Chapter 1

The Romanian education system

Romania’s education system has made major advances since 1989. Learning outcomes have improved and it has established modern institutions with technical expertise. However, educational attainment and performance continues to be strongly influenced by a student’s background, and learning levels remain low for many. This reflects systemic challenges of low funding, unstable governance and early selection on the basis of high-stakes tests, putting students into different educational tracks of uneven quality. Placing student learning at the centre of Romania’s evaluation and assessment processes can help to focus the system onto raising standards for all.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Introduction

Romania is one of Europe’s fastest growing economies. It has made significant progress in recent decades in consolidating its democratic processes and improving transparency across the public and private sectors. It has also made significant progress in modernising its education system and raising students’ learning levels. But student outcomes indicate that many Romanian children do not achieve their potential. Many young Romanians continue to leave education early and without mastering basic competencies for life and work. The evaluation and assessment system could help to direct the education sector towards improved quality and equity, by focusing attention on those factors that contribute the most to better learning and providing information to develop more effective policies and practices.

Key features of the education system in Romania

Governance

Romania’s education system is centralised, both horizontally and vertically. All key responsibilities for education strategy, policy and delivery are concentrated within the Ministry of National Education and Scientific Research (MNESR). Several specialised bodies provide input to the ministry, but there is no fully independent evaluation body. Locally elected authorities play very little role in the design and delivery of education policies. The MNESR directly steers and monitors the implementation of national policies at the local level through the County School Inspectorates (CSIs).

Responsibility for education is concentrated in central government

The MNESR is responsible for setting the education system’s overall strategy and national policies, from pre-school and compulsory education to vocational education and training and higher education. In the pre-university system, it is responsible for approving and monitoring the implementation of the curriculum, managing the school network, and allocating financial and human resources to schools. The MNESR is also responsible for the national system of evaluation, with implementation and some policy evaluation performed by public bodies linked to the ministry.

Specialised bodies affiliated to the ministry provide technical expertise. The long-standing Institute of Educational Sciences (IES) produces educational research and analyses the performance of Romania’s education system for the MNESR and the public. The IES also co-ordinates the development of Romania’s new curriculum, which is currently underway. The National Centre for Assessment and Examinations (NCAE) was established in 1998 as part of a World Bank project to professionalise assessment in Romania. The NCAE designs and manages national student examinations and assessments, sets the exams for permanent teacher certification (definitivat) and teacher tenure (titularizare), and organises the school textbook evaluation process. The National Centre for Technical Vocational Education and Training Development (NCVETD) was created in 1999 and is accountable to the MNESR. It develops the qualifications and the curriculum for vocational education and training (VET) in upper and post-secondary education. Most recently, the Romanian Agency for Quality Assurance in Pre-University Education (ARACIP) was created in 2005 to ensure that all schools meet minimum quality standards and to support the development of quality assurance processes at the school level (Figure 1.1).
The creation of these bodies reflects important efforts towards modernisation. The presence of a separate examination and assessment agency, an educational research institute and an external school inspectorate supports independent analysis and the professionalisation of their respective areas. However, in Romania these bodies remain subordinate to the MNESR. All of them except ARACIP are accountable to the ministry, which sets their strategies, programmes of work and operating budgets. Even in the case of ARACIP, the government and ministry takes decisions on the organisation’s structure and operating model. This limits these bodies’ ability to develop professional independence.

Frequent staff turnover and unstable funding limit capacity in central government

The MNESR has had over 20 education ministers since 1989. In the absence of a strong cadre of professional civil servants, it has been difficult for the ministry to achieve coherence and consistency in policy making. Political change at the ministerial level is mirrored by frequent institutional re-organisations and personnel changes at the management level, undermining the continuity of policy making and opportunities to develop professional skills and staff expertise (European Commission, 2016). The MNESR also lacks staff with appropriate skills in general and project management (World Bank, 2010). It was also reported to the OECD Review Team in interviews that staff have limited technical ability to use and analyse data.

The bodies around the MNESR have tended to be subject to less organisational and personnel changes, and their staff do have relevant technical expertise. However, they are weakened by unstable funding and falling staffing levels. Staff numbers in the IES have fallen by more than two-thirds since 1990 and in ARACIP by approximately three-quarters since its creation, while the NCAE has just 23 professional testing staff and lacks
technical capacity for modern test development and analysis. These organisations have limited financial means to invest in institutional development, which would provide important expertise and help to support a more evidence-based discussion about education in Romania.

**County School Inspectorates are central to local school governance**

The CSIs represent the MNESR at county level. Currently, there are 42 school inspectorates: 1 in each of the 41 counties of Romania and a General Inspectorate for the Municipality of Bucharest. In each county, the general school inspector and the deputy general school inspector are appointed by the MNESR. Other inspectors are hired locally among qualified teachers, in principle based on seniority and appraisal results. CSIs are responsible for ensuring that schools implement national policies, appointing school principals, providing teacher professional development in their affiliated Teacher Training Houses, and proposing enrolment quotas for their county to the ministry by education level and programme based on projections of demand (Eurydice, 2016). CSIs also play a key role in teacher appraisal and school evaluation (see Chapters 3 and 4).

While local authorities have begun to play an increasing role in the delivery of some education services, such as targeted programmes for vulnerable children, overall local authorities (villages, towns and cities) have a very small role in local education governance and policy setting. Although local authorities do make up one-third of the membership of school boards, these boards have limited capacity to effectively use their responsibilities, in part due to their lack of educational experience (see below). Local authorities distribute the financial resources received from the MNESR to schools. They may also provide complementary funding to cover investment in infrastructure and transportation and subsidies for canteens, scholarships and extracurricular activities (Eurydice, 2016).

**Despite recent reforms to increase their autonomy, schools’ decision-making authority continues to be limited**

Over the past decade, various reforms have sought to increase the autonomy of schools and the engagement of local authorities. The 2011 Education Law reinforced school boards, which previously had a limited decision-making role (OECD, 2000; MNESR, 2011). School boards are composed of school principals and their deputies; teaching and administrative staff; and representatives of the mayor, local council and parents. Under the 2011 law they acquired responsibilities previously held by CSIs, such as the recruitment of the school principal and deputy principal, and disciplinary sanctions of teaching staff. However this has not happened in practice. In part, this reflects school boards’ limited capacity to take on these responsibilities – half of their members have no expertise or experience in education and they receive limited training on their role. It also reflects resistance from teachers and their unions since it would mean that some human resources decisions could no longer be negotiated nationally, reducing unions’ influence (World Bank, 2011). Amendments to the 2011 Education Law subsequently transferred responsibility for human resource decisions back to the CSIs.

Schools also lack influence over other important dimensions of teaching and learning. Legally, schools in Romania have some autonomy over the curriculum and can choose up to one-third of the curriculum taught, called “optional subjects” (MNESR, 2011), but in practice, this flexibility is apparently rarely used. Data from the OECD Programme for International Student Assessment (PISA) survey in 2015, which assessed the skills and
knowledge of 15-year-old students and collected information on key factors influencing student outcomes, showed that principals and teachers in Romania have among the lowest levels of responsibility for the distribution of school resources and determining school-assessment policies of all countries and economies participating in PISA (OECD, 2016b).

**Efforts to increase school autonomy have been matched by stronger school accountability**

Recent reforms aimed at increasing school autonomy have been matched by strengthening schools’ accountability to central government and their local communities. Following the 2011 Education Law, school boards and principals are now publicly responsible for school quality. Accountability to local constituencies has been reinforced by creating a Commission for Quality Assurance and Evaluation in each school, and to the ministry and broader public by establishing an independent evaluator, ARACIP (see Chapter 4). The 2011 Education Law’s introduction of national student assessments in Grades 2, 4, and 6, and the roll-out of the online Integrated Information System for Education System in Romania (SIIIR) from 2013 aimed to support accountability by improving the quality of data collected by schools (World Bank, 2011). However, schools currently make limited use of the data from the national assessments for diagnostic purposes, reflecting limitations in national support and local capacity. Despite improved data collection at the school level, gaps in contextual data on student background and school context limit analysis of what is influencing student learning across different groups.

**The politicisation of local and school leadership roles has limited their professional development**

At local and school levels, many roles have been historically politicised. It was reported to the OECD Review Team during interviews that inspectors and school principals are often appointed mainly based on their political affiliation or connections to local officials. This raises concerns about schools’ independence and integrity and the quality of leadership while increasing instability, as key school actors may change with the government.

Romania has recognised the importance of improving transparency and professionalism at the local level and in 2011 the MNESR introduced merit-based open contests to appoint school leaders and school inspectors. Implementation was initially mixed, but in autumn 2016 candidates for the principal, general inspector and deputy positions did compete in open competitions in all counties (see Chapter 4). Candidates for the principal position need to fulfil certain perquisites including being a permanent teacher with five years of seniority, having positive annual appraisal results and didactic grade qualifications signifying teaching excellence (see Chapter 3). The new competition to become a principal includes three stages: a written exam based on multiple choice questions which aims to assess both cognitive and school management skills; analysis of the candidate’s curriculum vitae; and an interview. Romania also adopted the Anti-corruption Strategy in Education 2013-2015 to consolidate anti-corruption monitoring processes and raise awareness of the importance of tackling corruption in the education system.
The 2005 and 2011 laws provide an overarching national framework for education

The 2011 Education Law defined the current organisation and operation of the education system. The law brought significant changes to the education system including extending the length of primary education by lowering the age of entry to compulsory education to 6 years of age instead of 7; strengthening school boards; and introducing a teacher evaluation at the end of the Preparatory Grade, and national assessments at the end of Grades 2, 4 and 6. The 2005 Quality Assurance Law created the current system for school evaluation (MNESR, 2006). It created ARACIP and a Commission for Quality Assurance and Evaluation in each school responsible for internal school self-evaluation and improvement (see Chapter 4).

The 2005 Quality Law and the 2011 Education Law set out the key principles governing Romanian’s education system which include quality, fairness, decentralisation and the involvement of all stakeholders. However, the realisation of these principles has been mixed. It was reported to the OECD Review Team during interviews that the time and resources for discussion and communication of both laws was arguably insufficient, limiting the opportunity to develop consensus politically and across education actors. The 2011 law has been heavily amended and some of its original measures, such as increased decentralisation, were reversed.

Reflecting the incomplete achievements and implementation of the current law, in 2016 the President launched a new consultation effort, “Educated Romania”, aimed at broadening discussion to include local stakeholders to reach social and political consensus on the future direction of the education system. At the same time, the government is currently discussing the development of a new law on education. These initiatives create an important opportunity to develop a long-term vision and strategy for education (see Chapter 5).

The European Union has an important influence on national policy

The European Union’s (EU) jobs and growth strategy for 2010-20, the EU 2020 Strategy, plays a major framing role for reforms in Romania. Romania has developed five national education strategies to help meet its EU 2020 targets. These strategies focus on subjects that are also highlighted by the 2011 Education Law and cover major challenges for Romania’s education system: reducing early school leaving, improving the quality of tertiary education and VET, developing lifelong learning and investing in educational institutions’ infrastructure (see Chapter 5). The strategies are linked to specific targets, include detailed plans, and are supported by extensive monitoring and co-ordination within the MNESR. However, international consultants were heavily involved in developing the strategies, their development was a requirement for the receipt of EU structural funds, and they depend on EU funds for implementation, which overall may lead to fragmented implementation, and inhibit national ownership and accountability.

Financing

Public spending on education is very low

Romania’s public expenditure on primary and secondary education is the lowest of all the EU countries, both in relative and absolute terms. In 2013, Romania had the lowest level of expenditure on education as a share of total government expenditure (7%),
compared with an EU average of 11%. The average expenditure per student in Romania calculated using the Purchasing Power Standard (PPPs)\(^1\) is EUR 1535 in primary and EUR 1897 in lower secondary, this is less than one-third of the average public spending per primary or lower secondary student in the EU\(^2\). Bulgaria spends 60% more per pupil in lower secondary education than Romania (Eurostat, 2016).

Public expenditure on education as a share of gross domestic product (GDP) is also the lowest among EU member countries and has fallen sharply since the 2008 financial crisis (Figure 1.2).

Figure 1.2. Total public expenditure on education as a percentage of GDP (2002-13)

![Graph showing total public expenditure on education as a percentage of GDP (2002-13)](image)


Most public funding comes from central government, although local governments may provide complementary resources (Eurydice, 2016). However, there are no reliable national data on the extent of local funding. In general, state funding covers the operational functioning of the education system, while any additional investments in quality must draw on external sources. External funding from international donors such as the EU and World Bank made up 5% of total expenditure on education in 2013 (Figure 1.3).

Private spending on education remains low in Romania, and is set to fall following the decision in 2015 to provide the same level of per capita funding to accredited private schools as public institutions receive. In 2013, less than 1% of total expenditure on primary and secondary education was private. However, while relatively small, household contributions can make a difference to the resources available to schools.
**Figure 1.3. Distribution of total expenditure on education by source of funding (2013)**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Primary education</th>
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**Note:** Data for early childhood education are missing.


**Funding for basic education has fallen sharply in absolute and relative terms**

Romania invests relatively less at all levels of education than other European countries, and allocates more resources to upper secondary and tertiary education than compulsory education (Figure 1.4). Investment in primary and lower secondary education is essential to reduce early school leaving and raise the level of student learning in Romania to enable more students to access and complete higher education. Yet over the past decade the share of resources allocated to primary and lower secondary have decreased significantly while funding for upper secondary and tertiary education have increased. While Romania’s investment in primary education as a share of GDP was on par with EU levels until 2005, it fell by more than half between 2005 and 2013 (Eurostat, 2016).
Compulsory education has also suffered a sharp decline in capital investment. In primary education, capital expenditure as a share of total public expenditure on education dropped from 21% in 2007 to 3% in 2013, below the EU average of 6% (UNESCO-UIS, 2016). The same patterns are observed in secondary education (UNESCO-UIS, 2016). The decline in capital investment coincided with the transfer of responsibility for school infrastructure to local authorities and is symptomatic of limited resources at local level (World Bank, 2011).

Attempts have been made to improve the allocation of school funding to reflect school needs

Schools in Romania receive most of their funding from central government as “basic funding” which covers their current expenditure (Eurydice, 2016). Since 2010, basic funding has been based on a standard costing per student with adjustments for the geographical location of the school, the type of school, the number of students per class and the level of education (Fartuşnic et al., 2014a). This formula replaced a historical cost-based funding and was intended to improve transparency and ensure greater predictability and equity in the allocation of resources. While schools’ budgets were previously determined mainly by the number of staff on the payroll, the new financing model provides schools with a lump sum and in principle should give the school principal the ability to allocate funds depending on school need (World Bank, 2011). While the per capita funding formula is an improvement on the previous scheme, many schools report that funding remains insufficient, with significant variations in the level of school resources and how far they meet local needs.

The structure of Romania’s school system

Education in Romania is compulsory for 11 years, from the Preparatory Grade in primary school to Grade 10 of upper secondary education. Most students in these grades attend public schools, with only approximately 1% enrolled in private institutions. Participation in compulsory education remains far from universal, however, and has been decreasing in recent years (see below).

Compulsory education lasts 11 years

Education in Romania is compulsory for 11 years, from the Preparatory Grade in primary school to Grade 10 of upper secondary education. Most students in these grades attend public schools, with only approximately 1% enrolled in private institutions. Participation in compulsory education remains far from universal, however, and has been decreasing in recent years (see below).

Romania has made important progress in giving children a more equal start in education. According to school principals, the integration of the Preparatory Grade into compulsory education in 2012 has helped to reduce disparities among students in terms of their preparation for school and learning before entering Grade 1 (IES, 2013). Participation in pre-primary education has also increased. The majority of children are now in early childhood education and care from the age of 3, and 80% of 3-year-olds were enrolled in pre-primary education in 2014, on par with both EU (85.3% in 2013) and OECD averages (71% in 2014) (Eurostat, 2016; OECD, 2016c)
CHAPTER 1. THE ROMANIAN EDUCATION SYSTEM

Selection and tracking start early

Student selection into different education programmes starts early in Romania, at the age of 14. At the end of lower secondary education (Grade 8), Romanian students take a national examination, which assesses their performance in mathematics and Romanian language and literature. Results in this exam, their average grade at the end of each year of lower secondary and students’ individual school choices determine the upper secondary school and the type of programme students will attend.

Students may be assigned to one of three types of high school: technological, theoretical and “vocational” (Figure 1.5). Technological high schools combine academic and vocational programmes, and in 2014 44.1% of 15-18 year-olds were enrolled in this option. The theoretical and vocational high schools both follow an academic programme, but the latter have a special focus on arts, sports, theology or the military. In 2014, 45.1% of 15-18 year-olds were enrolled in theoretical and vocational high schools (MNESR, 2014).

At the end of upper secondary education, students from all three types of high school must pass the baccalaureate examination if they wish to access tertiary education. The baccalaureate pass rate varies widely across the different types of high schools. In 2013, 80% of graduates from theoretical high schools and 73% of graduates from vocational high schools passed the baccalaureate, while only 38% of technological high school graduates passed the examination (MNESR, 2013).

Academic competition and tutoring weigh heavily on the system

Selection in secondary education through high-stake examinations reflects an ingrained culture of academic competition in Romania. High-stakes examinations put pressure on teachers to “teach to the test”, which limits students’ learning opportunities and narrows the curriculum (OECD, 2013b). It also encourages teachers to focus on the top-performing students, with little incentive to address the needs of those who might be struggling to progress. The success of teachers and schools in Romania is also determined, to a large extent, by the achievements of high performers. The preparation of students for academic competitions “Olympiads” and examination results are part of the criteria used in the teacher appraisal process. Schools are ranked publicly according to raw examination results and school management may be removed for poor results in national examinations (see Chapters 3 and 4).

Another consequence of the pressure for academic success is the prevalence of private tutoring in Romania. It is difficult to obtain accurate data on the extent of private tutoring but recent surveys have found that between 17% to 50% of Romanian school students receive some form of tutoring, with annual costs representing around EUR 300 million nationally (European Commission, 2011). This accentuates inequalities by benefitting those students whose families have the means to access it.

Repeated policy changes have weakened vocational education and training at secondary level

Vocational education and training in Romania has been subject to changes and reversals over the past decade, which has limited the provision of relevant, high-quality VET. Prior to 2009, Arts and Crafts Schools were the main providers of vocational secondary education. Graduates received a vocational qualification after one or two years of study, with the option of entering high school after an additional completion year. In
2006 the gross enrolment rate of upper secondary students following this VET path was 27.6% (Fartuşnic et al., 2014b).

However in 2009 the Arts and Crafts Schools were dissolved amid concerns about their quality, creating a major gap in VET provision, and limiting secondary options for students with less interest in academic study. At least some of the students who would have previously attended the Arts and Crafts Schools were absorbed by technological high schools, whose enrolment increased by almost 10 percentage points between 2010 and 2012 (MNESR, 2014). However, the significant rise in students dropping out suggests that the programmes provided by many technological high schools are not meeting the needs of students with more vocational interests.

In theory, the technological high schools provide flexible pathways. Graduates can receive a Level 3 vocational qualification to enter the labour market, and take the baccalaureate examination to access higher education. However, the need to cover both vocational and academic content means that there is little space to provide either sufficient practical training to develop vocational competencies, or thorough preparation in the academic content. In practice, during the OECD Review Team’s interviews it was indicated that they are often a second choice for students who do not obtain high enough grades to attend the other types of high schools.

Romania is now trying to revive its vocational education, to provide a genuine alternative to academic programmes and fill the gap created by the dissolution of the Arts and Crafts Schools. Since 2011, students have been able to follow a VET programme in the technological high schools, beginning in Grade 9, initially for two years and since 2013 for three years. These programmes provide specialised vocational education developed in close collaboration with the business sector to offer an alternative to high school (Fartuşnic et al., 2014b). Graduates can directly enter the labour market or post-secondary non-tertiary training. While still in its early stages, this programme is proving popular with upper secondary students, with 4% enrolled in 2014 (MNESR, 2014). The curriculum and certification for these programmes are developed by the NCVETD.

**Selection via high-stakes examinations hampers student progression**

Romania’s use of national examinations to select students passing from lower to upper secondary and upper secondary to tertiary creates successive barriers to student progression, fuelling early leaving and limiting access to tertiary education for most Romanian students. Only one-fourth of adults aged 25-34 have completed tertiary education, the second lowest rate among European countries. Tertiary attainment is unlikely to increase substantially in the coming years since the gross enrolment rate in tertiary education has plunged, from 71% in 2009 to 50% in 2014 (Eurostat, 2016; UNESCO-UIS, 2016). Access to tertiary education is particularly limited for students from socio-economically disadvantaged areas, since they tend to perform less well on the baccalaureate which is required to enter university.

Romania’s recently published National Strategy for Tertiary Education in Romania 2015-2020 seeks to increase tertiary attainment. It aims to do this by establishing clearer routes from vocational and other types of upper secondary education to higher education, and developing outreach programmes to student groups currently underrepresented in tertiary education, such as students from lower socio-economic groups (Government of Romania, 2015).
Curriculum, teaching and assessment

Romania is in the early stages of a major curriculum reform

Romania is reforming its primary and secondary curriculum for the first time in almost two decades. Apart from some minor changes, the curriculum currently in effect in Romania has remained unchanged since 1998. This work is led by the IES, who have developed the overall framework for the new curriculum and are coordinating the development of the new curriculum for each grade and domain. The roll-out of the new curriculum started in 2012 with the Preparatory Grade. By the end of 2015 the new curriculum had been implemented up to and including Grade 4, and the lower secondary curriculum will be progressively implemented, starting with Grade 5 in the academic year 2017/18.

A major feature of the curriculum reform is a move towards a competency-based approach to learning. In 2008, this approach was introduced into the curriculum for early childhood education which Romanian policy makers and curriculum experts perceive to have been a success story in curriculum design and implementation. The curriculum framework for primary and secondary education published in December 2015 sets competency-based learning as a key principle and defines eight main categories of competencies, in line with the key competencies for lifelong learning set out in the EU Reference Framework: 1) communication in the mother tongue; 2) communication in foreign languages; 3) mathematical competence and basic competencies in science and technology; 4) digital competence; 5) learning to learn; 6) social and civic competencies; 7) sense of initiative and entrepreneurship; and 8) cultural awareness and expression (OJEU, 2006). The framework sets out what students should know and be able to do at the end of each cycle in Grades 4, 10 and 12 by each competency (see Chapter 2).

However, teachers are facing difficulties in teaching the new curriculum. Its rapid roll-out, with only one year between development and implementation in classrooms, has left little space for teacher training and appropriation of the new concepts. Some school inspectors reported to the OECD Review Team during interviews that some Preparatory Grade to Grade 2 teachers still use the old curriculum while others have reported a limited understanding of its competency-based approach.

Preparation and standards for entry into the teaching profession are low

The Teaching Staff Statute that forms part of the 2011 Education Law sets the rules for recruitment, salary levels, career progression and training as well as teachers’ rights and obligations. Teachers in Romania are required to complete at least a bachelor’s degree for all teaching levels, and between one to two semester modules in initial teacher education depending on the level of education that they will teach. Overall, however, the initial preparation that Romanian teachers receive offers less preparation, especially in teaching practice, than in other EU countries (see Chapter 3).

New teachers must pass a probation appraisal, which includes two CSI inspections and a written exam, the definitivat, to become permanent teachers. However, CSI inspectors do not receive training to reliably perform classroom inspections and provide feedback to new teachers, nor does the definitivat in its current form adequately assess the teaching competencies required by Romania’s new curriculum (see Chapter 3). Furthermore, professional development is not as effective as it might be in supporting teachers to develop their teaching competencies. While all teachers are required to complete some continuous professional development, the offer is not always well
matched to teacher needs. For example, teachers have so far received little preparation in the shift in teaching and learning that will be required by the new curriculum.

**Salaries are also very low**

The average salary of a mid-career teacher represents less than half of Romania’s per capita GDP, the lowest level among countries who participated in PISA 2012 (Figure 1.6). The basic salary level is defined in the teaching statute but an additional salary bonus is granted to 16% of teachers for a five-year period following an additional inspection process, the Merit Grade Inspection.

Although a teacher’s salary increases by 150% between the start and top of the scale, their earning progression was the slowest among countries participating in PISA 2012. It takes the average Romanian teacher 40 years to reach the top of the salary scale compared to an OECD average of 24 years (OECD, 2013a). While there have been efforts to increase salaries, with a 15% increase for the education sector in January 2017 (See News, 2016), teachers’ salaries in Romania remain low. The salary progression structure and low salaries create a system that is ill-designed to encourage good performance, and to attract and retain talented professionals (see Chapter 3).

![Figure 1.6. Teachers’ salaries, 2012](http://dx.doi.org/10.1787/9789264201156-en)

**Most of Romania’s teachers entered the profession before major modernisation reforms**

In common with trends across Europe, Romania has a female-dominated and ageing teaching profession. In 2014, about 89% of primary teachers were women. In the same year, about one-third of primary and secondary teachers were aged over 50 while only 6% of teachers in primary education were below the age of 30, and 10% and 7% in lower and
upper secondary education respectively (Eurostat, 2016). The overwhelming majority of Romanian’s teachers were therefore educated and trained before the major education reforms of the 1990s, when teaching and learning focused heavily on memorisation and content knowledge (OECD, 2000). Transforming teaching approaches to foster inclusion, student engagement and more complex competencies will require much greater investment in in-service education and professional development of the established workforce.

Romania has gradually reduced its teaching workforce over the past decade (Figure 1.7) in response to a declining student population due to falling birth rates and migration. This decline has allowed the country to maintain a relatively stable student-teacher ratio, slightly above the EU 28 and OECD averages. The student-teacher ratio in primary education was 18 students per teacher in 2012, a higher rate than the EU 28 average (13) and the OECD average (14) (UNESCO-UIS, 2016). While the impact of class sizes on student learning is not unequivocal, there is evidence that smaller class sizes can benefit younger students, and especially more disadvantaged students from lower socio-economic backgrounds (OECD, 2016c).

Figure 1.7. Change in number of teachers by educational level (2000-14, 2005=100)


School principals play a limited role in leading school improvement

School principals in Romania focus primarily on administration rather than pedagogical leadership and school improvement. The lack of objective criteria to guide selection, principal appraisal and conditions for dismissal to date have created instability in the role and have not ensured that principals have the skills and capacity that school leadership requires. A positive recent development however is the open contest for principal candidates conducted in all counties in autumn 2016 with four-year contracts awarded to successful candidates, following the introduction of merit-based competitions in the 2011 Law. This should bring greater stability and transparency to the principal role.

However, the absence of principal standards to guide the recruitment, appraisal and dismissal of principals will still make it difficult to ensure that principals are selected according to, and supported to develop, the competencies that are most important for school
leadership. Moreover, principals receive no professional support in either their pre-service training or continuous professional development which targets the specific learning needs and demands of the principal position to help them to lead school improvement (see Chapter 4).

The use of assessment to support student learning is constrained by inconsistencies between its purpose and design

Two high-stakes examinations in Grades 8 and 12 strongly influence teaching and learning, encouraging teaching to the test across a limited range of domains and competencies. The influential role of external examinations also limits the space available for teachers to exercise and develop confidence in their own professional judgement, which is central to developing their ability to reliably assess student learning and to practise formative assessment to help students to progress.

The 2011 Education Law introduced diagnostic national assessments in Grades 2 and 6 to monitor student learning of the new curriculum, and encourage more student-led learning. However limited guidance and supports for teachers on how to use the assessments has so far limited their diagnostic use and their ability to influence more differentiated teaching. The 2011 law also introduced a new system-monitoring assessment in Grade 4 which could fill a monitoring gap in Romania. However the current design and administration of the assessment is not consistent with this purpose, and its ability to provide reliable data for system-monitoring is hindered by the lack of standardised marking (see Chapters 2 and 5).

Main trends in participation, outcomes and equity

Romania has succeeded in improving student learning outcomes over the past decade, in particular reducing low performance. However, a sizeable share of its student population still do not reach basic levels of competence and leave school before graduating from upper secondary education. Low skills and early school leaving are concentrated among students from socio-economically disadvantaged backgrounds, particularly in rural areas, demonstrating the inequities in the Romanian education system which have consequences for the country’s wider socio-economic development. Chronic underfunding of education, and the lack of effective mechanisms for the redistribution of financial resources based on need, contribute to the country’s relatively poor performance in terms of access and student outcomes.

Participation

While most European countries are moving towards full participation in upper secondary education, Romania has been struggling with low and decreasing enrolment rates in primary and lower secondary education since 2005 (OECD, 2016c). The large gaps between gross and net enrolment rates indicate the significant number of students who drop in and out of education, even in the primary years (Figure 1.8).
Dropout rates are high and increasing

Romania has among the highest dropout rates in the EU in both primary and lower secondary education. The dropout rate at both levels has increased in the past decade (Figure 1.9). In 2015, the share of early school leavers in Romania, defined as the percentage of the population aged 18-24 with at most lower secondary education and who were not in education or training, was 19%, defined as the percentage of the population aged 18-24 with at most lower secondary education and who were not in further education or training during the last four weeks preceding the survey (Eurostat, 2016). This makes it unlikely that Romania will reach its EU 2020 goal of reducing the share of early school leavers to 11.3% by 2020.
Transition from lower to upper secondary education represents the main weak point in the education system. While education is compulsory until the age of 16, the enrolment rate drops by 5 percentage points between the ages of 14 and 15. About one-fifth of the student population has dropped out by the age of 16 (Figure 1.10). Selection based on ability at the end of lower secondary and the perceived poor quality and relevance of upper secondary VET education, together with limited access to tertiary education, are among the main factors behind the sudden fall in the student population at the age of 15 (Fartușnic et al., 2014b).

![Figure 1.10. Enrolment rates by age (2014)](image)


High and increasing levels of early school leaving create difficulties for young people entering the workforce

In 2015, nearly one-fifth of Romanian young adults (15-24 year-olds) were not in education, employment or training, one of the highest rates among EU countries. Among 15-34 year-olds, those who did not attain upper secondary education were more likely to be unemployed, with a 13.5% unemployment rate compared to 7% for those who attained tertiary education (Eurostat, 2016). As educational attainment and earnings are highly correlated, such disparities translate into income inequality, which in Romania is the highest in Europe (Eurostat, 2016).

Learning outcomes

Although improving, learning levels remain low

Learning outcomes are improving in Romania. Romania was one of the few countries participating in PISA to improve its average performance in science between 2006 and 2015. In all domains, Romania’s average three-year trend has improved significantly across PISA cycles, with science performance improving by 6 points, mathematics by 10 points and reading by 4 points on average (OECD, 2016a). Recent
Grade 12 baccalaureate results also demonstrate a similar upward trend: pass rates have improved from a low of 55.6% in 2011 to 71% in 2014 (MNESR, 2014, 2013).

Despite these important improvements, learning outcomes in Romania remain low compared to neighbouring European countries. Romanian students participating in PISA 2015 scored on average below the OECD average in all subjects and, alongside Bulgaria, had the lowest performance across all EU countries (OECD, 2016a). Romania has one of the highest shares of students (38.5%) performing below PISA Level 2 among European countries (Figure 1.11). It is worth noting that performance of 15-year-olds in PISA would be even lower if the almost 20% of students not enrolled in formal education were included (Eurostat, 2016).

Figure 1.11. Students’ proficiency in science (2015)

Note by Turkey: The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the “Cyprus issue”.

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: OECD (2016a), PISA 2015 Results (Volume I): Excellence and Equity in Education, http://dx.doi.org/10.1787/9789264266490-en, Figure I.2.15, showing only EU countries with EU and OECD average.
The share of low performers is falling, but remains high

The fall in the share of Romania’s low performers in mathematics i.e. those without the basic skills considered necessary to participate fully in modern society (below Level 2 in the PISA scale), was the second highest among all PISA participating countries between 2006 and 2012. The fall in the share of low performers in science and reading was also higher than the OECD average (OECD, 2014). However, between 2012 and 2015 the share of low performers increased slightly in science and reading, and fell only slightly in mathematics (OECD 2016a).

Students struggle with more complex higher-order skills

Romania’s low proportion of high-achieving students compared to other EU countries suggests that current teaching and learning approaches may be ill-equipped to foster more complex, higher-order skills. In mathematics, the main domain assessed in PISA 2012, Romanian students were found to struggle more in questions where they were required to interpret, apply and evaluate mathematical outcomes, and solve problems using probabilistic reasoning (OECD, 2014). Less than one-third of Romanian students participating in PISA 2012 performed above Level 2 on such questions, compared, for example, with more than half in the Slovak Republic and 70% of students in Poland (OECD, 2014).

Equity

Participation and learning outcomes are strongly linked to student background

In Romania, students from socio-economically disadvantaged backgrounds are more likely to leave school before finishing upper secondary education. Boys in rural areas and from poorer quintiles are most at risk of dropping out before completion. Other vulnerable populations include Roma students and students with disabilities. In 2011, only one-third of Roma 15-18 year-olds were still in school (UNICEF/UNESCO-UIS, 2012).

Only 11.3% of all Romanian students were resilient in PISA 2015, meaning that they overcame their low socio-economic background to perform in the top quarter of students. In contrast, neighbouring countries such as Slovenia and Croatia are more effective at helping students to realise their potential, with a share of “resilient” students closer to the OECD average of 29.2% (OECD, 2016a). PISA shows that education systems which select students at a young age into different types of schools and tracks tend to show lower levels of equity, as well as lower student motivation (OECD, 2012).

Inequity in education overlaps closely with urban/rural disparities

With 70% of the poorest population living in rural areas, educational inequities in Romania are closely associated with disparities between rural and urban areas. The predominantly rural counties of the north east have the highest share of population at risk of poverty (Figure 1.12). Students from urban areas outperform their rural peers in both attainment levels and skills. In 2014, just 59% of rural students who sat the baccalaureate were successful compared with 76% of students living in urban areas (MNESR, 2014). In PISA 2012, students from urban areas scored 59 points higher in mathematics than students in rural schools, corresponding to an additional year and a half of learning, which is roughly half a year more than the average disparity in OECD countries (OECD, 2014).
Lower levels of learning outcomes in rural areas are associated with higher levels of student disengagement from education and dropout rates. The enrolment rate in urban schools is higher than in rural areas at all levels of education and the gap widens in upper secondary education (Figure 1.13).

Figure 1.13. Gross enrolment rate by education level and school location (2010-14)

Low central spending is an obstacle to education reform and, despite a new funding formula, inequities in school resources persist

The 2011 Education Law set a public expenditure target for education of 6% of GDP, however this has never been reached. At its highest, public spending was just over 4% of GDP before the 2008 financial crisis, and in 2013 spending was just 2.7% of GDP (see Figure 1.2) (MNESR, 2011; Eurostat, 2016). Low central spending affects the system as a whole, but its impact on schools in disadvantaged areas is particularly pronounced. While schools in wealthier communities can receive additional resources from local government, parents and other sources, those in poor areas have less access to supplementary funds and the central government lacks the means to redress the inequities this creates.

Romania does not have any targeted programmes to channel additional resources to disadvantaged schools. Instead, the main redistributive mechanism is the per student funding formula, introduced in 2011. Though the per capita formula includes weights for a school’s location, the type of school, the number of students per class and the level of education, these appear insufficient to address the needs of schools in regions with high levels of poverty, in part because the overall level of funding is so low (Fartușnic et al, 2014a). In 2013, about half of the schools participating in a UNICEF survey of schools in socio-economically disadvantaged areas reported not receiving enough funds to cover their basic needs. These were mainly rural schools (Fartușnic et al, 2014a).

Differences in schools’ financial capacity and access to local resources exacerbates disparities in school resources

While the new formula provides schools with more flexibility to allocate financial resources, the UNICEF survey shows that school principals have insufficient training in financial management to help them make efficient use of their limited resources. One in four school principals participating in the survey had received at most one week of training in financial management. Schools can also apply for grants from international donors and the EU but very few do, due to limited experience in making grant applications (Fartușnic et al., 2014a). Schools in urban areas are more likely to apply successfully for grants than schools in disadvantaged areas (World Bank, 2010).

Schools in urban centres are also more likely to receive additional funds from local authorities. Such “complementary funding” supplements central funding and is provided for investment in infrastructure, extracurricular activities, and subsidies for transport and school canteens (Eurydice, 2016). Complementary funding is discretionary, and it is not always distributed by local authorities according to school need. The OECD Review Team was informed than some local governments may prioritise funding for schools with good examination results or where there is a close relationship with the school principal, rather than according to transparent criteria and evidence of need.

Together, these disparities create a situation where students from the wealthiest quintiles and from urban centres receive more funding than students in the poorest quintiles and in rural areas (Figure 1.14).
Households bear additional “hidden costs” of education

While education in public primary and secondary schools in Romania is free and schools are not allowed to solicit funds for basic costs, limited central and local funding and lack of oversight mean that parents are often solicited to contribute to such things as school infrastructure repair, school supplies and sports equipment. Many parents also pay varying levels of tutoring fees for their children (Save the Children, 2010). These “hidden costs”, which are difficult to track as they are not reported in the school budget, can represent a heavy burden on the poorest households and exacerbate inequity in learning.

Recent policy developments

Recent policies in Romania aim to address some of the challenges around persistent inequality and low levels of acquisition of basic competencies. These include Romania’s national strategies developed under the Europe 2020 agenda, which target some important systemic issues facing the education sector. The National Strategy to Reduce Early School Leaving plans to improve the government’s institutional capacity, for example, by providing training to MNESR staff to plan, implement and monitor early school leaving programmes. It also aims to better identify and support students at risk of dropping out of education through improved central data to identify and track at risk students. The Strategy for Vocational Education and Training also represents a promising response to the low quality and relevance of upper secondary vocational programmes in Romania which limits opportunities for students who do not aspire to tertiary education to acquire meaningful qualifications.

At the same time, Romania’s Anti-Poverty Package, launched in 2016, includes policies to narrow learning and attainment disparities between rural and urban areas. The initiatives focus on after-school remediation programmes, integrated services in schools and second chance programmes. It also includes additional grants to schools in disadvantaged areas and investments in improving school infrastructure. However, the OECD Review Team observed that the reach of these initiatives has so far been limited and some of the initiatives are yet to be implemented.
Conclusion

While Romania is implementing several initiatives to improve participation in education, especially for at-risk populations, there is no coherent and consistent approach to raising the educational outcomes of all students. This report looks at how the creation of a coherent framework for evaluation and assessment, guided by the learning objectives of the new curriculum and embedded within a long-term vision for reform, could help to improve equity and quality across the system. The following chapters of this review look at how the different parts of the evaluation and assessment system – student assessment, teacher appraisal, school evaluation and system evaluation – currently support teaching and learning, and how they can be strengthened so that all students and schools have an equal chance to do well. Each chapter also considers how the different elements of evaluation and assessment interact with each other, to create synergies to effectively support student learning (Box 1.1).

Box 1.1. OECD Reviews of Evaluation and Assessment in Education

OECD Reviews of Evaluation and Assessment look at how evaluation and assessment policy can be used to improve student outcomes. They assess countries’ evaluation and assessment policies and practices for school education, and draw on insights from international practices, to provide actionable recommendations.

The reviews focus on four key components:

- **Student assessment** monitors and provides feedback on individual student progress and certifies the achievement of learning goals. It covers classroom-based assessments as well as large-scale, external assessments and examinations.
- **Teacher appraisal** assesses the performance of teachers in providing quality learning for their students.
- **School evaluation** looks at the effectiveness of schools in providing quality education.
- **System evaluation** uses educational information to monitor and evaluate the education system against national goals.

The reviews draw on existing OECD work on evaluation and assessment, which included reviews of 14 countries’ evaluation and assessment policies and practices (OECD, 2013b). Each country review is based on national information, provided by the country to the OECD; background research and country visits. During the country visits a team of OECD staff and international experts meet with key actors across the education system to identify policy strengths and challenges, and discuss the challenges of evaluation and assessment with national actors. The OECD prepares a report for the country which analyses national practices and policies, and provides policy recommendations to strengthen evaluation and assessment linked to national goals and priorities.
Annex 1.1 Key indicators

<table>
<thead>
<tr>
<th>List of key indicators</th>
<th>Romania</th>
<th>EU 28 countries*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita (current USD), 2015, World Bank</td>
<td>8 973</td>
<td>31 843</td>
</tr>
<tr>
<td>GDP growth, 2015, World Bank</td>
<td>3.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population density, inhabitant/km², 2014, Eurostat</td>
<td>87</td>
<td>117</td>
</tr>
<tr>
<td>Population aged 14 years or less, 2013, Eurostat</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Total fertility rate, 2014, Eurostat</td>
<td>1.52</td>
<td>1.58</td>
</tr>
<tr>
<td>Population at risk of poverty or social exclusion, 2014, Eurostat</td>
<td>40%</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth unemployment rate (aged 15-24 years old), 2015, Eurostat</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Total unemployment rate (aged 15-74 years old), 2015, Eurostat</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Education indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>System</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official entry age to pre-primary, 2016, UNESCO-UIS</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Official entry age to compulsory education, 2014, UNESCO-UIS</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Duration of compulsory education, 2014, UNESCO-UIS</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School life expectancy, estimated number of years from primary to tertiary, 2012, Eurostat</td>
<td>16.9</td>
<td>17.6</td>
</tr>
<tr>
<td>Participation in early childhood education from age 4 until the beginning of compulsory primary education, 2012, Eurostat</td>
<td>86%</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Net enrolment rate</strong></td>
<td></td>
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</tr>
<tr>
<td>Primary education, 2012, UNESCO-UIS</td>
<td>87%</td>
<td>96%</td>
</tr>
<tr>
<td>Lower secondary education, 2014, UNESCO-UIS</td>
<td>85%</td>
<td>91%</td>
</tr>
<tr>
<td>Upper secondary education, 2014, UNESCO-UIS</td>
<td>85%</td>
<td>91%</td>
</tr>
<tr>
<td>Gross enrolment ratio, tertiary education, 2014, UNESCO-UIS</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Percentage of students enrolled in private institutions for primary education, 2014, Eurostat</td>
<td>0.66%</td>
<td>12.12%</td>
</tr>
<tr>
<td>Percentage of students enrolled in vocational programmes in upper secondary education, 2014, Eurostat</td>
<td>57%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Drop out rate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education, 2011, UNESCO-UIS</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Lower secondary education, 2013, UNESCO-UIS</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>
## Annex 1.1 Key indicators (continued)

<table>
<thead>
<tr>
<th>List of key indicators</th>
<th>Romania</th>
<th>EU 28 countries*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teachrs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education, 2012, UNESCO-UIS</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Secondary education, 2014, UNESCO-UIS</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td><strong>Female teachers as percentage of all teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-primary education, 2014, Eurostat</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Primary education, 2014, Eurostat</td>
<td>89%</td>
<td>85%</td>
</tr>
<tr>
<td>Lower secondary education, 2014, Eurostat</td>
<td>70%</td>
<td>68%</td>
</tr>
<tr>
<td>Upper secondary education, 2014, Eurostat</td>
<td>69%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total public expenditure on education as percentage of GDP, 2013, UNESCO-UIS</td>
<td>2.70%</td>
<td>5.34%</td>
</tr>
<tr>
<td>Average public expenditure per student by education level in euros using PPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education, 2013, Eurostat</td>
<td>1 533</td>
<td>5 311</td>
</tr>
<tr>
<td>Lower secondary education, 2013, Eurostat</td>
<td>1 897</td>
<td>6 358</td>
</tr>
<tr>
<td>Upper secondary education, 2013, Eurostat</td>
<td>2 182</td>
<td>6 307</td>
</tr>
<tr>
<td>Post-secondary non-tertiary education, 2013, Eurostat</td>
<td>852</td>
<td>3 929</td>
</tr>
<tr>
<td>Tertiary education, 2013, Eurostat</td>
<td>2 886</td>
<td>7 952</td>
</tr>
<tr>
<td>Expenditure on primary education as percentage of total government expenditure on education, 2012, UNESCO-UIS</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Expenditure on secondary as percentage of total government expenditure on education, 2012, UNESCO-UIS</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Student performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean performance in science, PISA 2015</td>
<td>435</td>
<td>489</td>
</tr>
<tr>
<td>Share of students below level 2 (basic proficiency level) in science, PISA 2015</td>
<td>39%</td>
<td>23%</td>
</tr>
<tr>
<td>Average three-year trend in score points in science since PISA 2006, PISA 2015</td>
<td>6</td>
<td>-2</td>
</tr>
<tr>
<td>Average three-year trend in score points in mathematics since PISA 2006, PISA 2015</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Average three-year trend in score points in reading since PISA 2009, PISA 2015</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Percentage of variation in science performance explained by students' socio-economic background, PISA 2015</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Percentage of resilient students, PISA 2015</td>
<td>11%</td>
<td>27%</td>
</tr>
</tbody>
</table>

* Average includes EU 28 countries with available data.
Notes

1. PPS (Purchasing Power Standard) is the technical term used by Eurostat for the common currency in which national accounts aggregates are expressed when adjusted for price level differences using PPP (Purchasing Power Parity). Thus, PPP can be interpreted as the exchange rate of the PPS against the euro. (Eurostat, 2016).

2. Data for EU countries does not include Croatia, Denmark and Greece.

3. Enrolment rates can be expressed in net enrolment rates or gross enrolment rates. The net enrolment rate refers to the percentage of students in the theoretical age group for a given level of education enrolled in that level as a percentage of the total population in that group. The gross enrolment rate refers to the general level of participation in a given level of education. Due to students repeating grades, the gross enrolment rate can be larger than 100%. The net enrolment rate is always lower than 100%.

4. Reference years for science and mathematics are 2006 and 2009 for reading. Please note that changes were made to the test design, administration, and scaling of PISA 2015. These changes add statistical uncertainty to trend comparisons that should be taken into account when comparing 2015 results to those from prior years. Please see the “Reader’s Guide” and Annex A5 of the PISA 2015 Initial Report (Volume I) (OECD, 2016) for a detailed discussion of these changes.

5. 2015 data on the science subscales is only available for countries where PISA 2015 was delivered in computers; Romania did not take PISA 2015 on computers.
References


IES (2013), Implementation of the Preparatory Year, Institute of Educational Sciences, Bucharest.


