take into account as indicators the result of a student performance, in Romania the performance indicators are focuses exclusively on the quality of their teaching staff and leadership.

In this circumstances financing higher education by the state by taking into account only the of the academic stuff and infrastructure, management, and the service offered by the academic community, not taking into account in the funding formula indicators relating to results of the students, has the effect of neglect of higher education quality. This has as consequences less quality in the student's preparation, which will graduate tomorrow and will be faced with tough changes imposed by economic environment which have to face it. Reality shows that in order to be employed as quickly in the specialty for which they prepared, many university graduates must have the knowledge required by employers in order to be able to generate added value as high as possible.

In Romania- until recently, there was no correlation of the amount of public financing with the performance of universities, universities receiving public funds, which has generated a lack of a motivation to increase the process education quality. Quality of published results and research in relation to national and international standards has become the criterion upon which public subsidy is granted and this fact will influence positive, in the end, the quality of education process.

3. Entrepreneurship university model - a challenge for higher education system in Romania

In a knowledge based society, the academics are required not only to respond to changes but also to initiate changes. Today's networking technologies provide a valuable opportunity to the practice of learning techniques. Educators are discovering that computer networks and multi-based educational tools are facilitating learning and enhancing social interaction (Stefan, Stefanescu and Panzaru, 2009, pp. 47-53).

The University has a new mission and a multidimensional vision. University mission is to facilitate a custom education, adaptable and knowledge generator for individuals and community. University plays a central role in reshaping economy and society, acting as a real estate broker of knowledge, as an incubator of knowledge and value creation in the world.

The values are in the center of university. University generates innovation and cultural intelligence and demonstrates a high degree of flexibility and adaptability in the relationship to the knowledge-based society.

In the new context, the great challenge of university, as the main supplier of knowledge, affects its ability to exploit the results of research in economic and social environment.

A university characterized by value creation in society and maximizing the marketing potential of his ideas, which do not regard this as a threat to academic values and recognizes the need for a database of funding stream, involving increasing as income from private sources is a entrepreneurial university, according to American professor Burton R. Clark (<https://webpace.utexas.edu>).

Concerned, in the first place, of the quality of his "products": professional competences and skills offered in consensus with labor market needs and also by the application of the scientific and technological results obtained in the social and economical plan, the entrepreneurship university tries constantly to change competitive balance in its favor and to adopt quality standards and procedures for evaluating the quality of educational processes designed to achieve this goal.

An entrepreneurial university is characterized by its relations with a large number of stakeholders, through the formation of partnerships with the community to solve the problems and to identify opportunities in the environment in which it operates.

Create and exploit the opportunities of the transposition of innovation in practice is the essence of entrepreneurial university.

Entrepreneurial university it's focused on developing an attitude, culture and entrepreneurial education among students to be able to respond promptly, efficiently and responsibly to local imperatives.

Certifying key competences and not qualifications, providing opportunities for career and personal development, internships in business, academic staff act as facilitator and mentor in the process of knowledge, students become important actors in the educational process. Motivation for success, competences, respect for the value, the efficiency, the involvement, competition, responsibility for undertaken actions are the marks of entrepreneurial education.

In Romania, the partnership between universities and the business environment is in an early phase and the benefits of these partnerships are insufficiently recovered. Dindire L., Asandei M., Gănescu C. (2011, pp. 69-82) showed in a study of 432 managers from Romanian companies that managers identified a discrepancy between skills and qualifications offered by academic field and labor market needs.

Young graduates do not have the competences and skills required by employers and this generates serious problems employability.

Therefore, cooperation between academia and business becomes a fundamental condition in forming and development of graduates able to face the challenges of the labor market.

Manifestation of an proactive and open attitude to the private sector, practicing some form of collaboration between universities and the business environment such as trainings, consultancy, research partnerships, involving local business in conducting internships for students, creating a favorable framework for development of entrepreneurial skills of students do that license and dissertation work to be based on identifying solutions for real problems of local companies, a better visibility of the educational offer among companies constitutes, in our opinion, solutions that can be developed by higher education system to form the entrepreneurial skills among young graduates in Romania.

Creating consortia in which the research institutes collaborate with the national universities and the business environment on projects focused on solving the problems concerning the need for knowledge and innovation in the national economy meets the needs of the openness of the educational

system towards the economic environment and the society's needs. For the economic agents and the educational system, such partnerships are very beneficial (Stefanescu, Munteanu, 2010, p. 303).

The lack of a tradition limited the university mission to his institutional history and incorporating entrepreneurship education in the university sector in Romania requires time and effort, as it is just beginning to compared with US or UK entrepreneurial university model.

An explanation of what it means success of entrepreneurial universities Stanford, MIT (Massachusetts Institute of Technology) and North Carolina is the effort in time for creation an development of an entrepreneurial culture al local and regional level.

Characterized by a clear orientation towards the requirements of internal and external clients, including those of the business environment, guidance concretized by extending and strengthening partnerships with all the parties concerned in the educational process and the results of research made in universities, American or British model of entrepreneurship university is adopted by more and more universities in the word.

For Romania, introducing entrepreneurship in universities is an achievable goal. Romanian specialists¹ demonstrate that entrepreneurship university model can be successfully developed and reinforced in universities in Romania, with the involvement and commitment of the entire academic community, in partnership with business and society in general.

Having regard to reduction in financing higher education by the state of Romania, the state budget, the formation of entrepreneurial skills in academic world, the connection between university and the business environment becomes a fundamental premise necessary in ensuring graduates skill and abilities in order to adapt to the requirements and opportunities on the labor market.

Currently, entrepreneurial universities that demonstrate high degree openness to economic environment diversify their funding sources in order to increase revenues from research and training. In addition, provision of education and high quality research (academic advice, training, business incubators and industrial parks) is a solution that can bring significant additional financial resources to universities.

¹ Sandu S., The entrepreneurship university and its role in sustainable development, Summer school, University of Oradea, Faculty of Economic Sciences.

4. General considerations on the current state of education system in Romania

Recent evidence (<http://www.aracis.ro>) indicates that the education system in Romania is still focused on the transfer of information and less on developing skills, practical competences, creative thinking style and risk taking, entrepreneurial education-specific features.

In addition, the partnership: academic-business- government is still poorly functionally, multinational companies are not interested in cooperating with universities in the field of CDI¹.

The positions of the two main actors: university-economic environment contrasts sharply when it comes to quality learners. While a substantial majority of teachers credits education with confidence in the ability to provide quality graduates to labor market, employers are more reserved.

In a 2007 report submitted to the President of Romania by members of the Presidential commission for the analysis and policy development in education and research (<http://edu.presidency.ro>) stating that the current educational system in Romania has serious problems of efficiency, equity, quality and relevance to the knowledge economy. It produces insufficient research and innovation and is not able to promote a competitive and prosperous country. Restructuring it becomes necessary and urgently.

• Possible solutions to restructure the educational system in Romania

Sir Ken Robinson (<http://www.ted.com>), referring to the current educational system status, said 'Reforming the current education system is not enough. It must be transformed!'

If we really want a profound change, it is essential to achieve a commitment of all responsible forces in the triptych: academic institutions - business - government. When striving to reform the educational system in Romania, specialists in the field recommending restructuring measures in the modernization of school education and higher education and research.

In the strategic directions for restructuring school education can be mentioned: the new organization of educational levels, early childhood education to become a public good, the implementation of a flexible curriculum focused on necessary skills for personal development and

¹ ARACIS Report, 2011

knowledge economy, accelerating decentralization and repositioning school in community and stimulation of permanent education, in respect to the modernization of higher education and research, as main directions are proposed: differentiated and flexible financing, reorganization of research system, differentiating universities, concentration of resources and promoting a culture of entrepreneurship in higher education.

Conclusions

With few exceptions, education and research in Romania recorded a weak performance. There is no culture of lifelong learning. There is no motivation for performing in education and research. If we do not rebuild quickly our education system, if we do not develop a culture and an entrepreneurship education, unless we rethink research and innovation, we will not be able to make any further progress.

Restructuring will be radical. It needs commitment, active involvement, accountability and rationality. You must be able to reach performance in education. Entrepreneurship education is the premise for economic development and competitiveness. Entrepreneurship education represents an important step. It should be done until it is not too late!

Otherwise the future will not forgive us and we'll not be able to secure the necessary premises for a steady economic development.

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