



European Social Partners in Education Embracing Digitalisation

**Challenges and  
Opportunities for  
European Education  
Trade Unions and  
Employer Organisations  
in the Digital Era**

**Case study visit  
to Romania**

20-21 April 2021



As part of the above-mentioned E-speed project, a virtual case study visit was organised to Romania on 20-21 April 2021, with the participation of:

- E-speed Project Advisory Group members;
- Two external experts Inga Pavlovaite and Dr. Michael Hallissy;
- National social partners in Romania, including the Ministry of Education and the trade unions "Alma Mater" NTUF and FLSI;
- A technical university in Bucharest, including interviews with:
  - The institution leader (rector),
  - Two heads of faculties/lecturers,
  - Two students.
- A primary school in Bucharest, including interviews with:
  - The school leader,
  - A teacher,
  - Two pupils.

Videos showcasing the university and the school were also watched during the visit. In total, the perspectives of 12 stakeholders from across the Romanian education system were heard during the case study visit.

The aims of the case study visit were as follows:

- Identify and discuss examples of practical and concrete ways to ensure optimal use of digital tools, both for the improvement of education personnel's employment and working conditions and for better teaching and learning practices;
- Dive deeper into the topics identified by the survey results and the Advisory Group meetings;
- Discuss the concrete impact of the practices in place as regards the use of digital tools on teaching, learning and education staff's working conditions.

This document provides a summary of main themes and findings from the case study visit.



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

## KEY FACTS ABOUT THE ROMANIAN EDUCATION SYSTEM

Romania's national educational system includes public, private and denominational education units. The state ensures equal access to all levels and forms of pre-university and higher education, as well as to lifelong learning, without discrimination. Public school primary and secondary education is free. The national educational system allows the mobility of pupils by transfer from one school unit to another school unit, from one class to another class, from one field of study to another, and from one pathway to another pathway. Instruction is delivered mainly in the official language, and also in the mother tongue of students identifying with large national minorities, as well as in other languages - usually in the case of private schools.

The general mandatory education has 11 grades (from the preparatory grade in primary school to grade 10 of upper secondary education), as detailed in the Figure below.

**Figure 1: The overview of the Romanian education system**

ISCED level	Age	Grade	Education programme in English and Romanian (certification when applicable)		
8			Higher Education- Doctoral studies (Doctoral degree)		
7			Higher Education- Master (Master's degree)		
6			Higher education – Bachelor (Bachelor's degree)		
4					Post-secondary non-tertiary education (Certificate of professional education)
3	18	12	Upper secondary general education- Theoretical high schools (Baccalaureate)	Upper secondary general and vocational education – Technological and 'vocational' high schools	Vocational education (Certificate of professional qualification)
	17	11			
	16	10			
	15	9			
2	14	8	Lower secondary education		
	13	7			
	12	6			
	11	5			
1	10	4	Primary education		
	9	3			
	8	2			
	7	1			
	6	Preparatory year			
02	5		Pre-school education		
	4				
01	3		Ante pre-school education		
	2				
	1				
	0				

Source: [OECD reviews of evaluation and assessment in Romania, 2017](#).

As shown above, the education system includes primary education (consisting of a preparatory grade and grades 1 to 4), lower secondary education or gymnasium (grades 5 – 8), and the first two years of the upper secondary education. At the end of lower secondary education (grade 8), students take a national examination in mathematics and Romanian language and literature. Students' exam results, their average grade at the end of each year of lower secondary education, and their individual school choices determine the upper secondary school and the type of programme students will attend.

Upper secondary education can be: (a) high school education (grades 9 – 12/13), organized in two cycles – lower high school (grades 9-10) and upper high-school (grades 11-12/13), and (b) vocational education and training (3 years minimum, in vocational schools). At the end of upper secondary education, students must pass the baccalaureate examination if they wish to access tertiary education. The baccalaureate exam includes an oral examination in Romanian; a test in a modern foreign language; an assessment in computer skills to access the European Computer Driving Licence in digital competencies; and a written test in the Romanian language and literature.

Romania's education system is horizontally and vertically centralised. The Ministry of National Education and Scientific Research (MNESR) has key responsibility for all aspects of the education system's strategy and policy development. Their responsibility extends from setting the education system's overall strategy and national policies, to pre-school and compulsory education to vocational education and training and higher education. The system is highly centralised, with locally elected authorities and schools having little input in the design and delivery of educational policies and limited autonomy of teachers and schools to lead improvements. In the pre-university system, the MNESR is also responsible for the national system of evaluation, approving and monitoring the implementation of the curriculum, managing the school network, and allocating financial and human resources to schools.<sup>1</sup>

The curriculum framework for primary and secondary education 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<sup>2</sup>: 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. 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.

In Romania, teachers at all levels of education have to possess at least a bachelor's degree, and, depending on the level of education that they will teach, complete one or two semester modules in initial teacher education. To become a permanent teacher, they must pass a probation appraisal, which includes two inspections by the County School Inspectorate and a written exam.

---

<sup>1</sup> See also Kitchen, H., et al. (2017), Romania 2017, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris.

<sup>2</sup> See [Council Recommendation on Key Competences for Lifelong Learning | Education and Training \(europa.eu\)](#).

## THE USE OF DIGITAL TOOLS IS AN INTEGRAL PART OF THE EDUCATION SYSTEM IN ROMANIA

Study visit participants defined the use of digital tools as an integral and necessary part of modern education as they help education institutions in fulfilling their educational and pedagogical missions. In the institutions visited, the importance of using digital tools in an integrated way is part of an overall pedagogical approach. This was recognised in the two case-study institutions almost 10 years ago when they began using digital technologies to support teaching, learning and assessment practices. In both institutions, the digitalisation in education is viewed as an integral part of their pedagogical approaches, and the technologies are used to ensure that young people attain their educational goals in a modern, effective, attractive and appealing way. This is done in a thoughtful way to complement "traditional" ways of teaching, learning and assessing, where the teacher is central to the dissemination of knowledge.

In 2011, Information and Communication Technology training was added to the Romanian National Curriculum. Since 2012, digital competences training is a compulsory stand-alone subject for all students in lower and upper secondary education. In addition, upper secondary education students take a national test to assess their digital competences. At the primary education level, students may develop their digital competences, as it is an optional subject that school can offer.

The importance of digitalisation in education is also recognised at the strategic educational policy planning level. The Ministry of Education has treated the digitalisation in education as an important policy priority, supporting it with financial resources and investments into the technical infrastructure and training of teachers, as well as incorporating the development of digital competences into the school curriculum and teacher training curricula. Most recently, as part of the national Romanian plan<sup>3</sup> in the context of implementing the EU level funding initiative the Recovery and Resilience Facility<sup>4</sup>, a dedicated budget will be allocated to the upgrading of digital infrastructures across the educational system and in further enhancing the digital competences of all teachers and education personnel. This shows that the teachers and education personnel in Romania have been working with the digitalisation agenda for at least 10 years, supported by the Ministry's investment in technical infrastructure, supports that include teacher education and student education/training in digital competences.

Quotes from the interviewees:

*“ Given the increasingly digitalized world we live in, digitalization in education is no longer a possibility but a necessity.”*

*“Digital tools are very useful in education as they complement, and in some regards even supplement traditional education.”*

<sup>3</sup> See [PLANUL NATIONAL DE REDRESARE ȘI REZILIENTĂ \(PNRR\)](https://www.gov.ro/planul-national-de-redresare-si-rezilienta) (gov.ro).

<sup>4</sup> See [Recovery and Resilience Facility](https://ec.europa.eu/economy_finance/recovery-and-resilience-facility) | European Commission (europa.eu).

*“Our strategic goal is better education, and for that we make use of all tools, including digital.”*

## LEADERSHIP IS IMPORTANT IN CAPITALISING ON DIGITALISATION IN EDUCATION

Embedding of digital tools across educational sectors, levels and subjects varies. The case study interviews revealed that the use of digital tools was higher where the senior leadership and management of educational institutions are committed to promoting digital education. For instance, it was reported that before the COVID-19 pandemic, some of the teachers and education personnel in school and university were reluctant to use digital tools, usually due to a preference for traditional education methods or because they lacked the necessary digital competences. In both institutions, training for teachers and education personnel in connection for development of their digital skills was already provided also before the COVID-19 pandemic, relating both to the technical level skills of using specific digital tools as well as the pedagogical deployment of digital tools. Within several months into the COVID-19 pandemic, many of these teachers succeeded were able to “go digital” due to the ongoing training, encouragement and help they received from the institution’s management and their more digitally skilled colleagues.

Quote from the interviews:

*“Some teachers received needed support from management, technical support staff and peer colleagues to learn how to use digital platforms, setting accounts, and adapt and create the online educational content.”*

## BOTH INSTITUTIONS ARE VERY MATURE IN USING DIGITAL TOOLS

The interviewees reported that the pace of digitalization in education is not the same across educational institutions and subjects within their institutions. This is highlighting the importance of addressing the potential risk of creating a digital divide amongst education institutions and teachers and education personnel, as it can leave those who are less digitally competent and confident further behind.

Quote from the interviews:

*“ We shifted very fast (to online learning), as we already had the skills and digital platforms to continue our teaching and learning activities. However, that was not the case with many other educational institutions in Romania.”*

As noted earlier, the two educational institutions visited started digitalising about ten years ago. Both institutions have included the digitalisation agenda in their strategic planning documents. Both institutions have invested in providing both the technical infrastructure and supports for digital teaching and learning in face-to-face classrooms long before the arrival of COVID-19 pandemic. Their institutional level strategies and action plans envisage continuous improvement of the quality of digital infrastructure and the digital competences of students, teachers and education personnel and administrative staff.

Quote from the interviews:

*“ Our digitalization action plan has two aims - improving our digital infrastructure with newer computers, faster internet speed, and an online platform for our administration; and the development of our students', teachers' and administration's digital skills.”*

Prior to the pandemic, in one institution digital technologies were used in approximately half of instances in the teaching and learning process. In the second institution, digital tools such as interactive boards, TV sets, and laptops/multimedia were integrated to support teaching, learning and assessment practices. The level and type of uses varied by subject area. The interviewees observed that the use of digital education tools depends mostly on the personal motivation of teachers and education personnel and the nature of the particular subjects taught. Conversely, the use of digital tools in the pedagogical practice depended less on the age or gender of teachers and education personnel. Because both institutions are very mature in using digital learning tools, the shift to the emergency remote teaching during the COVID-19 pandemic was a relatively fast and smooth process.

Quote from the interviews:

*“ We started digitalising our educational services long before the pandemic. This process has been going on for a while, and the pandemic only speeded it up.”*

# THE USE OF SPECIFIC DIGITAL TOOLS

In both institutions, there was an awareness of the European agenda on the digitalisation of education, with multiple references made to the Digital Education Action Plan<sup>5</sup> or the use of results from Erasmus+ projects across the interviews. For example, the higher education institution participates actively in the mobility schemes for staff and students offered through the Erasmus+ programme.<sup>6</sup> The primary school has participated in two Comenius projects and a number of individual mobility actions offered through the Erasmus+ programme.<sup>7</sup> Stakeholders from both institutions illustrated an understanding of how digital education issues are tackled at the European level while also showcasing how their participation in a range of European networks has enabled them to draw upon concrete results, processes and outcomes in the digitalisation of education.

Both educational institutions used a range of digital platforms that included Microsoft Teams, Google Drive, and a range of specialised in-house digital tools, which facilitate communication between teaching staff and management. The higher education institution is part of the Microsoft network for higher education institutions, demonstrating its high level of engagement in the respective digital education networks and platforms. The Microsoft platform is an innovative network that gives the educational institutions access to new tools and new approaches to digital education.

# TEACHERS AND EDUCATION PERSONNEL COLLABORATE EXTENSIVELY IN USING DIGITAL TOOLS

A challenge that existed before and during the first months of the COVID-19 pandemic was that there were a number of teachers and education personnel in both institutions who avoided using digital education tools. After consulting with them, the heads and teaching staff of the institutions, they found out that there were several reasons for such avoidance, including anxiety, stress and an inability to cope during the pandemic; a preference for traditional face-to-face teaching; as well as a lack of necessary digital competences or digital equipment. Additional supports, encouragement and training were provided to such teachers and education personnel by a range of stakeholders - the management, the IT personnel, and more digitally advanced peer teachers. Arising out of these supports, those teachers and education personnel learned how to use digital education tools and managed to readjust to online teaching within a few months.

This experience showcases a broader trend in both educational institutions in relation to a culture of collaboration between teachers and education personnel around the use of digital tools. These supports included both technical support received from existing IT support functions, as well as the exchange of professional practice with peers about the use of digital tools in the daily pedagogical practice of teaching. This peer support and reflection in relation to their digital educational practices is considered to be extremely

5 See [Digital Education Action Plan \(2021-2027\) | Education and Training \(europa.eu\)](#)

6 See [Erasmus+ - Universitatea Politehnica din Bucuresti \(upb.ro\)](#)

7 See [Școala 194 - Școala Gimnazială Nr. 194 Sector 4, București](#)



valuable by the stakeholders interviewed. Such practices allow both staff to resolve technical issues associated with using digital tools in teaching practice, while also enabling them to reflect on the best and optimal use of digital tools, so they can enhance their practices from a pedagogical perspective.

Quotes from the interviews:

*“ Teachers who had no digital devices were given the computers from the IT lab. Those who were less digitally skilled used tutorials provided by our IT person and help from their co-workers and students. Eventually, they learned how to work with different digital platforms and started teaching online.”*

*“Digital tools were invented to help us but if we don't know how to use them, they are useless.”*

## PARENTS PLAYED AN IMPORTANT ROLE IN THE PRIMARY SCHOOLS' TRANSITION TO ONLINE EDUCATION

Parents played an important role in ensuring that digital tools were used appropriately in the primary school setting. This was highlighted by the stakeholders in the primary school visited during the case study. In particular, they played an important role ensuring primary school pupils engaged effectively with the move to online education. During this process they became more engaged in their children's education, and parent-teacher connections have been strengthened because of the emergency remote teaching. The interviewees reported that parents were extremely helpful and supportive during the online education through ensuring that pupils actively participated, by helping them access and use digital platforms and in resolving any technical issues. One primary teacher observed that parents learned more about their children's learning by observing their performance online. As a result, they learnt more about the engagement, interests and abilities of their children and help them with their homework and catching up. An unexpected side effect of parental involvement during the emergency remote teaching was that parents became aware and more appreciative of the role of the teacher in their children's learning.

Quote from the interviews:

*“ The digital education tools we used made the link with the parents alive, and the parents more involved in the learning process. The online education was in a way a school also for parents, not only for pupils. Parents were also very supportive and helpful in handling technical difficulties.”*

*“Through digital tools used in the teaching now, parents appreciate much more how hard and demanding the job of the teacher is”.*

## ASSESSMENT USING DIGITAL TOOLS HAS BOTH ADVANTAGES AND DISADVANTAGES

In the two education institutions visited, the use of digital technologies to support a range of assessment practices differed across a range of criteria that included educational level and subject disciplines.

As reported by some interviews, online assessments can consist of group projects, case studies, and presentations, which promote and emphasis students' creativity and critical thinking, as opposed to the learning process focussed more on memorising and learning by heart. Indeed, such diverse assessment strategies typically differ from more traditional assessment approaches that emphasise rote learning and memorisation. While digital technology has the potential to expand the range and format of assessments, experiences during the COVID-19 crisis also highlighted a range of challenges. This was particularly evident in higher education where traditional on-site examinations were replaced by online examinations. In this context academic integrity came to the fore and institutions were forced to adapt existing practices, such as reducing the duration of online exams, to avoid student cheating. Students also must upload their timed exam papers, and they sometimes encounter technical issues with that. Interviewees reported that in such circumstances, digitally based assessment poses additional stress on students and they can fail an exam because of technical difficulties, which makes such learning assessments challenging and possibly inaccurate. Another problem with digitally based assessments is that sometimes they cannot assess students performing practice-oriented assessments such as laboratory activities due to the lack of equipment at students' home. Such online-based assessment also had an impact on teachers and educational personnel, as they had to devote more time to transforming the existing types of assessment to digitalised formats, as well as modifying the pre-existing methods of assessments (an example was provided when the practical laboratory based assessment had to be replaced by more theoretical oriented assessment).

The case study interviewees focussed on the use of digital tools in the summative assessment, and less so on the formative assessment.<sup>9</sup> This might be explained by the challenges and issues that summative remote assessment presented for the institutions. In contrast, formative assessment played less of a central role and therefore did not generate such challenge. Here, the potential of digital tools to help to assess the progress of learners during the learning process (as opposed to its end point) appears to require further reflection and exploitation.

---

<sup>9</sup> Formative assessment refers to formal and informal assessment procedures conducted during the learning process and thus enables to monitor student learning to provide ongoing feedback. In contrast, summative assessment evaluates what a student has learnt at the end of the process of learning.

Quote from the interviews:

*“Digital tools do not have good accuracy for assessing the knowledge and they need to be combined with offline assessment such as practical assessments in practice labs, especially given that my subject (chemistry) is based not only on theory but also on experiments.”*

## THE FUTURE OF DIGITAL EDUCATION

Study participants recognise that traditional classroom-based education, which is typically more teacher-centred, and digital education practices have advantages and disadvantages. In a sense, there was also a view expressed that modern education process and institutions are no longer a choice between “either / or”, between traditional or digitalised education. For this reason, there was a general agreement among the participants that in future, education processes and experiences will combine both digitalised and face-to-face teaching, learning and assessment, where digital tools will be further used by teachers and education personnel to deliver the overall pedagogical mission of educational institutions. Participants recognise that are pros and cons to traditional teacher-centred practices and more student-centred learning practices supported by digital technologies. They favour the embedding of digital technologies into existing practices and for teachers and education personnel to use their professional judgement to decide which approaches are most appropriate, depending on their context.

Among the reported advantages of using digital tools in education were that they enable fast access to a vast array of information, executing tasks more accurately and efficiently, visualizing concepts and processes and thus making them easier to understand, and the possibility to communicate and collaborate with other learners, or teachers from distance.

Quotes from the interviews:

*“Digital tools provide an easy access to information and help to do things faster and more accurately.”*

*“We used digital education tools before the pandemic, as they save time and energy.”*

*“Digital education makes it easier to involve guest lecturers from other departments and universities.”*

On a more negative side, the stakeholders interviewed in the case study visit also reported that using digital education tools can be demotivating if the use of digital tools does not match their pace or style of learning or if the exposure to digital tools is very long with monitor fatigue setting in (especially during the extended emergency remote teaching in the context of COVID-19 pandemic). In addition, it was also considered that their use can lead to social isolation; learning assessments can be less accurate as they are more theory-based; technical issues can interrupt the process of online based assessments (such as disruptions to the internet connection); teachers needing more time to prepare teaching content that is interactive and can attract and keep students' attention.

Quotes from the interviews:

*“In a normal classroom, teachers can have physical contact with pupils and watch over them, checking how they write, how they manage with their assignments, and give them feedback and help right away. We cannot do that in an online activity.”*

*“We could not stick to the classical curriculum in online teaching. We made the online classes more practical and interactive so we could keep pupils awake.”*

*“I don't like it when we have technical issues such as some device doesn't work or there is no internet connection, and that we cannot socialize as well as when we are face-to-face.”*