

Aspects regarding the Level of Education in the Context of Sustainable Development

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Abstract

Employers are demanding ever higher levels of training. Higher level qualifications offer the possibility of accessing those opportunities that appear on the labor market. Changes are occurring in all areas of social life. As a consequence of these changes, education is becoming more and more important. Employment rates can be increased by applying flexible learning pathways. Technological changes occur in economic systems, which are based on the updating of skills, abilities and knowledge. Both pre-university education, and especially higher education, have in mind the development of skills and competences. Sustainable development can be achieved through quality education. Through the analysis carried out, the statistical data related to students enrolled in pre-university education, as well as to people who have a tertiary level of education, are highlighted. The comparative analysis gives us a picture of the evolution of these educational indicators.

Keywords: *European Union, level of education, pre-university education, sustainable development, labor market*

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1. Introduction

The decrease in the number of active people representing the labor force of a community is also a consequence of the aging of the population. Successful participation in economic and social life can be positively influenced by the skills,

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knowledge and abilities that individuals have. Also, finding a quality job and keeping it is influenced.

The lack of basic skills negatively influences leading to low graduation rates of pre-university education. These problems affect rural areas more. Under these conditions, access to the labor market, education, and quality services decreases.

At the same time, the existence of a high number of jobs makes it possible to build skills more easily in that area. Also, demographic changes can also impose changes at the level of education and professional training systems (Angheluță et al., 2020).

Increasing the competitiveness of companies can also be achieved by investing in employee skills (Cedefop, 2019) (Gabor, et al. 2021). Sustainable development becomes important to the extent that collaboration within partnerships leads to a balance between interests and priorities (Oancea Negescu et al., 2021).

Tertiary education graduates are found to have the highest employment rates (EC, 2019). Thus, the chances of employment increase with participation in vocational education and training programs.

2. Literature review

Throughout life, social, civic and entrepreneurial skills can be both acquired and developed (ETF, 2018).

Even if on the labor market the skills required by employers do not fully match the skills possessed by employees, the investment in acquiring new knowledge, skills and competences contributes to maintaining the capacity for professional insertion (EC, 2018). For this reason, a balance needs to be maintained between the skills and abilities required by the labor market and the skills and abilities possessed by people (Cedefop, 2018).

Individual as well as social outcomes are higher for younger generations than for older generations. Education brings an increased contribution to the identification of solutions regarding the problems of a community. Under these conditions, the quality of life of its members is higher (OECD, 2015).

The acquisition of new skills can lead to changes at the level of communities and their members. Since most jobs are found in urban areas, the role of urban areas has changed. In the urban environment, employment rates and wage levels are the highest (OECD, 2019).

Improving educational prospects can underlie older people's involvement and active participation in the workforce (Lorenti et al., 2020).

Education systems are changing as a result of changes occurring in production technologies. The requirements imposed on new ways of making products, respectively of offering services, lead to an increased focus on education. Sustainable development and economic growth are thus a consequence of increasing the level of education (Webb et al., 2020).

Computer use enables higher levels of proficiency to be achieved by applying new learning opportunities (Ertl et al., 2020).

A higher level of education offers possibilities to increase the degree of employability (Profiroiu, 2020).

Also, the use of artificial intelligence leads to high managerial performance (Rădulescu et al., 2018).

3. Research methodology

The article presents an analysis of students enrolled in pre-university education in the member countries of the European Union. Given that the next level of training after completing pre-university studies is higher education, the article analyzes the evolution of the share of people in the 15-64 age group who have a tertiary level of education. In the second part, the comparative situation of the evolution of students enrolled in pre-university education is analyzed.

4. Findings and discussions

People who have a high level of training can influence the socio-economic development of a community. The share of people with a tertiary level of education represents the next indicator whose evolution was analyzed. For the period 2004-2021, the following figure shows the evolution of the share of people in the 15-64 age group who have a tertiary level of education.

It is observed that at the level of the European Union, in 2021, compared to 2004, for the 15-64 age group, the share of people with a tertiary level of education increased by 11.3%. Also, the values increased in all the member countries of the European Union. The highest increases were registered in: Luxembourg (+23.7%), Ireland (+20.3%), Slovenia (+19.7%), Malta (+19.1%). In 2021, the highest values were in: Ireland (45.2%), Luxembourg (44.5%), Lithuania (39.8%), Belgium (39.7%), Sweden (39.7%), Netherlands (37.5%).

Table 1. The comparative situation of the share of people who have a tertiary level of education, %

Countries	2004	2007	2011	2016	2021
European Union	18,2	19,4	22,4	25,7	29,5
Belgium	26,8	28,1	30,4	33,2	39,7
Bulgaria	17,9	18,5	20,1	24,4	25,9
Czechia	10,4	11,6	15,8	20,6	23,4
Denmark	27,9	26,0	27,8	31,1	34,9
Germany	21,1	20,4	24,3	24,4	27,0
Estonia	25,6	27,5	31,3	33,1	36,0
Ireland	24,9	30,3	34,4	39,5	45,2
Greece	17,5	19,1	22,2	26,4	30,1
Spain	24,5	26,8	29,3	32,7	36,5
France	22,7	24,4	26,7	30,9	36,3

Countries	2004	2007	2011	2016	2021
Croatia	13,2	13,4	15,4	20,0	21,8
Italy	10,0	12,0	13,2	15,7	17,8
Cyprus	25,7	29,7	33,7	37,6	41,9
Latvia	16,5	18,5	23,6	29,5	34,2
Lithuania	21,6	23,7	27,9	34,1	39,8
Luxembourg	20,8	22,7	31,7	36,4	44,5
Hungary	14,2	15,4	18,0	20,6	25,4
Malta	10,2	11,7	15,1	20,3	29,3
Netherlands	25,7	25,5	28,0	31,0	37,5
Austria	15,4	14,6	16,3	28,9	31,8
Poland	12,8	15,7	20,3	25,2	29,1
Portugal	10,8	12,0	15,5	21,5	28,3
Romania	8,7	9,9	12,9	15,1	16,4
Slovenia	15,7	18,5	21,6	27,2	35,4
Slovakia	10,4	11,9	16,4	19,7	24,7
Finland	28,3	30,0	32,5	35,9	35,5
Sweden	24,7	26,4	29,1	35,3	39,7

Source: made by the authors based on the data available on the EUROSTAT website

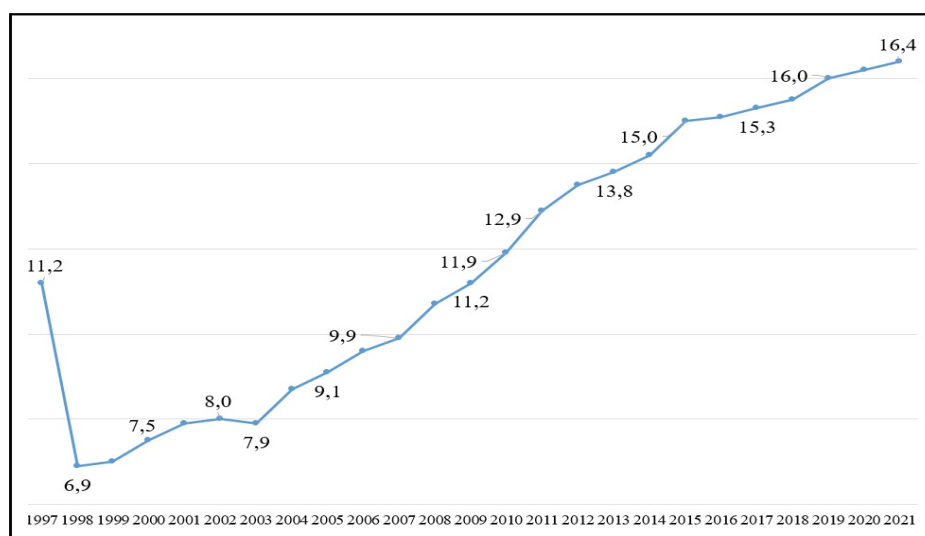


Figure 1. The evolution of the share of people with tertiary education in Romania, %

Source: made by the authors based on the data available on the EUROSTAT website

Figure 1 shows the evolution of the share of people in the 15-64 age group, who have a tertiary level of education, in Romania, for the period 1997-2021 (%).

It is observed that the share of people in the 15-64 age group, who have a tertiary level of education, in Romania, increased from 6.9% (1998) to 16.4% (2021).

The number of students enrolled in pre-university education is another indicator whose evolution is monitored. Thus, for the countries of the European Union, the following figure shows the evolution of students enrolled in pre-university education.

Table 2. The comparative situation of students enrolled in pre-university education, students

Countries	2013	2016	2018	2020
European Union	75.648.699	76.795.844	75.285.318	77.116.135
Belgium	2.489.677	2.623.142	2.615.097	2.495.923
Bulgaria	1.010.723	982.402	974.369	939.520
Czechia	1.709.759	1.753.200	1.753.228	1.794.579
Denmark	1.330.723	1.297.064	1.282.138	1.264.519
Germany	13.893.518	13.795.589	13.950.670	14.054.748
Estonia	234.151	238.562	243.226	247.966
Ireland	1.004.362	1.080.110	1.253.577	1.193.841
Greece	1.558.266	1.591.208	1.546.119	1.624.294
Spain	8.146.007	8.192.036	8.209.077	8.245.313
France	12.680.379	12.920.748	12.984.436	12.941.978
Croatia	667.423	646.110	633.428	620.962
Italy	9.149.535	9.022.851	8.992.491	8.817.580
Cyprus	137.821	141.062	144.618	148.496
Latvia	244.519	333.390	340.207	341.065
Lithuania	531.265	506.909	497.059	484.898
Luxembourg	98.834	102.150	105.195	108.834
Hungary	1.350.486	1.596.798	1.586.683	1.558.957
Malta	65.911	66.586	67.123	67.904
Netherlands	3.293.026	3.314.524	3.282.557	3.259.076
Austria	1.327.576	1.337.383	1.358.135	1.376.577
Poland	6.478.479	6.339.052	6.266.384	6.282.031
Portugal	1.768.977	1.671.084	1.738.752	1.349.874
Romania	3.269.734	3.107.414	3.039.690	2.982.890
Slovenia	339.871	353.866	362.829	369.732
Slovakia	866.045	845.088	851.419	860.366
Finland	1.158.242	1.182.714	1.202.642	1.175.076
Sweden	2.184.723	2.311.007	2.480.866	2.509.137

Source: made by the authors based on the data available on the EUROSTAT website

From the data presented, it can be seen that, at the level of the European Union, in 2020 compared to 2013, the number of students enrolled in pre-university education increased by 1467436 students. However, in ten countries the number of pupils has fallen. The countries with the largest decreases in students enrolled in pre-university education are: Portugal (-419103 students), Italy (-331955 students), Romania (-286844 students), Poland (-196448 students). The most significant increases were registered in: Sweden (+324414 students), France (+261599 students), Hungary (+208471 students), Ireland (+189479 students),

Germany (+161230 students). In 2020, the most students enrolled in pre-university education were in: Germany (14054748 students), France (12941978 students), Italy (8817580 students), Spain (8245313 students), Poland (6282031 students), Netherlands (3259076 students), Romania (2982890 students).

For Romania, the following figure shows the evolution of students enrolled in pre-university education from the total school population (%). The figure also shows the evolution of students depending on the urban/rural area of residence (%).

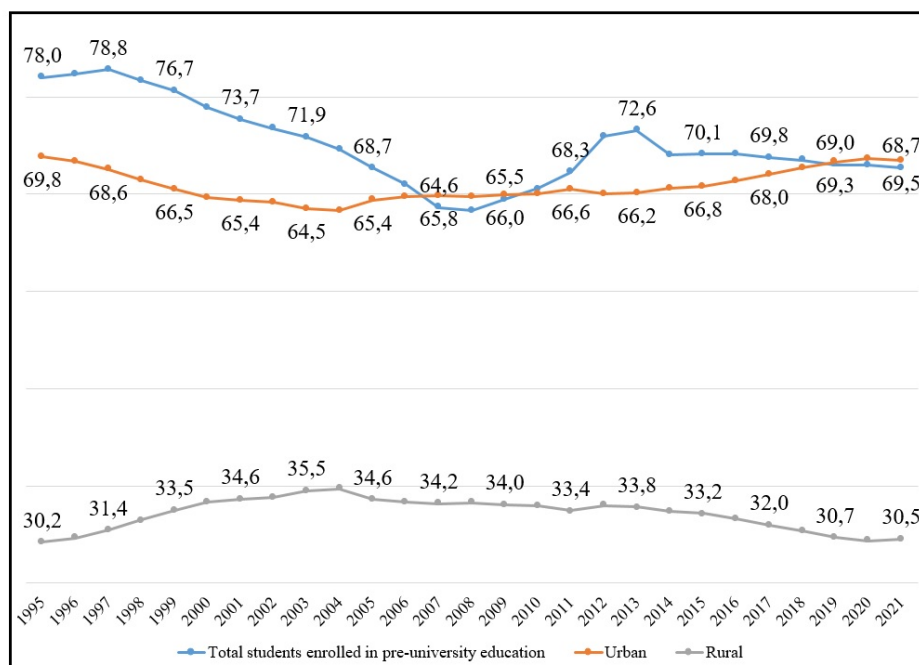


Figure 2. The evolution of students enrolled in pre-university education in Romania, %

Source: made by the authors based on the data available on the website of the National Institute of Statistics

From the presented figure, it can be seen that for the period 1997-2008, the share of students enrolled in pre-university education in the total school population decreased from 78.8% (1997) to 64.3% (2008). For the following period, the values increase up to 72.6% (2013). For the next period, the values decrease to 68.7%, in 2021. It is also observed that the shares of students enrolled in pre-university education in urban areas are higher compared to those in rural areas. In the urban environment, the values decreased from 69.8% (1995) to 64.3% (2004), and for the following period the share of students enrolled in pre-university education in the urban environment increased to 69.5% (2021). For rural areas, the share of students enrolled in pre-university education increased from 30.2% (1995) to 35.7% (2004). In the following period, the values decrease to 30.5% (2021).

5. Conclusions

The analysis shows that at the level of the European Union, in 2021, compared to 2004, for the 15-64 age group, the share of people with a tertiary level of education increased by 11.3%. Also, the values increased in all the member countries of the European Union. In 2021, over 35% of people in the 15-64 age group had a tertiary level of education in: Ireland, Luxembourg, Lithuania, Belgium, Sweden, Netherlands. In Romania, in 2021, the share of people in the 15-64 age group who have a tertiary level of education was 16.4%.

Regarding the number of students enrolled in pre-university education, at the level of the European Union, in 2020 compared to 2013, it increased by 1467436 students. In 2020, the most students enrolled in pre-university education were in: Germany, France, Italy, Spain, Poland, Netherlands, Romania. However, in ten countries the number of pupils has fallen. The countries with the largest decreases in students enrolled in pre-university education are: Portugal, Italy, Romania, Poland.

In Romania, in 2021, the share of students enrolled in pre-university education from the total school population was 68.7%, the shares of students enrolled in pre-university education in urban areas being higher than those in rural areas.

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