Analyzing the Two Extremes in the Romanian Education System: What the System Wants To Be and What It Actually Is

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Abstract/Thesis

The Romanian education system has gone through major changes since the fall of communism such as reforms in the curriculum and instructional method with a focus on diversity and problem-solving, the teacher trainings were changed and new accurate and unbiased textbooks were published. Still, the Ministry has yet to find a way to foster a growing environment for its students. This study underlines the major reforms and decrees that the Ministry has pushed in the past three decades and the outcomes and impact they had on both students and teachers. It analyzes the quality of education through scholarships, dropout rates, National, International, and European exam scores, students leaving the country, students studying in different environments, changes in the curriculum, teacher training and salaries, and Olympic favoritism. The current paper also aims to provide an overview of what students and teachers require in terms of resources and materials, followed by possible solutions or alterations to the main educational framework that could benefit the entire ecosystem.

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Introduction

Mass media constantly brings up the education system in Romania. Since the fall of communism, the system has significantly changed by trying to fit into the European standards and rise to the level present in other countries. This evolution started with the establishment of a new National Reform that had the purpose of embracing democracy and revitalizing the educational structure. During that period, the textbooks were re-written, the curriculum was changed, new research with the purpose of defining standards and practices of schools around the country began to be conducted, and teachers had more accessible trainings [1]. The catalog of educational opportunities promised to become more inclusive and offer quality education to every child in the country, but essentially failed to deliver on that promise.

Romania is currently ranked fourth in Europe at the Mathematics Olympiad [2] and seventh in the world at the Physics Olympiad [3]. At first glance, by analyzing these notable results, Romanian students benefit from one of the most comprehensive education systems in the world. Meanwhile, in the same country, various phenomena refute the quality of education: the national dropout rate is 15.6% (6% above the EU average) [4], 1.84% of national merit-based scholarships are awarded to below passing grade students [5], roughly 40% of Romanian students are illiterate and innumerate [6], 45% of births among underage girls in the European Union come from Romania [7], and about 28% of Romanian schools do not meet basic sanitation needs [8]. Considering these recent statistics and results, the targets set to revitalize the educational structure

in the past 30 years (we are using the fall of communism as the standard timeline) worked for the students who have shown remarkable results in olympiads. Still, millions of Romanian students, specifically the ones that are part of minorities, tend not to get the most out of the same education system.

1. National Scholarships: categories and miscalculations

As stated on the Ministry of Education website, there are 6 categories of scholarships (some of them being new):

- Olympic Excellence I Scholarship: 750-3000 RON for awards at International Olympiads
- Olympic Excellence II Scholarship: 700 RON for awards at National Olympiads
- Merit Scholarship: 450 RON awarded by the criteria discussed above or for awards and Regional Olympiads and National contests
- Social Scholarship: 300 RON for low-income/single parent/orphan/diseased students
- Scholarship for teen mothers: 700 RON
- Technological Scholarship: 300 RON for students at vocational schools, previously called as the Professional Scholarships

Yet, students do not receive the amounts written below as the Ministry came up with the following formula to determine the amount of money based on working days: (CmB/NZL)*(NZL-NZV)

CmB - the minimum amount of money determined by the Ministry (eg. 450 RON for Merit Scholarships)

NZL - the number of working days in a specific month

NZV - the number of free days or holidays in a specific month

For a few years, the Ministry of Education and the National Students' Council tried to develop a better scholarship plan for students nationwide. For the school year 2023-2024, they came up with a new solution in order to award more students with a merit-based scholarship: if you were part of the top 30% of your class or had a grade point average (GPA) above 9.50 (out of 10), you were guaranteed 450 RON every school month. What the Ministry forgot to take into account was a minimum grade to achieve such a scholarship, as multiple schools where even the top students cannot obtain a passing grade still exist. That is how 8.74% of the fund goes to students with a GPA between 5-7, and 1.84% of the fund goes to students with a GPA below 5. In Romania, you need to have a GPA higher than 5 in order to pass your classes. The Ministry chooses to award these students rather than deal with the root cause of this particular white elephant.

2. Students pursuing higher education

Regardless of the numerous scholarships the Ministry of Education offers, an increased number of Romanian students choose to study abroad. Based on the data collected by UNESCO [12], in 2021, more than 34 thousand Romanian students studied outside the country, following an increasing trend compared to the numbers in 2019 and 2020. According to the National Statistics Institute, in the same year [13], around 554 thousand students were enrolled in higher education in Romania. Comparing the

numbers, almost 6% chose to study abroad full-time, not taking into exchange year programs.

*Note: Even though 6% might not seem as a significant number, when we take into account that usually the students who go abroad made significant changes in their communities and fields of interest and that they are moving because they see no future in studying and working in their home country, that small number starts to gain more significance.

3. The number of children outside of school

In the timeframe of 2019-2022, the national dropout rate has stayed almost the same, fluctuating between 15.3% and 15.6%. Meanwhile, the average school dropout rate in the European Union has been decreasing from 10.2% to 9.6%.

According to a report by the Ministry of Education in 2021-2022, approximately 2.9 million students were enrolled in pre-university education. However, in a report made by the National Institute of Statistics during the same school year, there were about 3.49 million people in the education system, out of which 78.6% were in pre-university education. This means that the number of students in pre-university education was approximately 2.74 million, almost 200 thousand lower than what the Ministry of Education reported.

*Note: The analysis of this research subtopic and other comparisons tied to the total

number of students in Romania are limited because of the discrepancy between a set of data with two different sources.

4. Urban vs Rural

Educational inequalities between urban and rural areas are a pressing issue in Romania, with rural students facing significant disadvantages compared to their urban counterparts. According to the National Statistics Institute, 27,2% of the total students are from rural areas. Still, the disparities between urban and rural education in Romania are evident in categories that should not be overlooked: Computer and Internet, Teacher Competencies, and Funding. In a study conducted by the European Commission in 2020, it is underlined that schools in rural areas endure difficulties in offering digital education for their students due to the low number of qualified teachers and poor digital infrastructure. Additionally, the number of computers in urban schools is 60% higher than in rural areas, and 1 in 5 schools did not even have access to the internet, creating a significant gap in educational opportunities. The low interest in developing rural schools directly affects students' performances. In 2020, at the national evaluation at the end of 8th grade, 38% of rural students could not obtain a grade higher than 5 - meaning they could not enroll in high school - compared to only 15% in urban areas. Because of the poor conditions, the drop-out rate in rural areas is even higher than the national average, hitting 22.4% [14].

"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." Besides the educational issues, the physical infrastructure of rural schools is concerning. According to researchers Roberta Mihaela Stanef and Alina Magdalena Manole, over 82% of all Romanian schools were built before 1970 which is why thousands of these buildings lack basic facilities and material supplies [15].

The Ministry of Education tried to bridge the gap between urban and rural education by initiating programs like the CRED project for teacher training or the RAPID (Reach/Assess/Prioritize/Increase/Develop) education framework, but comparing the recent numbers underlined above, they still face significant challenges. More comprehensive and updated strategies are needed to address the systematic issues and provide rural students with the same learning opportunities as their urban counterparts.

5. Romanian Education on a global scale

The Program for International Student Assessment (PISA) is a worldwide study conducted by the Organization for Economic Co-operation and Development (OECD) to evaluate a random selection of 15-year-olds on mathematics, literacy, and science. After each testing cycle, this organization releases a report on the performance of each educational system and its ranking. Romania's first participation in this study began with the 2000 cycle in order to learn from other countries' policies [9].

<u>Testing scores throughout the year compared to the last report</u>

As the 2022 report graphs show, Romania has increased its mean performance up until 2012 in every category. However, in the past decade, there has been a 19.5% decline in the mathematics score, 9.7% in the reading category, and 12.5% in the science score. That is why, in the past 10 years, Romania's overall score has only been declining. This decrease is severely highlighted in the OECD average performance, as Romania's score is below average in every category. Moreover, since 2018, the gap between the highest-scoring students and the low-scoring students in Romania has widened in the science category while hinting that the country has yet to come up with a solution to narrow the differences between students [10].

School life in Romania

In 2022, only half of the students felt they belonged at school (the OECD average being 75%), and nearly 11% reported being unsatisfied with their lives (compared to 9% in 2018). Regarding support and discipline during mathematics lessons, Romania scores once again below the OECD average. Most importantly, 61% of students said teachers give them extra help when needed (OECD average: 70%). About 21% believe they cannot work well in most or all lessons, and 28% of students do not listen to their teacher.

Romania scores above average in some areas but does not reflect a positive aspect of the school's quality. About 13% of students do not feel safe on their way to school (OECD average 8%) or in other school places (OECD average 10%), and 8% of them feel unprotected in the classroom (OECD average 7%). In addition, between 24-26% of

Romanian students reported being a victim of bullying at school (OECD average between 20-21%),

Additional information - Quality is associated with spending on education

The PISA 2022 Results Factsheet provided an overlook of how more investments in education can lead to improved results. More expenditure on educational resources for all primary and secondary levels was associated with higher scores in the PISA mathematics tests - the cumulative amount spent per student was under 75 thousand dollars. In Romania, the cumulative expenditure per student was about 38.9 thousand dollars - almost half of that amount.

Key findings about the quality of Romanian Education

When these reports were released, almost every mass media categorized these results as "disastrous" because the country ranks second to last compared to the other EU countries' results. With a below-average score, Romania has difficulty maintaining global standards and fostering equal quality education for students.

6. The National Curriculum

The National Curriculum has been constantly changing since the fall of Communism, and new promises are made every year. The perplexing journey of the Romanian education system and the criticism received in the past years - students expressing dissatisfaction with the system in the annual feedback forms and Romania occupying the first place in EU's countries drop-out rates - reveal a need for more thorough solutions than what the government has been so far willing and able to bring.

Possibility of elected courses

Apart from the National Education System, the Ministry of Education has implemented CDS or "Curriculum la decizia școlii" - roughly translated as curriculum based on school's decision. It is a national curriculum segment allowing each educational unit to develop its own project curriculum. It is a flexible approach that will enable schools to tailor their curriculum to the needs and interests of their students and the needs of the local community. The CDS curriculum is organized and implemented according to a specific methodology, and it includes various disciplines, domains, and modules of study that are optional at the national, regional, and local levels.

The CDS curriculum is - on paper - a unique way to create new educational opportunities for students. However, most school profiles (the specialization a student chooses at the beginning of high school, e.g., mathematics-computer science) already meet the average number of school hours by following the national curriculum. Because of that, a significant number of students cannot access the CDS curriculum. Additionally, students and parents vote on the CDS curriculum for an entire class with

roughly 26-30 students. Whatever the majority chooses, all students in that class must complete the subject for an entire year.

Additionally, in the Graph published by the Ministry of Education for the timeline of the new National Curriculum, a CDEOS or "Curriculum la decizia elevului din oferta scolii" - roughly translated as curriculum based on the student's decision from the school offer - has been mentioned. This reform aims to create more choices for students. Still, the debates organized for this subject should have ended in March 2024, and there is currently no news [17].

Extracurricular activities and non-formal education

A common practice among Western education frameworks is to draw students' attention to extracurricular activities and engage them through non-formal education. Extracurricular activities significantly impact students in various aspects, including creativity, responsibility, and communication.

In a 2021 study, researchers M. Tilea, O.A. Duta, and A. Resceanu tested a group of Romanian high school students to analyze their participation and engagement in extracurricular projects. While the results from the questionnaire show that the Romanian educational context favors students' participation in these types of activities, a few uncommon inferences arose. For example, some of the numbers indicated by the students in the questionnaire confirm "confirm a lack of accurate information among students whose cause can be a faulty dissemination at large scale within the school."

Moreover, most of the students were involved in a small number of projects - indicating a low participation rate - while the rest used vague terms such as "many" to represent the number of activities they had been involved in. Throughout the survey responses, there are a few specific details about the students' involvement and devotion to those projects.

The researchers end their study by stating that the Romanian education system still lacks a "better correlation of the extracurricular and curricular activities in the benefit of developing the students' both transversal and specialised competences." Additionally, the activities should be tailored to the students' needs and expectations through constant communication with all the major actors of the education system [18].

Teenage pregnancies and sexual education

Teenage pregnancies have been a concerning phenomenon in Romania that is directly tied to the education system. Out of all the adolescent births in the European Union, 45% of them come from Romania, and one-third of the birth givers were also born from teenage mothers. This data comes from reports made by the Save the Children organization, underlining the link between the level of education and the age of girls in disadvantaged rural communities who give birth.

It is not enough to give school scholarships and aid to teenage mothers when 85% abandon school. The report also states that 80% of them never even used contraceptive methods because they did not have access to information about this. Additionally, the

monthly amount they would receive if they attended school could not compete with the financial demands of raising a child in this economy.

7. The Teachers

Students are just some people who face difficulties with the education system. Teachers in Romania are disadvantaged, poorly paid, and neglected, which may be the root cause of the problems in the national framework.

According to a study conducted by Euro News through Eurostat (The European Commission's body for statistics), the starting annual salary for a teacher in Romania is 8027 Euro - ranking Romania in the last places in Europe and far below the 25k euro average of the European Union. For comparison, this annual income is only 1.5 times bigger than the minimum wage. According to the Teaching and Learning International Survey (TALIS) in 2018, teachers were not satisfied with their salaries - only 39% were satisfied with their pay. This unfair amount of money is caused by the government not investing enough in education. The Eurostat study underlines that Romania invests only 3.7% of its GDP in Education, while the EU average is 5. This number places the country as the second to last in terms of GPD investments in education in the European Union [21].

In addition to low salaries, teachers in Romania face challenges such as large class sizes, which can hinder their ability to provide quality instruction. The study by Tatiana Tutunaru indicates that teachers with large class sizes face challenges in successfully

teaching children to read. Furthermore, the quality of school facilities and the availability of learning materials can also be insufficient. She also draws attention to the increased funds needed to create a better schooling environment [22].

8. The olympiad culture

Olympic students in Romania have a head start over other students because they can access grants and perks that regular students can not. Romania has hundreds of gifted students who deserve their results and recognition. Still, when the system favors them, it creates and enforces a gap between them and millions of students who lack basic necessities.

As mentioned in the introduction, based on the International Mathematics and Physics Olympiads rankings, Romania occupies first place in Europe and the top 10 in the world. To celebrate the achievements of the gifted winners, the Ministry of Education has allocated in 2023 an additional 3.9 million RON fund (unrelated to the 700-3000 RON monthly excellence scholarships awarded to Olympic students) to award 144 scholars [11]. Meanwhile, the allocated fund for all the 6 scholarship categories is 1.1 billion RON. It might seem like a big difference between the two amounts, but when we take into account that there are 3472 million students in the country, the average amount per student decreases significantly.

Moreover, some of the best-ranked Romanian universities (e.g. Politehnica Bucuresti University, Babes-Bolyai University) make their admission process more accessible for Olympic students. Suppose a student receives an award at one of the regional, national, or international olympiads funded/co-funded by the Ministry of Education. In that case, their file is automatically graded with 10 - the maximum mark. In some cases, they do not even have to take the entrance exam. They are automatically accepted [19].

Following a similar system, the Ministry of Education came up in 2023 with a new decree favoring Olympic students. At the end of 8th grade, every student in the country has to take a National Exam - consisting of 2 parts: Romanian language and mathematics - that is mandatory to enter high school. Recently, students who were awarded first place in national olympiads and first, second, and third place in international competitions recognized by the Ministry of Education do not have to take this mandatory exam, and they can register for a high school based on their award [20].

Conclusion

Romanian students have outstanding results at international competitions, constantly ranking at the top. Yet, the government has a hard time finding solutions to engage with and help students nationwide. The scholarship system is poorly designed, and it doesn't track the students' actual performance. Judging the dropout rates and the PISA scores, these scholarships do not help students' academic development. The national dropout rate is constant, while the EU's average has been decreasing, partially due to the Ministry not prioritizing a beneficial schooling environment for students. There are significant discrepancies between different categories of students. The most important one is that rural students are significantly underprivileged compared to urban. The Romanian curriculum has not been updated to meet students' needs and learning skills. The PISA results show that Romanian students - both urban and rural - are ranked below the world's average. They also underline that the gap between the lowest-scoring and highest-scoring students has only broadened year by year, paralleling the major differences between Olympic and regular students. Only half of the students feel they belong at school, and about a quarter of them are victims of bullying. Students have few choices when choosing the subjects they want to study. Moreover, there is a minor involvement in extracurricular activities, and those are not tailored to the students' needs and expectations, even though it has been proven for them to have a significant impact on students. Analyzing the concerning number of teenage pregnancies, it can be inferred that Romanian students lack sexual education. The system also has masked favoritism for Olympic students as they can access more opportunities. At the end of the day, more students are increasingly choosing opportunities to study abroad. Teachers are poorly paid, prepared, and somewhat neglected, which was brought up during the May 2022 protests. The government only gave them a voucher that can be used annually for school supplies.

The Romanian Education System struggles to reach and maintain global standards.

Discussion

The Government should focus on minimizing the gaps between students and prioritize accessible training and salaries for their teachers. The constant policy changes without consistency or analyzed implementation have severely affected the education system. The reforms have presented only surface-level or short-term changes. To improve this situation, there is a need for comprehensive training programs for teachers and a significant change in salary and opportunities to attract more people to this career. This should be accompanied by programs that incentivize and help them to implement new ideas in the curriculum.

The scholarship system should be restructured to track a student's actual involvement in both academic and extracurricular areas, and the need-based scholarships should include more categories and criteria based on the student's background. The Ministry can implement a national platform where students can apply for each scholarship so that the schools do not have to complete all the bureaucracy. Additionally, such a platform allows students' backgrounds and involvement to be easily tracked, and this idea can open doors for more comprehensive applications for specific scholarships.

The Ministry of Education needs to implement more choices for students in the national curriculum. Allowing them to structure their own school schedule can potentially decrease the dropout rate. Students can become more interested in the subjects they

choose. Additionally, underprivileged students who face financial issues and have to work part-time, complete certain chores, take care of a relative, etc., can truly benefit from the freedom of scheduling and choosing their subjects.

More extracurricular activities that follow students' proposals and needs are needed. This is a great way to actively involve them in their community and offer them a new perspective. These activities could also be implemented as mandatory, following a similar structure to the IB CAS.

Regarding the high numbers of teenage pregnancies, the Government should create a balance between seeking more ways to help the mothers deal with their situations and coming up with comprehensive solutions on how to prevent these situations. Sexual or health education should be integrated into the national curriculum. The need for such a subject can be seen in a Statista survey where 37% of the respondents believe it should be introduced in high school high school and 22% in middle schools [16].

Resources

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