



## ***Students Scientific Conference***

**EDUCATION AND TRAINING IN ROMANIA AND EUROPEAN UNION: A  
COMPARATIVE ANALYSIS**

**CRISTINA BOBOI**

**Supervisor : Associate Professor Olimpia Neagu PhD.**

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# **Introduction**

Education and vocational training is now a global concept under which they are meeting all aspects of education and training in the formal, non-formal and informal system. They play a vital role in both economic and social context. The opportunities which the European Union (EU) offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding, personal development and the realisation of the EU's full economic potential. Each year, well over a million EU citizens of all ages benefit from EU-funded educational, vocational and citizenship-building programmes.

The present paper aims to compare the education statistics in Romania and European Union, highlighting the situation in Romania and the gaps to be covered in the next years in order to be closer to the European average level.

Education statistics presented in this paper cover a range of subjects, including: expenditure, personnel, participation rates, and educational attainment. The main source of data on enrolment and graduates in the formal education system is the joint UNESCO/OECD/Eurostat.

## **Tertiary education**

Tertiary education broadly refers to all post-secondary education, including but not limited to universities. Universities are clearly a key part of all tertiary systems, but the diverse and growing set of public and private tertiary institutions in every country—colleges, technical training institutes, community colleges, nursing schools, research laboratories, centers of excellence, distance learning centers, and many more—forms a network of institutions that support the production of the higher-order capacity necessary for development.

In 2012, the share of the population aged 30-34 having completed tertiary or equivalent education reached 35.7 %.

Across the EU-27, just over one third (35.7 %) of the students in tertiary education were studying social sciences, business or law. The second largest number of students by field of education was in engineering, manufacturing and construction-related studies which

accounted for 14.7 % of all students in tertiary education. The third largest number of students (13.9%) was in the health and welfare area.

There were more women studying education, health and welfare, humanities and arts, as well as social sciences, business and law. Men slightly dominated in agriculture and veterinary fields, more so in services, science, mathematics and computing fields, and by close to four to one in engineering, manufacturing and construction-related fields.

In **Romania** the average level of tertiary or equivalent education attainment of this age group was 18.1% in 2010, more under European level (33.6%). Our country is the worst performer on this indicator, occupying, unfortunately, last place in EU-27. Participation in tertiary education by students from urban areas is double the rate for rural areas. Attracting more students from lower-income families, particularly from rural areas remains a big challenge.

In 2007-2012, Romania has recorded a significant increase in the share of tertiary graduates, from 13.9% in 2007 to 21.8% in 2012, exceeding the forecasts made by the National Reform Programme 2011-2013 (18, 7% in 2011). However, in 2011, Romania was on the penultimate position among European countries at this indicator after Malta (21.1%), Czech Republic (23.8%) and Bulgaria (27.3%).

**Table 1: Tertiary educational attainment by sex, age group 30-34**

| <b>Geo / Time</b>        | <b>2010</b>       | <b>2011</b>       | <b>2012</b>       |
|--------------------------|-------------------|-------------------|-------------------|
| <b>EU (28 countries)</b> | 33.4              | 34.5              | 35.7              |
| <b>EU (27 countries)</b> | 33.5              | 34.6              | 35.8              |
| <b>Belgium</b>           | 44.4              | 42.6              | 43.9              |
| <b>Bulgaria</b>          | 27.7              | 27.3              | 26.9              |
| <b>Czech Republic</b>    | 20.4              | 23.7              | 25.6              |
| <b>Denmark</b>           | 41.2              | 41.2              | 43.0              |
| <b>Germany</b>           | 29.8              | 30.7              | 32.0              |
| <b>Estonia</b>           | 40.0              | 40.3              | 39.1              |
| <b>Ireland</b>           | 50.1              | 49.7              | 51.1              |
| <b>Greece</b>            | 28.4              | 28.9              | 30.9              |
| <b>Spain</b>             | 40.6              | 40.6              | 40.1              |
| <b>France</b>            | 43.5              | 43.3              | 43.6              |
| <b>Croatia</b>           | 24.3              | 24.5              | 23.7              |
| <b>Italy</b>             | 19.8              | 20.3              | 21.7              |
| <b>Cyprus</b>            | 45.3              | 46.2              | 49.9              |
| <b>Latvia</b>            | 32.3              | 35.9 <sup>b</sup> | 37.2              |
| <b>Lithuania</b>         | 43.8              | 45.7              | 48.6              |
| <b>Luxembourg</b>        | 46.1              | 48.2              | 49.6              |
| <b>Hungary</b>           | 25.7              | 28.1              | 29.9              |
| <b>Malta</b>             | 21.5              | 21.4              | 22.4              |
| <b>Netherlands</b>       | 41.4 <sup>b</sup> | 41.1              | 42.2 <sup>p</sup> |
| <b>Austria</b>           | 23.5              | 23.8              | 26.3              |
| <b>Poland</b>            | 34.8              | 36.5              | 39.1              |
| <b>Portugal</b>          | 23.5              | 26.1 <sup>d</sup> | 27.2              |
| <b>Romania</b>           | 18.1              | 20.4              | 21.8              |

|                                              |      |      |      |
|----------------------------------------------|------|------|------|
| <b>Slovenia</b>                              | 34.8 | 37.9 | 39.2 |
| <b>Slovakia</b>                              | 22.1 | 23.2 | 23.7 |
| <b>Finland</b>                               | 45.7 | 46.0 | 45.8 |
| <b>Sweden</b>                                | 45.3 | 46.8 | 47.9 |
| <b>United Kingdom</b>                        | 43.0 | 45.8 | 47.1 |
| <b>Iceland</b>                               | 40.9 | 44.6 | 42.8 |
| <b>Norway</b>                                | 47.3 | 48.8 | 47.6 |
| <b>Switzerland</b>                           | 44.2 | 43.8 | 43.8 |
| <b>Former Yugoslav Republic of Macedonia</b> | 17.1 | 20.4 | 21.7 |
| <b>Turkey</b>                                | 15.5 | 16.3 | 18.0 |

## Education funding

The European Union (EU-27) increased the total amount of public spending on education between 2000 and 2010. In all countries, public spending on education did not fall below the 2000 level during the entire decade apart from in Bulgaria (2001 and 2002), Greece and Slovakia (2001) and Portugal (2009).

Public expenditure on education in Romania is among the lowest in the EU27. According MEN (Ministry of Education), in the period 2010-2011 education budget had a value close to 4% of GDP (Gross Domestic Product), while in 2012 education budget, although low, had a value of 3.07% of GDP (Gross Domestic Product).

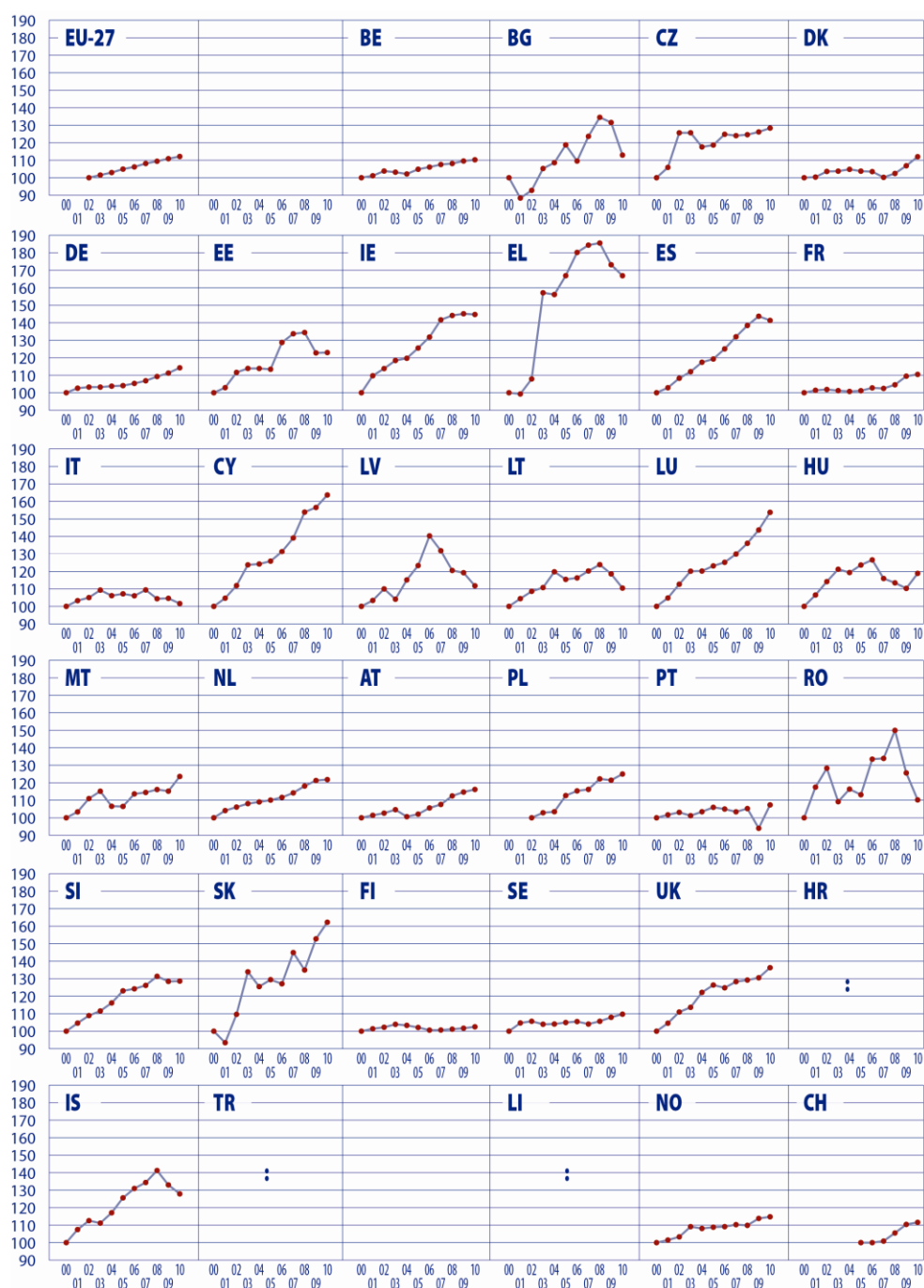
**Figure 1: Real GDP growth rate (percentage change over previous year), EU-27, 2000-2013**



The financial crisis has led to an increase in budget deficits in many countries and this has resulted in the need for fiscal consolidation. The effect of the financial crisis on education budgets is mainly seen in the countries (Ireland, Greece, Spain, France, Cyprus, Lithuania,

Poland, Portugal, Romania, Slovenia, Slovakia, the United Kingdom and Iceland) that had substantial general budget deficits in 2010 and 2011. In 2011, the exceptions were Cyprus, with an increase of almost 2 % in its education budget; France and Slovenia, where the budget remained stable. In 2012, the exception was Romania, with a 3.5 % increase in its education budget. However, Romania had already made significant reductions in its education budget in 2011.

**Figure 2: Trends in total public spending on education at constant prices from 2000-2011**



## Educational attainment of the population

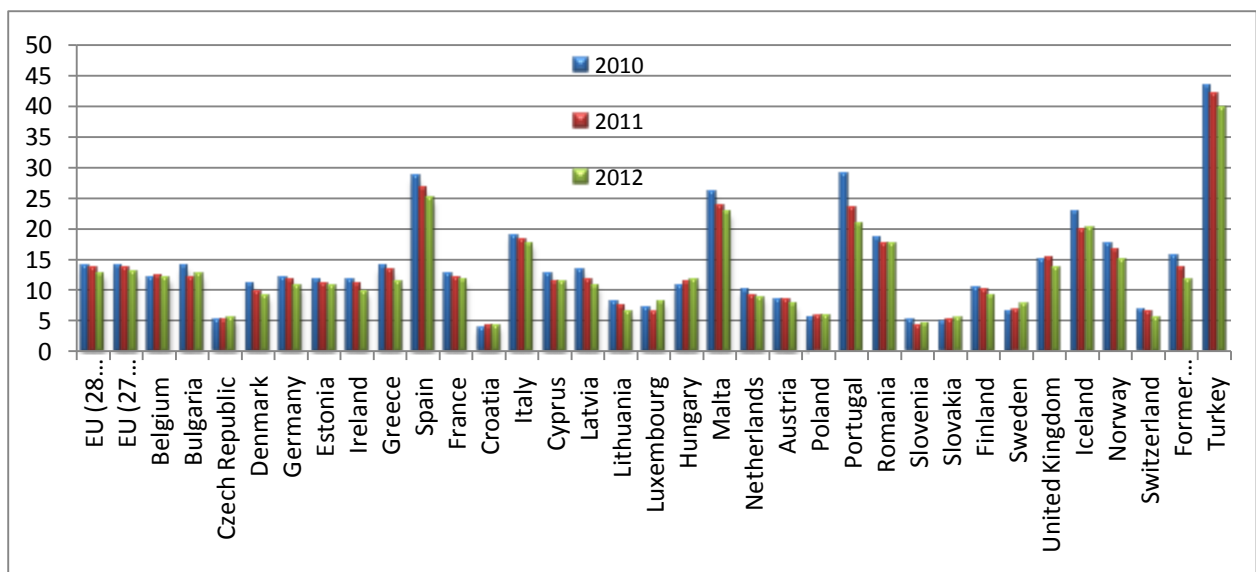
Educational attainment levels of the population have improved significantly over the last thirty years. In 2011, 76.4 % of people aged 25-54 in the EU-27 had at least an upper secondary education level, compared to 57.3 % of those aged 55-74. Those who had high educational attainment amounted respectively 28.8 % and 17.6 %.

Data on educational attainment also show that, in 2011, close to four fifths (79.5 %) of the EU-27's population aged 20 to 24 had completed at least an upper secondary level of education, a figure that reached 82.4 % for women.

Early school leaving is a phenomenon negatively affecting the quality and competitiveness of the human capital. The early school leaving rate decreased from 23.0% in 2002 to 17.5% in 2011. The proportion of the population aged 18-24 with primary or at most lower secondary education who no longer participate in either initial or continuing education is higher than in EU-27. In Romania, the early school leaving rate has a decreasing trend, as in the rest of the EU. It however exceeds the EU average by a high margin.

In Romania, the educational attainment of the population was of 87.7 % in 2012. More women (73.2%) than men (65.1%) aged 25 to 44 years of age had completed post-secondary education. The percentages for this age group are in stark contrast to those of the group 65 years of age and over, in which only 35.4% of women and 45.9% of men had completed post-secondary education.

**Figure 3: Early leavers from education and training**



## **Lifelong learning**

Lifelong learning may be broadly defined as learning that is pursued throughout life: learning that is flexible, diverse and available at different times and in different places.

In 2011, the proportion of persons aged 25 to 64 in the EU-27 receiving some form of education or training in the four weeks preceding the survey was 8.9 %. The proportion of the population who participated in such lifelong learning activities was slightly higher among women (9.6 %) than among men (8.2 %).

Unfortunately, Romania along with Bulgaria, Greece and Hungary reported lifelong learning participation rates of less than 3 %.

In Romania, the university system of education in the school year 2011/2012 school population dropped below 3.3 million. This level is mainly an effect of both demographic trends and the migration phenomenon recorded in this period at the level of general population. In recent years, there is emphasis on maintaining and even downward trend . This trend is reflected differently so for different educational levels and by residence . In this manner, students in secondary education registered the biggest drop (over 40 000 students) . Primary school population experience a decrease (nearly 19 000 students) and the professional one goes through a similar demographic trend which is added the effect of the abolition of Schools of Arts and Crafts. We note that in previous years, the negative developments are emphasized. At the opposite pole it is situated the high school and post high school where we identify a positive trend, on the restructuring vocational education fund and increasing the number of options for further study in another form than in university system.

At the high school level - as a result of the reorganization of the vocational education, higher education demand for technological profiles as well as the effect of extension measure of the length of compulsory education to 10 years - the number of students continued to record a strong upward trend in urban areas. Unfortunately, in rural areas the decrease is proportional this reduction representing a huge challenge for the education system also for measures to ensure equal opportunities after completing compulsory education.

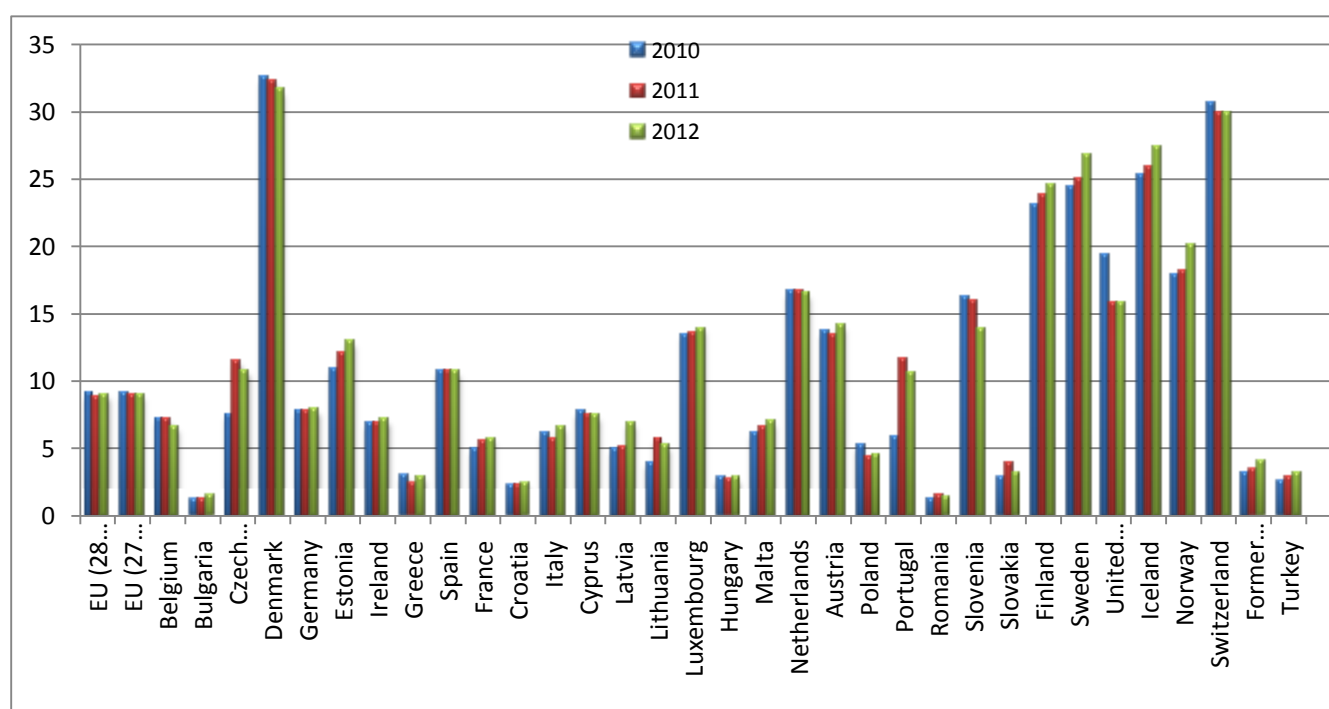
Vocational education in 2007-2011 has been a downward trend in both areas of residence. Vocational school population achieve a minimum of 12 382 students enrolled in the reference period.

Number of students enrolled in universities in Romania, regardless of their ownership, record in academic year 2008 - 2009 a significant reduction. Annually, according to NIS

(National Institute of Statistics) register (from 2009 to 2012), about 100,000 registrations fewer in the university system. Diminishing the number of students is visibly faster in private universities, while public universities have managed to maintain a relatively constant number of students enrolled.

Reducing the number of students in private universities begin in the academic year 2008 - 2009 with the completion of the first external evaluation of quality assurance which significant reduction in capacity of schooling them.

**Figure 4: Lifelong learning in period 2010-2012**



**Table 2: Lifelong learning in period 2010-2012**

| Geo / Time        | 2010 | 2011              | 2012 |
|-------------------|------|-------------------|------|
| EU (28 countries) | 9.1  | 8.8               | 9.0  |
| EU (27 countries) | 9.1  | 8.9               | 9.0  |
| Belgium           | 7.2  | 7.1               | 6.6  |
| Bulgaria          | 1.2  | 1.3               | 1.5  |
| Czech Republic    | 7.5  | 11.4 <sup>b</sup> | 10.8 |
| Denmark           | 32.5 | 32.3              | 31.6 |
| Germany           | 7.7  | 7.8               | 7.9  |
| Estonia           | 10.9 | 12.0              | 12.9 |
| Ireland           | 6.8  | 6.8               | 7.1  |
| Greece            | 3.0  | 2.4               | 2.9  |
| Spain             | 10.8 | 10.8              | 10.7 |

|                                                      |                   |                   |                   |
|------------------------------------------------------|-------------------|-------------------|-------------------|
| <b>France</b>                                        | 5.0               | 5.5               | 5.7               |
| <b>Croatia</b>                                       | 2.2               | 2.3               | 2.4               |
| <b>Italy</b>                                         | 6.2               | 5.7               | 6.6               |
| <b>Cyprus</b>                                        | 7.7               | 7.5               | 7.4               |
| <b>Latvia</b>                                        | 5.0               | 5.1 <sup>b</sup>  | 6.9               |
| <b>Lithuania</b>                                     | 3.9               | 5.7               | 5.2               |
| <b>Luxembourg</b>                                    | 13.4              | 13.6              | 13.9              |
| <b>Hungary</b>                                       | 2.8               | 2.7               | 2.8               |
| <b>Malta</b>                                         | 6.2               | 6.5               | 7.0               |
| <b>Netherlands</b>                                   | 16.6 <sup>b</sup> | 16.7              | 16.5 <sup>p</sup> |
| <b>Austria</b>                                       | 13.7              | 13.4              | 14.1              |
| <b>Poland</b>                                        | 5.2               | 4.4               | 4.5               |
| <b>Portugal</b>                                      | 5.8               | 11.6 <sup>b</sup> | 10.6              |
| <b>Romania</b>                                       | 1.3               | 1.6               | 1.4               |
| <b>Slovenia</b>                                      | 16.2              | 15.9              | 13.8              |
| <b>Slovakia</b>                                      | 2.8               | 3.9               | 3.1               |
| <b>Finland</b>                                       | 23.0              | 23.8              | 24.5              |
| <b>Sweden</b>                                        | 24.4              | 24.9              | 26.7              |
| <b>United Kingdom</b>                                | 19.4              | 15.8              | 15.8              |
| <b>Iceland</b>                                       | 25.2              | 25.9              | 27.3              |
| <b>Norway</b>                                        | 17.8              | 18.2              | 20.0              |
| <b>Switzerland</b>                                   | 30.6              | 29.9              | 29.9              |
| <b>Former Yugoslav<br/>Republic of<br/>Macedonia</b> | 3.2               | 3.4               | 4.0               |
| <b>Turkey</b>                                        | 2.5               | 2.9               | 3.2               |

## CONCLUSIONS

Education represents a permanent preoccupation for the Governments of all Member States, but the structure of the education systems differs considerably from a country to another.

Romania faces a major challenge in raising the quality of its education and training system. Early school leaving is a significant challenge. Romania should implement its reforms whilst building up its administrative capacity. Tertiary education should be aligned with the needs of the labour market and improve access for disadvantaged people.

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