Abstract. The last half-century was marked by an academic revolution, which brought unprecedented changes in terms of application and diversity. Understanding the ongoing and dynamic process is not an easy task, but is extremely important, especially when you are in the midst of the changes it brings. Currently, scientists believe that higher education systems are facing a lot of changes and many are starting to question the functionality of these systems. Starting from the current economic context and from the controversies existing in the academic environment concerning the functionality of the higher education system, this paper aims to emphasize the features of the functionality of a higher education system. The paper scope is also to underline some of the problems affecting the functionality of the higher education system, starting from the access to the system and finishing with the connection existing between the labour market and the output of the universities functioning inside the system.

Keywords: higher education, labour market, functionality, universities, economy.

“FUNCTIONAL” HIGHER EDUCATION IN THE PRESENT ECONOMIC CONTEXT

Liana BADEA
The Bucharest University of Economic Studies, Romana Square, no. 6, Bucharest, Romania
e-mail: badea.liana@gmail.com

Management & Marketing
Challenges for the Knowledge Society (2013) Vol. 8, No. 1, pp. 181-194
1. Introduction

In the present economic context, when important economists are writing and discussing about the phenomena of crisis, recession and all the related issues, it becomes more obvious that in searching for solutions, many are indicating among others, the educational system. What they indicate is the fact that nations that experienced a quicker than expected economic recovery (e.g. Switzerland, Canada and Finland) also performed outstandingly well in the World Education Rankings (2010), which suggests a correlation between prospering economies and financial sectors with strong educational systems.

In multi-millennial history of humanity, education represented the perennial element and the uncontested ferment of the scientific accumulation and of the transmission of intellectual traditions. In search for a better world, to gather trained people having a standard of living that meets their expectations, education represented the hope of all those who believed in the economic, social and cultural empowerment, through the “power of the mind”. From the ancient saying “if you want to help a man, teach him how to make a fishing rod” to the famous slogan of the Chicago School, “man is the most precious capital”, the educational systems all over the world have gone through numerous transformations. Educational systems used over time, tried either to adapt to the imperatives of economic changes or to cause those changes that would ensure the desired social cooperation. In the end, starting with the purpose, the means and the content, education has seen many changes, depending on the material and spiritual conditions of the society.

Nowadays, more than ever, education makes a difference. Throughout the time, some famous economists (like A. Smith, J. S. Mill, M. Friedman, etc.) have shown that between the development of a nation and the education there is an connection, so that today if we go with what the “father of economics” (A. Smith) said in the eighteenth century – “a country is rich if it has individuals” we could reach “a country is rich if it has educated individuals”. As a sort of “lessons for the future” economists – J.S. Mill, A. Marshall, G. Stigler, G. Becker, etc. – tried to decipher the meaning of education and to bring more light on the complicated relationship existing between the economic development and the education development.

Moreover, in conditions of globalization, all the competent international institutions, along with a suite of scientists and policy makers, emphasize the role of universities and of graduates in the innovation processes, considered necessary to achieve the economic objectives. At the same time, the education and the division of knowledge guide individuals towards savings and investment in human capital, education turning into an important vehicle of the social inclusion policy; the skills acquired by individuals are enabling them to significantly participate to economic and social development (ELLI, 2010).
2. The global educational context

In a knowledge society and in a changing world, people have much higher levels of education than ever before. For instance, an average person age 15 or older in 1960 had fewer than 4 years of formal education – by 2010 this number had doubled globally and more than tripled in developing countries (from 1.9 years to 6.4) (UNDP, 2010, p. 36). Education has been extended to a large number of people: since 1960 the proportion of people who attended school has risen from 57% to 85% (ibidem).

At the EU level, the progress is more than visible. During the last century the increasing number of students was accompanied by the increasing number of institutions. It is easy to understand this increasing in the number of institutions if we consider that we live in a knowledge economy and the demand for studies is normal to show an upward trend. Table 1 emphasizes in the “numerical” language the way developed countries have consistently encouraged a mass participation of individuals in different forms of higher education throughout the past century.

Table 1 emphasizes three phases of the expansion of higher education in Europe:

- Elite education: the percentage of those who graduated different forms of higher education was less than 15% of the total population;
- Mass education: the percentage of those who graduated different forms of higher education was between 15% and 35% of the total population;
- Universal education: the percentage of those who graduated different forms of higher education was greater than 35% of the total population.

The present stage of education, characterized by a numerous population of students, was reached as a result of lots of efforts made over time. Thus, following the way higher education has undergone different changes, Vaira (2006) identified four major stages for the last and current centuries:

- 1945-1965: The territorial expanding of the forms of higher education was done through growing the number of universities, teaching staff, educational programs and courses.
- 1965-1985: University expansion has reached its financial and structural limits. Education costs have increased. At the same time, European countries have experienced a period of economic prosperity and technological innovation, leading to an increased demand for better qualified workforce and generating new specializations in higher education. In this context it is not surprising that most attempts at this time to create, to maintain or to increase diversity in higher education was directed by governments (Teichler, 1988).
- 1986-2000: This was the period of the institutionalization and consolidation of the majority of education systems. This process occurred simultaneously with the crisis of the social protection system. This is the time when the idea of university autonomy begins to shape and to put more emphasis on the research activity in universities.
- After 2000: This is the period of reshaping education systems especially in Europe. It appears the idea of a unified system (Bologna) and in the same
time, it becomes more obvious the fact that it is necessary to create partnerships between the education systems and the business environment. The Bologna process begins to be implemented in order to make higher education in EU member countries more competitive, more attractive to students and at the same time compatible with the market demands.

\[ \text{Table 1} \]

<table>
<thead>
<tr>
<th>Cohort of birth</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
<th>80-84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>M</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>UK</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Switzerland</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Netherlands</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Greece</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Italy</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Portugal</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Spain</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-</td>
<td>M</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>Estonia</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Latvia</td>
<td>-</td>
<td>M</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Poland</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Romania</td>
<td>-</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Slovakia</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Slovenia</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Hungary</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
</tbody>
</table>

Note: E = elite, with a % of tertiary educated < 15%; M = mass, with a % of tertiary educated between 15% and 35%; U = universal, with a % of tertiary educated > 35%. Tertiary education is defined here as ISCED 5+6.

Source: Ballarino (2011).
The EU-27 has over 19 million students and over 4,000 higher education institutions, the number of students increasing and being characterised by an upward trend over recent years. However, there seems to be some projections showing the fact that in the future the number of tertiary educated people is still going to grow, but faster in non-EU countries.

Thus, in 2000 there were 51 million university graduates aged between 25 and 34 years in the OECD countries and 39 million in G20; in 2010, this number has increased significantly - in the OECD countries there were 66 million young university graduates aged between 25 and 34, and in the G20 there were 64 million (OECD, 2012). If growth is maintained, it is estimated that by 2020, the number of graduates from Argentina, Brazil, China, India, Indonesia, Russia, Saudi Arabia and South Africa will be approximately 40% higher than in OECD countries (OECD, 2012) (see Figure 1).

Source: OECD Database, UNESCO and National Statistics websites for Argentina, China, India, Indonesia, Saudi Arabia and South Africa.

Figure 1. Projections of the number of 25-34 year-olds with tertiary education, 2000-2020

The OECD reports show that it is likely the global talent pool to continue to grow across most OECD and G20 countries. In the same time, OECD reports emphasize that the fast-growing G20 economies will continue to account for an increasingly large share. According to OECD calculations out of the 200 million 25-34 year-olds with higher education degrees across all OECD and G20 countries by the year 2020 40% will come from China and India and only 25% from USA and Europe (OECD, 2012).

Thus, the number of graduates is going to grow, but at the same time, Europe is facing the problem of an ageing population. It is obvious nowadays that populations are decreasing in number, but increasing in longevity. There are new lifestyles and new patterns of migration and all this affects in different ways higher education
systems all over Europe. In this new context, higher education institutions may be deeply challenged by the existing and future demographic shifts in terms of the organization of their academic work, their organizational cultures and institutional identities, as well as concerning newly emerging types of student flows.

3. The “functionality” of higher education system

An academic revolution has taken place in the higher education system in the past century marked by transformations unprecedented in scope and diversity. One of these transformations was related to the issue of functionality of higher education.

Defining the functionality of education is a difficult process. Édouard Claparède was one of the authors who addressed the issue of functional education. Based on the elements characterizing the training of a child, he said that functional education is centered on student needs and “aims to develop mental processes, considering them not as such, but in terms of biology, of role, of usefulness for the active life in the present or in the future”. (Claparède, 1973, p. 11).

Extending this approach to the present environmental characteristics and to the higher education area, we may perceive the functionality of higher education in a broader sense. Thus, higher education can be regarded as being functional if it ensures the performance of the functions and role (see Figure 2) for which it was created, generating a maximum degree of satisfaction among the participants in the educational process.

Source: author’s adjustment based on Bergan et al. (2009).

Figure 2. The role of higher education

The functionality of education itself is very difficult to measure. There has not been created yet an index for this purpose. It can be viewed in terms of results which, unfortunately, cannot be seen immediately but over time. Unlike the consumption of an economic good/service, education functionality results are gathered in a variable
number of years, both directly by the individual and indirectly by the society, as H.R. Bowen showed: the aim of education is to shape people, and these changes can impact society, economy and therefore history (Bowen, 1977). In the following sections (3.1 and 3.2) we discuss some issues related to the potential outcomes of the functionality of the higher education system in Romania and abroad.

3.1. Higher education and labour market

Currently, analysts are asking important questions, in addition to those related to funding and to the quality of the educational services and these questions point towards the compatibility existing between the education system and the labour market demands. It is already common knowledge the fact that the compatibility between the education system and the labour market is the essence of a possible balance between the present and the future as the functional education system became the “forefront” of the economic performance of human capital. The connection between those two – higher education system and labour market – is very complex as it appears to influence and to be influenced directly by other subsystems.

Thus, the international reports show that the preferences related to the area of studies have been changing over the years, trying to keep up with the evolution of the labour market. While in the past, people preferred engineering and agricultural studies, nowadays the international reports show that, the largest majority of European graduates come from social sciences, law, and business (35% for the year 2009) followed by health and welfare with 15.4 % of total number of graduates, and engineering and humanities with 12.8 % and 11.6 % respectively (Eurydice, 2012). In some countries, such as Bulgaria, Cyprus, Latvia, Romania, and Liechtenstein, the proportion of graduates from social sciences, law and business reached over 50 %, while the proportion was lower than 25% in very few countries (Germany, Sweden and Finland). Overall, the field with the lowest number of graduates is agriculture and veterinary science (1.67%) (Eurydice, 2012).

In the same time, the functionality of the higher educational system is questioned when talking about the needed time to find a job. The report „Key Data on Education in Europe 2012” emphasizes that at the European Union level, the average duration of the transition to the first significant job was 6.5 months in 2009 for all educational levels and close to 7 months for the upper secondary level. It was only 5 months for people with tertiary qualifications but double that for people with lower qualifications (9.8 months). The same report mentioned that in all countries, people with higher education find their first job position faster than the group of people with only secondary education (ibidem).

Moreover, young people in some European countries are facing longer transition periods than the EU average. It is the case of people graduating high school in Slovakia (24.3 months), Bulgaria (21.5 months), Poland (17 months), Cyprus (15.7 months), Slovenia (14.9 months) and Romania (12.5 months). In Greece, Spain, Italy and Turkey transition periods were higher than the EU average for graduates of all
levels of education, including higher education (from 8.1 months to 13.1 months in Spain, Greece) (ibidem).

One of the most important proofs of the functionality of the higher education system is the level of employment of those who have graduated a faculty. Thus, the average for the year 2009 showed that 86% of the higher education graduates aged between 25 and 39 have a job, unlike 78% of high school graduates and only 60% of young people with lower level qualifications (ibidem) (see Figure 3).


Figure 3. People in employment by age group (25-39; 40-64) and highest level of education attained, 2010.
Although functional higher education offers many advantages to the graduates on the labour market, from finding faster a job or to obtaining higher incomes, in Romania there are still some issues to be solved regarding the connection between the labour market and educational market.

Another issue to be discussed is related to the skills developed through the educational system and the incompatibilities that may arise. It is said that skills have become the global currency of 21st century economies and that without adequate investment in the right skills, people languish on the margins of society, technological progress does not translate into economic growth, and countries can no longer compete in an increasingly knowledge-based global society. Succeeding in obtaining the best returns on investment in skills requires the ability to assess the quality and quantity of the skills available in the population, to determine and to anticipate the skills required in the labour market, and at the same time to develop and use those skills effectively in better jobs that lead to better lives. But, unfortunately, this sounds very good in theory, but in the reality, there different issues can arise. One is related to the incompatibilities, which can be vertical or horizontal. Vertical incompatibilities assume a level of education, training or skills above or below the required level needed by a job that a person has at a certain time. This is the case when we talk about over-education and under-education, over-qualification and under-qualification. Horizontal incompatibilities arise when the level of education or skills corresponds to the job requirements, but the type of education or skills are inadequate. They are usually associated with skills shortages or loss of skills over time. In addition, there may be other types of incompatibilities, such as lack of skills or skills surplus. Some causes may be related to the economy and the functionality of the link existing between education, labour market institutions and businesses environment.

The study entitled “Recent graduates of higher education and their integration on labour market”, managed by the Romanian National Executive Council of Qualifications and Vocational Training of Adults shows that when hiring a young graduate, the employers are not very much interested in what college or university the young individual has graduated, but they are very interested his/her experience and competences, thus emphasizing the idea that the Romanian education is facing a gap between the labour market structure and the structure by specialization of graduates. For example, in Romania there are over 20,000 Journalism students and over 130,000 students at Law, while the annual demand on labour market is at best equal to one third of the number of graduates who complete the two specializations (UECNCFPA, 2010).

Moreover, 22% of graduates majoring in engineering sciences are unemployed and unfortunately the percentage is similar for graduates in science and economics. The lowest proportion of registered unemployed is related to medicine, close to 0%, which means that the labour market is able to absorb most of the graduates in this field. Graduates from medical sciences are employed in the health industry (ibidem). The second place is occupied by the graduates of architecture and urbanism - 71%, and the third by those who have graduated art studies (68%), while in
the case of those who have graduated sports faculties the percentage is of 57. Meanwhile, only 45% of humanities graduates are working in the field in which they specialized (ibidem).

However, the number of positions open for competition by universities has been established based on the demand for a particular specialization and not by considering the demands of the labour market and of the economy, in general. Thus, we have a large number of students in specializations for which the demand in the labour market is far from covering the offer. Thus is why, the higher educational system in our country needs to overcome the obstacles in order to be fully functional.

3.2. The “functionality” of higher education from a socio-economic point of view

Knowledge is power! What kind of power? Some might say that it is political power; others would say it's simply about purchasing power, as augmented stock of skills and knowledge of an individual represents a potential source of future economic value, both in personal and social level. The benefits provided by the growing of the individual level of knowledge are multiple as the literature has revealed over time. Although the literature does not always allow us to outline conclusions about a direct causal relationship between education and other dimensions of quality of life, there is a consensus that functional education provides many benefits (monetary and non-monetary), both for the person who invests in education and community (Stiglitz et al. 2009, p. 46), as shown in the next figure.

![Diagram showing the advantages of higher education](source)

**Source:** OECD, 2011, p. 24 and Stiglitz et al., 2009, p. 46.

*Figure 4. The advantages of higher education*
A higher level of education is reflected in higher economic revenues both for the individual and the society. Authors such as Behrman and Stacy show that education generates benefits through: changing preferences of individuals, changing the constraints that they are dealing with or by improving information and knowledge on the basis of which individuals develop their behaviour (Behrman and Stacy, 1997, pp. 12-18). Thus, functional higher education can lead to improvements of quality of life for the community, since it affects issues such as:

- **The health of individuals** - it has been shown in several European countries that in the case of men with fewer years of study, the mortality rate is on average with 50% higher than in the case of those with more years of study, and for women, this difference is 30% (Mackenbach, 2006). In addition, educated patients will be more receptive to new treatments and will have a healthier lifestyle (Badea, 2012). Finally, for contagious diseases, a higher level of education will lead to a lower risk of contamination.

- **Participation in community life**: education contributes to a higher level of civic participation (Glaeser et al., 2007, pp. 77-99). First, educated individuals will massively participate to vote, acknowledging the importance of the electoral processes. Second, educated individuals have a civic behaviour; they contribute more to charitable and voluntary organizations (Hodgkinson and Weitzman, 1988). Also, people with higher education contribute with know-how and business ideas in their community, and thus they create jobs and prosperity in their communities.

- **Crime**: a level of higher education will lead to salary increases, which will increase the opportunity cost of illegal activities. People with higher education will have, in addition to a potential higher salary, greater opportunities for employment, a lower unemployment risk, thus higher benefits for their entire life, which will discourage the participation in crimes. However, the white-collar crime such as embezzlement and tax fraud may increase with increasing education levels, as individuals become more creative.

- **The level of pollution**: higher education creates the potential for environmental compliance. In a study it has been shown that an increase of 2% of the amounts invested in education leads to a reduction of 0.3% of the rate at which forests are destroyed in Africa (Appiah and McMahon, 2002, pp. 27-68). The influence of higher education on the environment is a controversial issue, because a high level of education is the basis for the technical progress and intensive exploitation of resources, and starting from this point of view, some authors consider that education can lead indirectly to an increase in the air pollution.

- **A controversial aspect is the phenomenon of brain drain** - people with high levels of human capital leave the country of origin, where they do not have opportunities to win enough and migrate to developed countries. The beneficiary of this increased level of higher education is the host country, while the country of origin is unable to recover the money spent on the individuals’ education.

- **Demography**: spending a longer period in school may contribute to slowing population growth. This is also a controversial issue. If for some countries with an
excessive increase in the number of children, such matters may prove beneficial, in some developing countries with an aging population, the reduction the number of births is a real problem.

- Technological progress: education as an investment in human capital, provide skills and competencies that people need for innovation and also represents a means of disseminating new knowledge in all areas, contributing to economic development. Education has a key role in a company's innovative capacity.
- The increase in the general level of education: it was shown that parents with higher levels of education are concerned about the education of their children.
- Income growth: higher education leads to some revenue growth at both the individual and the total level. Thus, through their daily work, individuals with higher education contribute to the GDP growth, as many times, they prove that they are more competitive and more productive than those with a low education level.
- Social cohesion: education contributes to behavioural changes and it generates a more open attitude towards disadvantaged groups, promoting their social inclusion and cohesion.
- Higher quality of life: education is one of the dimensions of the quality of life (Şerban-Oprescu, 2011, p. 10).

Thus, through the benefits it brings, a higher education system must be functional and if it is not efficient, then all the actors need to do something in order to make it respond to the demands of the economic environment as it has been proved the fact that higher education is one of the most important elements for the quality of life (Constantinescu, 2011, pp. 74-76) and for the competitiveness, viewed both individually and nationally.

4. Instead of conclusions

It is easily to observe that a functional higher education system is inextricably linked to the welfare and quality of life. Some studies show that countries investing over time in education are now reaping the rewards of the economic development. The current socio-economic context emphasizes that in any developed country the education was and still is included in long-term development strategies. The functionality of higher education is generated not only by intrinsic factors of education, but also by extrinsic factors. Unfortunately, the system in our country is influenced by several factors such as corruption, historical evolution, demography etc. and, in addition, the functionality is questioned starting from the compatibility between the labour market and the output provided by universities.

It is obvious that the role of education is extremely important and this is why Romania is trying to increase the access to higher education forms. According to the Memorandum on approval of final values of the objectives of Romania for Europe 2020, approved by the Government in July 2010, Romania aims to increase the percentage of graduates of higher education compared to total population to 20.25% in 2013 and to 26.74% in 2020 (MECTS, 2010, p. 134).
“Functional” higher education in the present economic context

The fact is that currently Romanian higher education system must meet several challenges: to achieve a better quality, to improve the management and to be more responsible, to increase funding and to diversify the funding sources. These goals involve major changes in higher education, as we, Romanians, are at a crossroads: either we admit that it's time for vigorous action to identify and stimulate the quality of education, where available, and to improve the quality, there where needed, or we preserve in a state of complacency, which may plunge us into a uniform consistency, characterized by a lack of perspective and competitiveness.

Acknowledgements

This work was cofinanced from the European Social Fund through the Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 „Performance and excellence in postdoctoral research in Romanian economics science domain”.

References

Claparède, É. (1973), Educația funcțională, Editura Didactică și Pedagogică, Bucharest
Ministerul Educației, Cercetării, Tineretului și Sportului (MECTS) (2010), „Raport asupra stării sistemului național de învățământ”, Bucharest
*** Eurostat, Education statistics, UOE data collection (educ_figdp)

About the author

Liana BADEA is a PhD lecturer at the Department of Economic Doctrines and Communication, Faculty of Economics, The Bucharest University of Economic Studies. Her main research areas are economic doctrines, economic epistemology, competitiveness, corruption, competitive intelligence, education. In November 2010 he received a postdoctoral scholarship for the research project „Functional Higher Economic Education – determining factor of increasing competitiveness and quality of life“.

About the author

Liana BADEA is a PhD lecturer at the Department of Economic Doctrines and Communication, Faculty of Economics, The Bucharest University of Economic Studies. Her main research areas are economic doctrines, economic epistemology, competitiveness, corruption, competitive intelligence, education. In November 2010 he received a postdoctoral scholarship for the research project „Functional Higher Economic Education – determining factor of increasing competitiveness and quality of life“.

About the author

Liana BADEA is a PhD lecturer at the Department of Economic Doctrines and Communication, Faculty of Economics, The Bucharest University of Economic Studies. Her main research areas are economic doctrines, economic epistemology, competitiveness, corruption, competitive intelligence, education. In November 2010 he received a postdoctoral scholarship for the research project „Functional Higher Economic Education – determining factor of increasing competitiveness and quality of life“.