3rd World Conference on Learning, Teaching and Educational Leadership (WCLTA-2012)

Educational system gaps in Romania

Roberta Mihaela Stanef *, Alina Magdalena Manole

The Bucharest University of Economic Studies, 6, Piata Romana, 1st district, Bucharest, Postcode 010374, Romania

Abstract

The paper presents a review of the current state of the educational system in Romania. It identifies four main vulnerabilities (ineffectiveness, irrelevance to the new economy and knowledge society, unfairness i.e. inability to create equal opportunities and poor endowment with necessary material and human resources) and argues that correcting these issues is a necessary step in reducing development gaps both within the country and considering regional disparities at the European level. Furthermore, using a means/end approach, the article presents how local policy initiatives could correlate learning outcomes with the need for a more competitive workforce with new skills and qualifications and meet the requirements of the Europe 2020 Agenda. Correcting the identified weaknesses would strengthen the fundamentals of economic development while also reflecting the final goal of economic activity – satisfying human needs.

Keywords: Differences in development, urban, rural, education.

1. Introduction - The current state of the education system in rural and urban Romania

The school population in Romania has decreased rapidly in the last few years, so that by the academic year of 2010/2011 it was 8.5% lower than the academic year of 2007/2008. For all levels of education, level of enrolment in the education of school age population has different values among genders (76.0% boys, 79.3% for girls in academic year 2010/2011). However, in higher education, there was a period of massive extension followed by minor annual decrease in of enrolments and currently reaching a stable number of students; this development is mainly due to private universities.

Specialization structure groups of students enrolled in higher education in academic year 2010/2011 reflect the choice of most students in Romania to study in fields such as: academic and teaching (27.1%), economics (25.3%) and technical (23.8%). In private higher education, the highest weight is recorded for students studying economics (37.1%).

The decrease in school population is mainly caused by demographic changes, so one could argue that the appropriate response to this situation is clear and consists in reducing teaching staff at these levels of education. On the other hand, this trend is also due to enrolment rates that are still low (especially in high school), and could thus

* Roberta Mihaela Stanef. Tel.: +407455139292
E-mail address: roberta.stanef@economie.ase.ro, stanefroberta@yahoo.com

© 2013 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license.
Selection and peer review under responsibility of Prof. Dr. Ferhan Odabaşı

Available online at www.sciencedirect.com

© 2013 The Authors.
Published by Elsevier Ltd.
Open access under CC BY-NC-ND license.
Selection and peer review under the responsibility of Prof. Dr. Ferhan Odabaşı

Keywords: Differences in development, urban, rural, education.
argue the need for change, both in schools and in teachers, to attract an increasing number of students. In the absence of other changes, maintaining constant parameters, such as class size, and whether employment practices would be totally flexible, loss of students would require a reduction in the need for over 50,000 staff, out of which 80% are in secondary education.

2. Development gaps in educational system

Despite a long series of reforms in education, student performance is still low compared to EU standards and that of the Organization for Economic Cooperation and Development (OECD). Study performance indicators values approaching international average, but are still below that of the EU, OECD and even neighbouring countries in Central and Eastern Europe.

Romania ranked 34 of the 42 countries participating in the International Student Assessment (PISA). Although student performance, as shown in the study of international trends in mathematics and science (TIMSS) is still close to the international average and it remains below the OECD average. Moreover, Romania's performance is below average for all European and Central Asian countries and significantly below the EU countries. The values of these performance indicators for Romania stagnated, while in other countries in the region, such as Lithuania and Latvia, they have improved. A high percentage of students recorded good results, but there is a substantial polarization of performance: student test scores are either very high or very low; few are situated in the middle.

Maintaining the current education system in Romania jeopardizes both the competitiveness and the prosperity of the country.

The education system is inefficient.

Table 1 shows the performance of the students in Romania for the main international assessment: PISA, TIMSS and PIRLS. Except for children's reading results in grade IV (PIRLS - 2010), all other performances are well below the international average (for example, Romania ranked 34 of the 42 participating countries in PISA 2010). More worrying is the fact that the performances of Romanian students are significantly worse than those of students from neighbouring countries, new member states that have roughly the same social and economic conditions.

<table>
<thead>
<tr>
<th>Type of evaluation</th>
<th>PISA</th>
<th>TIMSS</th>
<th>PIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>reading</td>
<td>math</td>
<td>sciences</td>
</tr>
<tr>
<td>Romania</td>
<td>428</td>
<td>426</td>
<td>411</td>
</tr>
<tr>
<td>International average</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>430</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>Hungary</td>
<td>480</td>
<td>488</td>
<td>496</td>
</tr>
<tr>
<td>Lithuania</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>Latvia</td>
<td>458</td>
<td>463</td>
<td>460</td>
</tr>
</tbody>
</table>

Sources and notes: PISA, the OECD International Student Assessment, OECD & UNESCO Institute of Statistics, 2010; TIMSS (Trends in International Mathematics and Science Study), 2010; PIRLS (Progress in International Reading Literacy Study), 2010.

Romania's poor performance compared with its neighbours and its new EU partners is even more unsatisfactory considering the low levels of enrolment in secondary and higher education. By including rural students who attend schools in cities, it is found that only 25% of rural students are enrolled in high school. It's a better percentage than the gross enrolment rate in rural high schools that constitutes 8.6%, but is still very low in terms of EU and OECD standards. Compared with EU countries, labour competitiveness in Romania in terms of education and skills is still low. In PISA, about 70% of students of 15 years in Romania have performed below the level required for a modern workplace, compared with 37% of students of 15 years of EU.

2.1. The education system is irrelevant in relation to economy and society of the future.

All current analysis shows that the future will be dominated by knowledge-based economies and societies (Dinu et al., 2012). In this context, Europe 2020, the EU has set key indicators showing the extent to which a country and
the Union as a whole are able to meet the challenges of the knowledge economy. Romania’s position in relation to the knowledge economy indicators is presented in Table 2.

Table 2 - Positioning Romania in relation to the Lisbon indicators

<table>
<thead>
<tr>
<th>LISBON INDICATORS</th>
<th>ROMANIA</th>
<th>UE</th>
<th>UE TARGET (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>leaving the education system prematurely*</td>
<td>23.60%</td>
<td>14.90%</td>
<td>max. 10%</td>
</tr>
<tr>
<td>share of population 22 years old who completed at least high school</td>
<td>66.50%</td>
<td>77.30%</td>
<td>min. 85%</td>
</tr>
<tr>
<td>share of 15 years old students who fail to reach even the lowest level of performance</td>
<td>41%</td>
<td>19.40%</td>
<td>15%</td>
</tr>
<tr>
<td>proportion of graduates in mathematics, science and technology</td>
<td>23%</td>
<td>24.10%</td>
<td>10%</td>
</tr>
<tr>
<td>adult participation in lifelong learning</td>
<td>1.60%</td>
<td>10.80%</td>
<td>12.50%</td>
</tr>
</tbody>
</table>

Source: PIRLS, 2010. Note: The indicator refers to population aged 18-24 years who completed only lower secondary education (or less) and are not engaged in any form of education or training.

The analysis of these data results in a gloomy conclusion: the current education system is unable to provide Romania with a competitive position in the knowledge economy.

While the Lisbon Agenda was revealed to have set too many goals within a limited timeframe and with little institutional support, the new Europe 2020 Strategy was developed, linking the economic objectives of growth, employment and reducing poverty with educational and environmental goals. Thus, the architecture of this strategy reveals a model of a knowledge-based society with a decisive intellectual component. Accomplishing the main goal of a better quality of life is provided, among others, by education and by making full use of the intellectual and scientific potential. The educational goal to limit to maximum 10% the rate of early school leaving by the population aged 18-24, and reaching a proportion of minimum 40% of the population aged 30 to 34 having a tertiary degree or equivalent is consistent with the economic goals of growth and employment. On the one hand, better skills will result in higher work productivity and on the other, higher employment rates that might generate GDP growth might also have a positive impact on the reduction of the early school leaving rate and on the increased rate of the population with tertiary education.

2.2. Current education system is unfair.

An education system that is fair provides students with the same learning opportunities and results, regardless of socio-economic or cultural backgrounds. Unfortunately, in Romania, despite interventions to date, major inequities remain. Membership in rural areas is associated with major drawbacks: currently only 24.54% of rural students get to attend school. The proportion of rural students who obtain poor results in the Romanian language, mathematics and science is 2-6 times higher than those in urban areas; the proportion of people who get good results in the same subjects is 2-3 times lower. Vulnerable groups continue to be largely educational disadvantage.

The observed differences between urban and rural areas reveal significant differences in terms of performance in school, but hide the exclusion of vulnerable groups. Differences between school students in rural and urban schools remain, as those of most students and those belonging to disadvantaged minority groups. Rural students score lower than urban students.

Rural education faces further serious challenges related to: investment in physical infrastructure; number of qualified teachers; staff turnover - determined by the degree of isolation of the settlements and their development (while the majority of teaching positions are covered in full, their share is higher in urban areas and the mobility is higher in rural schools); limited access to training and training programs for the rural population. All these lead to a still unsatisfactory efficiency of education in rural and / or disadvantaged territories. Rural areas still remain a disadvantaged environment, characterized by a high turnover of teachers and a lower proportion of qualified staff, to urban areas.
2.3. Infrastructure and resources in the education system is poor.

Most schools in Romania have a conception of architecture that would be better suited for a school in the late nineteenth century rather than the beginning of the XXI century. Over 82% of all school buildings were built before 1970, sometimes even much longer ago, making their current state and their equipment unable to meet current standards of training. Thousands of schools lack basic facilities (running water, toilets, etc.), and material supplies are poor. Only 36% of schools are connected to Internet, the vast majority consisting of urban high schools.

In summary, the current educational system has serious intrinsic problems of efficiency, equity, quality and relevance to the knowledge economy. It produces insufficient research and innovation and is unable to promote a competitive and prosperous Romania. There is also an external phenomenon with major implications for education: demographic decline.

3. Solutions

Challenges identified in this paper may be answered by applying a set of policy priorities including:

(I) Achieving greater efficiency and equity of education systems in the context of its decentralization through
   - entry per student funding formula based on rigorous standards, which must in turn rely on a sound
     analysis to reflect costs real policy objectives,
   - optimizing the school network to reflect the needs of a declining school population,
   - institutional capacity building through training of managers in all levels of education.

(II) Increasing the quality of education by:
   - human resource development strategy including a more effective incentive system linking teacher
     salaries to their performance, the strategy will be to solve poor management of human resources, including
     changes in the distribution, employment, dismissal, promotion and tenure of teachers,
   - modifying the distribution of teachers by level of educational and administrative units and vocational
     education teachers in general education;
   - setting standards for initial teacher training, career development teacher, teacher evaluation and
     employment regulations;
   - increasing teaching workload, and
   - establishing incentives for pedagogical innovation (Papuc, 2012).

(III) Increasing labour competitiveness in Romania through
   - the provision of higher qualifications of graduates by increasing the number of students enrolled in
     secondary education, and increasing the quality and relevance of curriculum and teaching;
   - the use of learning for qualification required in certain jobs, upgrading skills and qualifications, new
     skills for career change, and
   - increasing the relevance and attractiveness of vocational technical education, possibly reducing its
     share in the school population (Crețu, 2011).

(IV) Better management and finding the optimum degree of coordination from the Ministry of Education
   - by building the link between budgeting and strategic planning reform agenda, increasing the capacity
     to formulate policies, strategies and programs based on expected results and monitoring their implementation and
     review of regulatory policies on education,
   - increasing institutional capacity and management practices (including the unification and
     strengthening the Department of Educational Policy and Public Policy Unit of the Ministry of Education),
   - establishing a coordination mechanism for a better match to the budget process with strategic planning
     and policies set, and
   - establishing an inter-ministerial body to coordinate inter-Sectorial initiatives.

(V) Encouraging input from and addressing the needs of all parties involved with the help of:
- studies, consultations with all stakeholders, public debates, communication campaigns (e.g. with parents
- reporting record annual results of student learning, performance compared to school district performance and
  national standards, an observer of jobs for university graduates),
- providing a first high-level political support for changes in the education sector,
- developing a strategy of government information and public reporting on progress, and
- providing regular reports by specialized committees.

4. Conclusions

One of the challenges of education policies in member countries of the European Union is addressing and
combating disadvantage and disadvantaged groups in terms of education.

On this issue, some member states are aimed at increasing investment in education as a key solution to prevent
poverty and social exclusion in the long run. According to the priorities of these countries, this involves preventing
disadvantages in education by developing more effective interventions at an early age (mainly through an adequate
and comprehensive child protection), adapting the educational system so that schools can respond successfully to the
needs of children from disadvantaged groups, prevent drop out and return to training of young people who left
school, continuing education and extension, so there adequate opportunities for education and training accessible to
groups of children and young people at risk.

In recent years Romania developed an impressive number of strategies, national programs and projects designed
to improve learning conditions in schools and reduce educational and social inequalities. Although institutional
development and change in the educational system have cost effort, reform of Romanian education still records
negative aspects that directly affect the level of performance and quality. Educational programs taking place in
strategies aimed at pre-university education in general and education in rural development, in particular, are aimed
at the improvement of education.

In short, education and current research is yet able to sustain a prosperous Romania and competitive knowledge
economy.

Acknowledgements

This work was supported by the project "Post-Doctoral Studies in Economics: training program for elite
researchers - SPODE" co-funded from the European Social Fund through the Development of Human Resources
Operational Programme 2007-2013, contract no. POSDRU/89/1.5/S/61755.

References:

Lessons for Romania, revista de management comparat international/review of international comparative management, 12 (4), 761-769.
Conference (17th IBIMA), Milan, Italy.
Shucksmith, M. (2010). How to promote the role of youth in rural areas of Europe? Newcastle University, UK.