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THE QUALITY OF GRADUATES, EMPLOYERS AND HIGHER EDUCATION

Case study

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Abstract

Education and research are important pillars of society based on knowledge, aiming the ensurance of personal development of every citizen, the prosperity of society and sustainable development. A priority in its framework should be the education for labour market under the conditions of ensuring equal opportunities. The finality of education for the labour market should be the preparation for the permanent participation in the national and European labour market, the education being a preventing poverty factor. The purpose of this paper is to determine the differences between "ideal quality" of the higher education system from the point of view of the main stakeholders, namely direct clients (graduates) and the actual quality appreciated by them based on their experience with the labour market. The research results highlight the existence of some gaps between the skills and abilities effectively developed and those that should be developed in accordance with the requirements of employers, in graduates' opinion, formed on the basis of experience gained as employees or job applicants in the first year after graduation.

The quality of graduates, employers and higher education
The role of higher education system in the development of society

Worldwide, higher education is undergoing a process of change both in the demand for education and the supply of educational offer. The characteristics of internal and external clients of public and private higher education have changed and higher education institutions must find solutions to any arising difficulties. Low competitiveness of European higher education due to underfunding, poor collaboration of universities with the business stakeholders interested in their activities and results is the reason why since 2008 representatives of the academic and business environment have put the issue at the European Business Summit to identify solutions.

Changes in the higher education of the public and private sector were presented by authors like Kirp (2004), Maringe and Gibbs (2009), Levy (2002, 2003, 2004, 2006a, 2008), Kinser and Levy (2005).

Education market is characterized by a fierce competition, due to the increasing number of public and private universities, the appearance of university performance that focus on creating a culture of quality as a strategic objective to create and maintain an image as good as possible, a relevant aspect for long-term success of a university. The increasing number of universities is not accompanied by an increase of quality level of the results expressed in, mainly by the degree of employability of graduates and no improvement in financial support. According to EU statistics, in early 2012 the number of unemployed rose to 6.8 million from 5.5 million in 2009, and in 2010, the sixth part of young people aged 18-20 years did not participate in any form of education and were not employees. In former communist bloc countries, the GDP percentage allocated to education is between 3 and 7%, and for public higher education is between 0.5 - 1.73% (St. Aubyn et al., 2009).

Maringe and Gibbs (2009) found that in Europe, higher education specific to the society based on knowledge has become a commodity and therefore it is necessary to resort to the use of marketing tools. Levy (2006a) considers that the competition features in this market differ from region to region and from country to country and, therefore, marketing tools must be adapted.

To help increase European competitiveness, universities need to adopt flexible measures. Necessary transformations in the universe are related mainly to adaptation to the external environment by considering the various influences of the society in which they work, as well as radical changes in the manner of organizing and functioning internal revolutionizing of its business.

In the new type of economy, one based on process it appears the necessity as the social role of the university to be complemented with actions that directly contribute to solving society's problems through effective educational and scientific processes and results obtained, due to the development of market relations.

Due to the fact that the external environment is becoming less economically favourable to contribute to the development of economy based on knowledge, the two functions of the university, namely the education and research must be completed by the third function, namely the commercial one (Ha¨Yrinen-Alestalo & Peltola, 2006). Attracting, involving business environment in supporting the activities of education, research and development will help increase the competitiveness of universities. This aspect is supported at European level by the European Economic and Social Committee (EESC) which has proposed in the Prague Process some certain measures to allow innovative measures at local and national level

through the creation of a new partnership between universities and organizations. In order for Europe to become more attractive to investors, the Community Lisbon Programme includes among its main objectives the development of knowledge and innovation and the increase of the number and quality of jobs focusing on the integration of young people. The aim of Europe Startegy 2020 is to increase the employment rate to 75% and the number of people educated to 40% (European Commission, 2011.a).

The reports on Romanian higher education institutions in the social, economic context and the trends related to in the Bologna Process and the Lisbon Agenda underline the risk that universities will be less efficient due to the large number of graduates who do not always have the professional skills to graduation to facilitate rapid insertion in the labour market. In Romania the quality of higher education is in decline and the causes which led to decreased competitiveness in the universities are: rapid increase in the number of public and private higher education institutions who have also developed curricula that do not meet the needs of the economy, education and research underfunding, the difficulty in adapting to European reference criteria in the quality field of education. Regarding the quality and outcomes of higher education, recent studies have shown that they are not appropriate because the institutions involved are particularly interested to enter the system, respectively the number of students enrolled, the volume of information transmitted and less interested in the learning outcomes, level of employability of graduates in the labour market, the results of research and how to exploit them for the benefit of local and national economy. Quick introduction and monitoring the outcome indicators should become a priority. In order to improve the quality of Romanian education system by considering the importance of the labour market, the White Paper for Quality and Leadership in Romanian Higher Education in 2015 presents some results expected by increasing the interest of universities in tackling labour market. Therefore, there are actions targeted to improve specialized practical training of students as a result of a better collaboration with potential employers by the flexibility and harmonization of requirements of continuous professional training of the employees.

For the horizon of 2025 the White Paper, developed with the support of an important number of specialists and managers of Romanian higher education, proposes fundamental values of higher education, including: customization (students can choose career path from several options depending on the compatibility with individual characteristics), diversification (institutional system configuration with its own mission and purpose), transparency (using a set of information to ensure the building of institutional reputation).

Also, experts consider that in the building curricula we need to consider as a base the following The following categories of competences: communication in the mother tongue and foreign languages competences, basic science, technology, digital valorisation necessary competences for a responsible participation in social life, competences for personal life management and career development, entrepreneurial, cultural, lifelong learning skills.

The point of view of employers on skills needed by graduates to be employed

In the current market conditions of higher education characterized as a volatile market, as a buyer's market for graduates, employers can select graduates in the conditions in which they have information about the skills in a particular area of a graduate.

Eurobarometer European Commission (2010) on the perception of employers regarding the employability of graduates showed that the most important skills that a graduate should possess are:

ability to work in team considered the most important, the ability to use the computer, adapt to new situations, communication skills, ability to analyze and solve problems, planning and organizing ability, the ability to make decisions, the ability to use international languages.

Reports made by the Romanian Agency for Quality Assurance in Higher Education – RAQAHE in 2009 and 2010 presents an analysis of the quality of national higher education system in Romania also from the perspective of the employers. The 2010 report was conducted by considering the input indicators, processes within the system and result indicators

The report from 2009 (Quality Barometer 2009, p.14) shows that employers are interested in the selection process by the following aspects: graduated university's reputation as a potential indicator of the level of knowledge, work experience of graduates and their performance in the employment interview. Later, they found important the following: teamwork, ability to be organized at work, punctuality, morality, communication with customers and employees.

Employers perceive graduates as having a better theoretical training compared to the practical one. They also have a better picture of public universities and they prefer graduates of preBologna system and do not especially appreciate the fact that graduates have studied abroad. Some employers give importance also to training the graduate at work in their specific organizational culture.

In terms of satisfaction of employers on graduates skills, employers in Romania declared themselves satisfied to some extent, considering important computer use skills, writing skills. They are less satisfied compared to the European average on the following skills: working with figures, teamwork, industry-specific skills, communication skills, ability to analyze and solve problems, adapt to new

situations, planning and organization skills. Employers value as important in higher education, previous work experience, while the internship or studies abroad are not considered important aspects.

There are some differences between the perceptions of teachers, employers and students about the competences and skills acquired by students in university and how they are used in the labour market. The teachers believe in a greater extent than students that the university helps them gain the skills and abilities they need in the labour market. In terms of preparing graduates for the entry into the labor market, there are important differences between the views of employers and teachers. Thus, a smaller percentage of employers than that of the teachers claim that the obligation to train graduates for the labour market returns to the higher education institutions. Employers appreciate the educational content to a lesser extent than teachers do. They believe that graduate also needs a training at work because the gap between the skills and competencies acquired by graduates in the workplace are high. Absorption of graduates in the labour market is influenced by the development of the company, the level of development anticipated, the increasing complexity of specific job tasks. Romanian employers generally consider the graduates as being insufficient to correspond to the available positions.

In the context described above, we formulated the main research questions that formed the basis of this pilot study:

What are the competencies and skills actually acquired over the three years of study in the perception of economic education graduates (Bachelor's degree)? Which are the competencies and skills that higher education institution should develop in accordance with the requirements of employers, according to the perceptions of graduates formed in the basis of their experience with the labour market? What are the methods of teaching

and learning that contribute to the development of competencies and skills required on the labour market as perceived by graduates?

Thus, this pilot study aims to identify the gap between actual acquired competence and skills and competencies and skills that should be developed, the identification of these gaps being made in the graduates' perception, measurement being made about a year after graduation.

Research methodology

To identify the skills and abilities that educational institution should develop during the years of study, a survey quantitative research was conducted among the economic education graduates. The measurement was made from two perspectives - the actual competences and skills acquired during the years of study, respectively the skills and abilities that in the perception of graduates, higher education institution should develop their experience in the labour market (employed or applying for a job). In order to measure the perceptions of the two directions, it was used a scale of 5 steps as follows: 1 – to a very small extent, 2 - to a small extent, 3 - neither-nor, 4 - to a great extent, 5 - to a very large measure. Data were collected online, by sending the questionnaire to graduates existing in the Economic Science Faculty database during the period April-June 2013. From the questionnaires received, a total of 119 questionnaires were considered valid and entered in the statistical analysis.

Analysis of results

According to the averages determined for the entire sample, on the two directions of measurement, skills and abilities effectively developed, respectively skills and abilities that educational institution should develop according to the requirements of employers, there is the existence of gaps in the perception of

graduates. On the one hand, the educational institution focuses on training future economists on developing the ability to work in a team (1st place in the hierarchy), the formation of synthetic thinking (no. 2 in the hierarchy), the accumulation of a minimum level of knowledge of economic field (3rd in the hierarchy), developing the capacity to quickly acquire new knowledge (4th in the hierarchy), developing the ability to communicate occupying 5th place in the hierarchy of perceptions graduates. Regarding the skills and abilities that graduates considered relevant for the purposes of their development, given their experience with the labour market (employers) may notice a change in this hierarchy. Thus graduates appreciated the fact that educational institution should develop communication skills first (1st place in the hierarchy), the ability to work in teams (no. 2 in the hierarchy), the third being the ability to identify opportunities and act quickly to capitalize them and the fourth and five are rapid accumulation of knowledge and ability to support the points of view. It is noted that this hierarchy is significantly closer to the results of studies made at the level of the employers to identify skill requirements and employment skills.

Although there are significant differences between the averages determined in each direction measurement, research results clearly show that, as required by employers (as perceived by graduates), school should focus on developing those skills and abilities that lead to rapid integration of graduates in the working environment of the firm and to immediate productivity. Thus employers want graduates to easily communicate both in the internal and external environment of the firm, to be able to quickly find new solutions to business problems, respectively to be oriented towards solutions and results, be able to learn rapidly new things, respectively to be able to bring arguments, to support solutions

identified as alternatives in solving firm's problems.

It is noted that, although the accumulation of extensive theoretical knowledge in the program of study has a high degree of importance according to the determined average (4.09), this places on the last places as a degree of importance in the hierarchy determined, according to the requirements of employers (in the perception of graduates).

In terms of teaching and learning methods used by teachers to develop graduates skills and abilities appreciated the following: during the 3 years of study, teachers used most projects carried out in teams (4.10) presentations / oral argument (3.95) and individual projects (3.94). In contrast the least used were: debates between students moderated by teacher (2.87), homework (3.21), students lectures (3.27) and case studies (3.45).

To identify which methods of teaching and learning contributed to the development of the first 3 skills and abilities that should be developed according to the requirements of employers, we used Pearson correlation analysis method. The independent variables were considered methods of teaching and learning, competencies and skills of graduates actually being considered dependent variables. According to the correlation coefficients determined, there were identified statistically significant positive relationships, as:
- The correlation coefficients between the teaching-learning methods and communication skills.

Communication skills were developed primarily through homework that graduates, as students, they had to do. This identified relation can be explained by the fact that homework was submitted / supported by the student, on the other hand the fact that between homework and other teaching-learning methods used, respectively between all of these, presentations / oral arguments there was identified a statistically significant

association. Thus, homework took the shape of projects.
- The correlation coefficients between the teaching-learning methods and the ability to work in team.

The ability work in a team was developed primarily through case studies conducted during classroom / seminar or as homework. Generally this is done in teams. On the other hand, discussions on certain topics set by the teacher were carried out at the level of teams.

An interesting aspect is that between the use of team projects and team work ability was not identified a statistically significant relationship. This can be explained by the fact that although the method is used, project teams do not work effectively, activities related to project implementation are not allocated in a balanced way between project members, in many cases, the projects achieved being the result of a team effort rather than individual.

The correlation coefficients between the teaching-learning methods and the ability to identify new opportunities and capitalize them quickly.

The ability to identify new opportunities and their rapid fruition was developed through projects (individual and team), applications and exercises, debates between students moderated by teacher and through presentations / oral argument, according to the correlation of determined coefficients. It is apparent, therefore, that the applied and interactive methods contribute to forming this capacity.

In terms of satisfaction degree of graduates concerning graduated studies program and the correspondence between it and the labour market, research findings revealed the following:
- the graduates appreciated the fact that a program completed was the best choice in a relatively high extent, this being supported by the average determined at the level of the sample (3.70);

- regarding the correlation between the graduates expectations concerning educational services and educational services actually provided, we see an above average level of assessments, the average determined at the level of the sample being 3.45;

- regarding the correlation between the subjects studied and the demands of employers, graduates have found that there is a below average level of correspondence, according to the average determined at the level of the sample (2.92).

Discussion and conclusions

The labour market is more demanding with graduates. While for the public sector the diploma is more important than skills and abilities acquired during undergraduate studies, for the business environment these are important. Young people postpone the entry into the labour market by attending educational trails often completely different or become active in the black market or migrate to occupy jobs with lower quality than that they hold.

The employability degree of higher education graduates is influenced by the extent to which the curriculum design takes into account a set of characteristics of graduates who are permanently monitored in formative and summative evaluation. Proof that they acquired the covered skill sets can be a portfolio of own and particular experiences that could be exploited by the institution of higher education in curriculum development and in the presentation of individual achievements of graduates in order to be employed. The presentation of such credible information may be a proof of the quality of graduates that provides an advantage in the market of graduates buyers both for higher education institution and for graduates. The national education Law in Article 2 specifies the need to promote an education-oriented on values,

creativity, cognitive, volitional, acting abilities basic knowledge, skills and abilities of direct utility in the profession and society. Given that the academic link with the business almost disappeared, being only at an official level, it is necessary to reform the curricula and teaching methods to convey knowledge and to form competencies and abilities compatible with the requirements of the labour market. The quality of the education system must be analyzed in terms of expected results that represent assumed goals and which are related to the European system of quality education, the empowerment of stakeholders, with the need to create public-private partnerships in education and with wider opening of school for local businesses.

The quality of graduates capital will increase if there is a direct relationship between the employer and the graduate and whether university researchers will be anchored in the strategic and managerial issues of economic agents and the local community. To adapt quickly to a changing dynamic environment, graduates need to develop lifelong learning skills and not only skills refering to the immediate application of theoretical knowledge in practice.

The purpose of this study was to identify actual gaps between competences and skills acquired effectively and the competencies and skills that should be developed according to the requirements of employers, their measurements being made in the perception of graduates based on the experience with the labour market (employers). Study results revealed that, obviously, there are gaps between what the educational institution effectively forms and the existing demands on the labour market.

Developing the skills of graduates should be done with a focus on entrepreneurial spirit, on communication, teamwork, problem solving and finding quick solutions to provide quality graduates society.

Measurements:

- organization of flexible and efficient systems of internships for students; participation in internship programs as a means of cooperation between businesses and universities

- monitoring youth labour market insertion

- adaptation of education offers and training standards to the dynamic changes in the labour market by considering the skills expected by employers

- cultivation by the student-centered learning process and by career counseling services of the principle of potentiality which is essentially the personal urge of each individual to always be able to see "more" (Costea, Amiridis, Crump, 2012, p.35)

- the concern of the university to measure graduate satisfaction

- the concern of higher education institutions to provide educational services in the form of transfer of knowledge, attitudes, behaviours and support of the individual personality of the student to acquire a new status, performant in the individual and social point of view. This step must be substantiated by considering the university's mission, the basic service value correlated with peripheral services and market benefits.

The efforts of higher education institutions directed to promote quality culture should also be supported by intitutions which are relevant to implement actions to be taken to ensure a better use of the potential of academic and business environment drawn by the proposals from the Education Council and the European Commission jointly formulated in the interim report of the 2010 Work Programme Education and Training.

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Table 1
Descriptive statistics - Mean values of the skills and competences

Variable Skills and competences acquired	Mean value of skills and abilities acquired	Mean value of skills and competencies that should be developed	Existing hierarchy	Desired hierarchy
Accumulation of depth theoretical knowledge in the curriculum	3.63	4.09	13	13
Accumulation of a minimum level of general knowledge in the economic field	4.00	4.27	3	4
Acquisition of synthetic thinking	4.01	4.20	2	7
Acquisition of analytical thinking	3.70	4.14	11	11
Acquisition of creative thinking	3.77	4.17	10	9
Acquisition of critical thinking	3.77	4.13	10	12
Ability to quickly acquire new knowledge	3.97	4.22	4	6
Ability to identify opportunities and act quickly to capitalize them	3.80	4.28	9	3
Manage time effectively	3.84	4.15	8	10
Ability to work in team	4.05	4.31	1	2
Ability to mobilize other persons	3.64	4.19	12	8
Communication skills	3.88	4.33	5	1
Ability to exchange viewpoints	3.86	4.24	6	5
Ability to use a computer	3.85	4.19	7	8
Ability to report / making reports	3.60	4.06	14	14

Table 2
Corelation coefficients between teching methods and the communication abilities

	TC	PSO	AC
TC	1		
PSO	287**	1	
AC	.319**	.287**	1

* Correlation is significant at the 0.05 level (2-taided)
** Correlation is significant at the 0,01 level (2-taided)
TC – homework, PSO – students lectures, AC – communication abilities

Table 3
Corelation coefficients between teching methods and the ability to work in a team

	SC	*DSP*	ALE
SC	1		
DSP	227*	1	
ALE	.223*	.255*	1

* Correlation is significant at the 0.05 level (2-taided)
SC – case studies, DSP – debates between students and teacher, ALE – the ability to work in a team

Table 4
Corelation coefficients between teching methods and the capacity to identify opportunities

	IOFR	*PE*	*PI*	*AE*	*DSMP*	PSO
IOFR	1					
PE	.233*	1				
PI	.234*	.290**	1			
AE	237*	.221*	.206*	1		
DSMP	196*	.449**	.210*	.320**	1	
PSO	280**	.403**	.362**	.549**	.341**	1

* Correlation is significant at the 0.05 level (2-taided)
** Correlation is significant at the 0,01 level (2-taided)
IOFR – identifying opportunities and fast taking advantage of, PE – projects carried out in team, PI – individual projects, AE – applications and exercises, DSMP – debate among students moderated by teacher, PSO – presentations and oral argument.