

THE QUALITY OF PROFESSIONAL AND TECHNICAL EDUCATION - ANALYSIS BASED ON NATIONAL QUALITY STANDARDS AND EUROPEAN POLICIES IN THE FIELD

Alina, Bidireanu (Năstase)¹

Abstract

The purpose of this paper refers to the definition of the quality level of the educational services offered by the professional and technical education institutions, based on the national quality standards and the European policies in the field, in order to increase the capacity to substantiate the decision-making processes, both at central level and locally. This paper is based on the research of statistical data and considers two categories of information, the first refers to factual socio-educational data, resulting from statistics at national level regarding the demographic and educational developments of the population in Romania and the second category of information constitutes the results obtained from the "Survey of the labor force in the households" carried out quarterly by the National Institute of Statistics, on the basis of a representative sample. For the present paper, information from the population of 15-24 years was used from the results of this survey. Among the recommendations of this analysis is the transition from the extensive development of vocational and technical education to an intensive type development that covers all dimensions of quality improvement at the level of results, equity and efficiency.

Keywords: quality, national standards, substantiation of decision-making processes

JEL Code: I21, M19

1. Introduction

According to the recommendations of the meetings of the ministers of education in the community space, for almost two decades, the educational systems in this space make sustained efforts to integrate the models, techniques, methods and tools specific to the quality management in the functioning of the educational entities in Europe Union Member States, which were initially used only in the business environment. These efforts are oriented towards obtaining quality educational processes, products and services, compatible with the new educational requirements generated by current realities, which are in an ultra-accelerated dynamic of change. These efforts have hitherto materialized in the development of extremely important benchmarks, valid exclusively in the community space and with specific goals, such as: facilitating labor mobility, matching national qualifications frameworks with a European meta-framework in domain, facilitating the introduction of mechanisms for lifelong learning and, last but not least, the recognition of studies completed in various community education systems.(Chină R., 2015)

2. Statistical data analysis

This paper is based on the research of statistical data and considers two categories of information, the first refers to factual socio-educational data, resulting from statistics at national level regarding the demographic and educational developments of the population in Romania and the second category of information constitutes the results obtained from the "Survey of the labor force in the households" carried out quarterly by the National Institute of Statistics, on the basis of a representative sample. For the present paper, information from the population of 15-24 years was used from the results of the National Institute of Statistics survey. The analysis of the external efficiency of the education system must also be considered in the context of changes in population structure from different demographic perspectives, such as population structures by age or by residence area.

¹ Ph. D. student, Valahia University of Targoviste, alina_bidireanu@yahoo.com

Table 1. Evolution of the resident population aged 15-24, by residence area, age group and gender

	2011	2012	2013	2014	2015	2016	2017
Number of persons(thousands)							
Total	2483.0	2452.5	2365.0	2280.5	2210.5	2162.7	2122.3
Urban	1337.9	1329.2	1257.1	1178.2	1106.3	1051.8	1005.4
Rural	1145.1	1123.3	1107.9	1102.2	1104.2	1110.9	1117.0
Male	1279.3	1261.0	1219.5	1177.5	1139.0	1113.8	1089.1
Female	1203.7	1191.5	1145.5	1103.0	1071.5	1048.9	1033.2
15-19 years	1111.5	1102.1	1091.4	1087.4	1081.7	1083.1	1074.8
20-24 years	1371.5	1350.4	1273.7	1193.1	1128.8	1079.6	1047.5
Factor structures							
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Urban	53.9%	54.2%	53.2%	51.7%	50.0%	48.6%	47.4%
Rural	46.1%	45.8%	46.8%	48.3%	50.0%	51.4%	52.6%
Male	51.5%	51.4%	51.6%	51.6%	51.5%	51.5%	51.3%
Female	48.5%	48.6%	48.4%	48.4%	48.5%	48.5%	48.7%
15-19 years	44.8%	44.9%	46.1%	47.7%	48.9%	50.1%	50.6%
20-24 years	55.2%	55.1%	53.9%	52.3%	51.1%	49.9%	49.4%
Evolution of the population aged 15-24 as compared to 2011 (percent)							
Total	100.0%	98.8%	95.2%	91.8%	89.0%	87.1%	85.5%
Urban	100.0%	99.3%	94.0%	88.1%	82.7%	78.6%	75.1%
Rural	100.0%	98.1%	96.8%	96.3%	96.4%	97.0%	97.5%
Male	100.0%	98.6%	95.3%	92.0%	89.0%	87.1%	85.1%
Female	100.0%	99.0%	95.2%	91.6%	89.0%	87.1%	85.8%
15-19 years	100.0%	99.2%	98.2%	97.8%	97.3%	97.4%	96.7%
20-24 years	100.0%	98.5%	92.9%	87.0%	82.3%	78.7%	76.4%

Source: data processed by the author according to the information provided by the National Institute of Statistic in the period 2011-2017

Negative evolutions characterize all population categories from the perspective of factor groups, but with different intensities. The evolution by areas shows a strongly negative evolution of the target population in the urban area, the decrease compared to the reference year being by a quarter (25%) of the people from the urban area in 2011, also determining a change in structure.

Taking as a reference the year of the promulgation of the Law of National Education No.1/ 2011, an evolution is noticed negative demographic of the resident population in Romania, with a decrease of 2.7% in 2017 compared to 2011 (with an average annual negative evolution of 0.06% compared to the reference year). In the context presented the most affected was the young population, aged between 15-24 years, which in the period concerned registered a decrease by 14.5% compared to the reference year. The share of the young population in the urban area decreased from 53.9% in 2011, to 47.4% in 2017, the evolution being due in particular to the population level of 20-24 years.(see figure 1)

A characteristic of the young population of interest for analyzing the external efficiency of the education system is the formation of this population for the labor market, the population aged 15-24 years from 2015-2017 evolving under the influence of the major curricular changes started with the Education Law from 1995. Between the changes important for the present analysis, the generalization of the compulsory education up to the age of 16 with the continuation of the education by the high school graduates with the lower cycle of the high school or in vocational schools, the major transformations of the vocational education or the possibilities of continuing the education after the high school or education are registered professional.(see table 2)

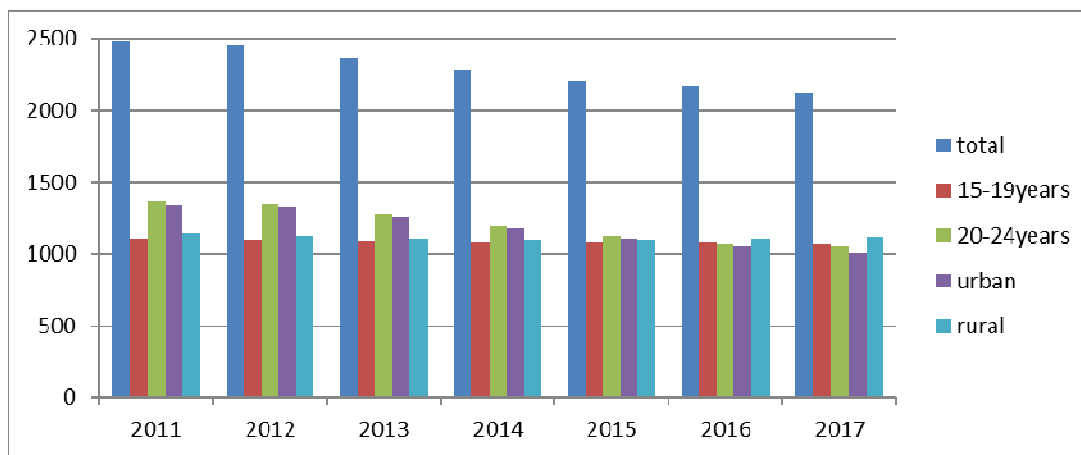


Figure 1: Evolution of the resident population aged 15-24, by residence area, age group and gender

Source: data processed by the author

The abolition of the arts and crafts schools starting with 2009/2010 and the reintroduction of vocational education starting with 2014 have also affected a significant number of young people regarding the impact on the labor market of the initial training. Other issues, such as the evolution of school dropout, have affected access to the labor market.

Table 2. Distribution of the population aged 15-24 by forms and levels of training

	2011	2012	2013	2014	2015	2016	2017
Number of persons (thousands)							
<i>Total (thousands)</i>	2475.4	2430.7	2343.2	2262.7	2188.1	2165.7	2133.9
No graduate school	19.5	18.1	18.1	18.8	22.7	20.0	17.4
Mayor (grades 1 - 4)	147.0	133.3	120.0	113.3	122.9	140.3	133.0
Gymnasium	1075.8	1079.5	1055.7	1023.6	995.4	977.4	962.7
Professional, complementary and apprentice	186.2	157.9	139.9	79.7	78.9	72.4	64.0
Secondary	913.3	903.6	874.4	887.2	865.7	871.6	865.1
Post-secondary, masters	13.4	11.4	9.7	11.2	16.3	12.6	11.4
Higher license	120.3	127.0	125.5	129.0	86.3	71.4	80.2

Source: data processed by the author according to the information provided by the „Survey of the labor force in the households" carried out quarterly by the National Institute of Statistics

High school or vocational school students appear as low-level, high school graduates, and people in post-secondary education are reported as high school graduates. Distribution by levels of education refers to the entire population living in Romania aged 15-24, over half of these persons being included in the national education system, on all levels and forms of education in the system. Persons aged 15-24 who have left the system in one form or another represent less than half of the people in the age category.(see figure 2)

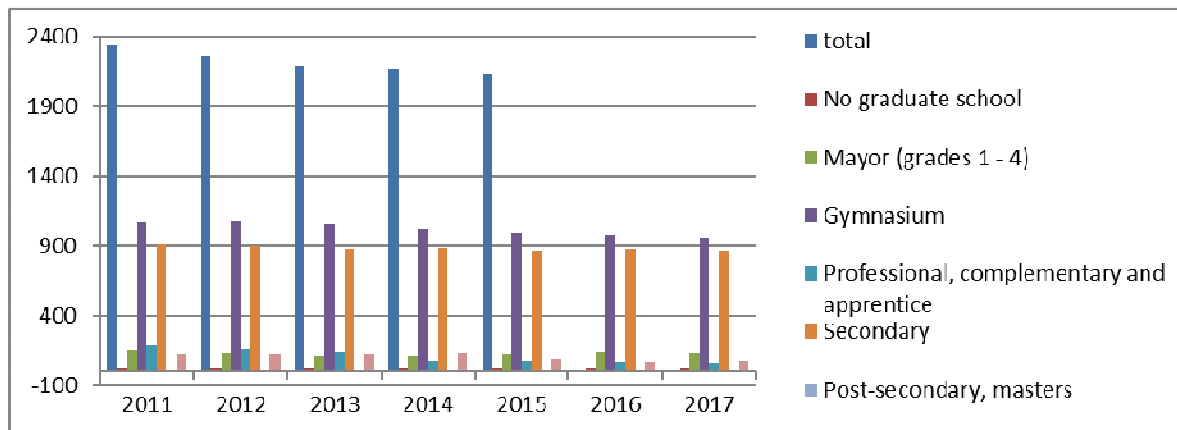


Figure 2: Distribution of the population aged 15-24 by forms and levels of training

Source: data processed by the author

The demand for education on the labor market is given by the number of graduates of different forms of education and levels of education who performed economic activities during the reference period, making up the employed population.

Table 3. The active population by categories, according to the participation in the economic life

Categories of the active population	2011	2012	2013	2014	2015	2016	2017
Population aged 15-24 (thousands)							
Occupied population	578.5	574.9	537.4	508.2	536.1	482.0	522.0
Unemployed population	181.8	167.4	167.2	160.7	148.2	125.1	117.1
Weights in the active population aged 15-24 (percent)							
Occupied population (%)	76.1%	77.4%	76.3%	76.0%	78.3%	79.4%	81.7%
Unemployed population (%)	23.9%	22.6%	23.7%	24.0%	21.7%	20.6%	18.3%

Source: data processed by the author according to the information provided by the „Survey of the labor force in the households“ carried out quarterly by the National Institute of Statistics

In 2017, the active population aged 15-24 years comprised 639.1 thousand persons, of which 522 thousand employed and 81.7 thousand unemployed. Similar to the active population, which indicates an increase of the population in the labor market, the employed population registered an increase by 2.4% (200 thousand people) as compared to the previous year, while unemployment decreased by 15.1%. In the case of the young population, the share of the employed population on the labor market registered an increase of more than four percentage points, from 76.1% of the persons available to carry out economic activities in 2011 to 81.7% in 2017 - the last year of the analyzed period.

Table 4. Participation in the economic life of graduates of vocational and technical education, aged 15-24 years

	2011	2012	2013	2014	2015	2016	2017
Number of active persons (thousands)							
Total	445.2	430.2	413.2	387.6	408.1	368.1	380.1
Professional, complementary / apprentice	136.9	113.1	102.9	64.9	68.3	60.7	54.2
secondary	298.1	307.2	301.3	313	327.5	297.1	316.6
Post-secondary, masters	10.2	9.9	9	9.7	12.3	10.3	9.3
Number of employed persons (thousands)							
Total	331.1	322.8	306.2	289.2	316.7	287.6	304.4
Professional, complementary / apprentice	106.3	89.1	85.0	55.1	58.0	50.8	46.4
secondary	215.6	225.7	215.1	227.0	250.1	229.9	250.7
Post-secondary, masters	9.2	8.0	6.1	7.1	8.6	6.9	7.3
Number of unemployed (thousands)							
Total	114.1	107.4	107	98.4	91.4	80.5	75.7
Professional, complementary / apprentice	30.6	24.0	17.9	9.8	10.3	9.9	7.8
secondary	82.5	81.5	86.2	86.0	77.4	67.2	65.9
Post-secondary, masters	1.0	1.9	2.9	2.6	3.7	3.4	2.0
Unemployment rate among the population aged 15-24 by education levels							
Total	25.6%	25.0%	25.9%	25.4%	22.4%	21.9%	19.9%
Professional, complementary / apprentice	22.4%	21.2%	17.4%	15.1%	15.1%	16.3%	14.4%
secondary	27.7%	26.5%	28.6%	27.5%	23.6%	22.6%	20.8%
Post-secondary, masters	9.8%	19.2%	32.2%	26.8%	30.1%	33.0%	21.5%

Source: data processed by the author according to the information provided by the „Survey of the labor force in the households" carried out quarterly by the National Institute of Statistics

The policies in the field of education regarding the generalization of the education of 10 years, have led during the analyzed period, to a continuous increase of the percentage of the graduates of the high school among the graduates of the professional and technical education, parallel with the decrease of the weight of the graduates of the vocational education. At the same time, there is a continuous decrease of the unemployment rate in the graduates of vocational and technical education, the share of unemployed among the participants in the economic life decreasing from 25.5% in 2011 to 19.9% in 2017. The continuous decrease of the unemployment rate was registered among the high school graduates and vocational education, while the evolution of the indicator related to the post-secondary education graduates is influenced by the development of this level of training in recent years.

3. Conclusions

The effectiveness of vocational education should not be viewed only from the perspective of its impact on the labor market, but also from the perspective of achieving educational objectives at the level of the educational unit, as they are established by the legislation and educational standards. According to the legislation in force, each school must

produce, annually, an Internal Evaluation Report on the quality of education. Internal evaluation is an initial, beneficial and useful step in any process of quality improvement, with the goals of continuous development and improvement of both the results and the satisfaction of the beneficiaries. Internal evaluation also ensures self-regulation, optimization and revision of the functioning and development of the institution. In the situations provided by the same quality legislation, the educational units are subject to the external evaluation process. The external evaluation aims to authorize the provisional operation and accreditation (of new pre-university education units, as well as of new levels, specializations and, professional qualifications within the existing units), as well as the periodic evaluation (once every five years) of quality of education offered by an educational institution. There is a tendency for the development of vocational education, registered in the last 5 years, including the initiation of the professional-dual education, realized at the request of the economic agents. It responds, at best, to the current needs of the labor market.

In order to improve the quality of professional and technical education, managerial development is required at the level of vocational and technical education units, in order to continuously improve learning outcomes, student well-being, professional capacity of teachers and institutional capacity. It is also necessary to evaluate the school management based on the results obtained and the achievement of the objectives assumed.

In the context of the demographic developments mentioned, it is necessary to move from an extensive development of the education system, with all its components (including vocational and technical education), to an intensive one, in the direction of improving quality on all its dimensions (results, equity and efficiency).

Bibliografy:

1. Chină, R.,(2015), *Managementul calității în învățământul preuniversitar. Referențiale, modele, tehnici, instrumente*, București, Editura Universitară
2. Goldbach, I. R., Nastase, (Bidireanu) A., Peichea, (Constantinescu) M., Marinescu (Barbu), I.F., (2019), *A New Approach to Management of Vocational and Training Education*, Revista Romaneasca pentru Educatie Multidimensionala, Volume 11, Issue 2, pages: 296-325 | doi:10.18662/rrem/132
3. Jaradat, M. (2007), *Bazele Managementului*, ClujNapoca: Risoprint Publishing
4. Năstase(Bidireanu), A., Peichea, M., Barbu, I.F.,(2019), *Dual learning - a new form of attraction for professional education*, The Journal Contemporary Economy/Revista Economia Contemporană, Vol. 4, Nr. 1/2019, p110-118
5. Stegăroiu I., Niculescu C., (2000), *Excelența în management*, Bucuresti: Editura Niculescu
6. Ancheta forței de muncă în gospodării (amigo), (2016), raport de calitate disponibil la http://www.insse.ro/cms/files/Rapoarte%20de%20calitate/Amigo/ro_amigo_rap_calitate_Ro_m_2016.pdf(accessed 26 September 2019)