

EUROPEAN COMMISSION

Education and Training Monitor 2021

EXECUTIVE SUMMARY

The 2021 Education and Training Monitor was prepared by: the European Commission's Directorate-General for Education, Youth, Sport and Culture (DG EAC), with contributions from the Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL); the Education and Youth Policy Analysis Unit of the European Education and Culture Executive Agency (EACEA); the Eurydice network; Eurostat; the European Centre for the Development of Vocational Training and its European network of expertise on VET (ReferNet) and the Human Capital and Employment Unit in the Directorate for Growth and Innovation of the Commission's Joint Research Centre (JRC). The Members of the Standing Group on Indicators and Benchmarks were consulted during the drafting phase.

The manuscript was completed on 19 October 2021.

Additional contextual data can be found at ec.europa.eu/education/monitor

Executive Summary

Well-being in the context of disruption

The COVID-19 pandemic has disrupted education and training in an unprecedented way, but this disruption has also presented opportunities for innovation. The pandemic has brought about major challenges to teaching and learning, but countries across Europe were able to rapidly mobilise resources. Teachers, school leaders, families, students and schools have showed determination, adaptability, resilience and creativity to ensure the continued provision of education. The crisis has accelerated change and has provided massive insights into how digital technology and innovative teaching can help strengthen our education and training systems. On the other hand, the crisis has exposed and, in some cases, magnified existing weaknesses and inefficiencies, and not least inequalities. As schools and universities have gradually re-opened and restarted their operations, their major task has been to remedy interruptions to learning and to address the negative impacts on students' well-being.

The debate about well-being in education predates the pandemic and well-being has attracted increasing attention of education policy makers in recent years. However, the pandemic has brought challenges to well-being to the fore. Well-being covers both mental and physical health and is closely connected to students' performance at school and in other aspects of their lives. Students' life satisfaction, the ability to develop decision-making skills and psychological coping mechanisms are crucial for lifelong learning and for individuals to lead meaningful lives. They lay the foundations for self-awareness, relationship building and forming resilience, enabling individuals to adjust and to overcome personal adversity, long-term life challenges and societal shocks.

While the disruption to learning resulting from the pandemic is difficult to measure at this stage, data available from the Netherlands indicates substantial learning loss, which might soon turn to the one of the biggest challenges for education policy. A survey carried out among primary and secondary school pupils shows that their learning progress dropped in all year groups. However, while the children of highly skilled parents showed no significant disruption to their progress, the children of low-skilled parents made only about 85% of the progress expected for their year group.

Most countries address well-being partially or implicitly in their education policies and practices. Competences related to mental health are generally incorporated in the curricula of specific subjects or as cross-cutting issues. The majority of Member States implement targeted programmes to tackle bullying and violence. A number of initiatives are focused on physical activity and healthy lifestyle, discrimination and racism, mental health, school climate and equal opportunities. Most of these, however, remain fragmented and few evaluations are available on their impact.

A few Member States have taken steps towards a comprehensive approach on well-being in education. Approaches include concepts and policy objectives linked to well-being, monitoring mechanisms collecting data on the well-being of students and concrete requirements and guidance on the implementation of well-being policies at the institutional level. For instance, the well-being of pupils is regularly monitored through surveys in Denmark, Finland and Estonia. In Ireland, every school is required by 2023 to use a self-evaluation tool to promote well-being and they are supported in this process by a Well-being Practice Framework and online resources. In Spain, an observatory of school life disseminates good practices, monitors and provides guidance on how to improve school climate.

Very timely, the dedicated working group on well-being launched under the EEA framework will help shed light on new trends following the pandemic and support Member States in learning from each other in a policy area, which is relatively new for most countries.

Surveys show that the pandemic has led to feelings of isolation, anxiety and depression among students of all ages. Data from nine EU Member States indicates that around a quarter of pupils felt “helpless” during remote classes and when completing homework. Experiences during the pandemic confirmed that education fulfils an essential societal role. Well-functioning, inclusive and supportive education systems are important for families and are key to support the well-being, including the mental health, of pupils and teachers.

Already before the pandemic, nearly half of all students in the EU reported feelings of sadness, one third reported feelings of fear and almost 40% reported feeling miserable. Phenomena, such as bullying and a low sense of belonging in school, are strongly linked to academic performance. Students with a stronger sense of belonging in school are less often truant and show stronger academic performance. In many EU Member States, students who skipped a day of school in within the past two weeks had a lower score on the sense of belonging index. Positive relationships between teachers and pupils emphasising respect and empowering students can foster performance improvements, especially among high-risk youth groups. In as many as 19 EU Member States, over 50% of students report bullying at least a few times a year.

Investment in education

In recent years, public expenditure on education in EU Member States was fairly steady. However, variations between countries are considerable. In 2019, on average, the EU dedicated 4.7% of its GDP to education, accounting for around 10% of total public expenditure. Education spending varied from over 6% in Estonia, Belgium, Denmark and Sweden to 3.1% of GDP in Ireland. The largest share of public investment is directed to secondary education (38.7%), followed by pre-primary and primary education combined (33.4%) and tertiary education (16.2%). Public expenditure in education is predominantly allocated to teaching staff (64%), followed by intermediate consumption (14%), which consists of the purchase of goods and services needed to provide education services. The third-highest allocation was gross capital formation (7%), which comprises capital investments, for example on buildings, followed by social benefits (6%) and other current transfers (6%).

Several Member States increased investment linked to the move to online and blended learning during the pandemic. Investments included digitalisation projects, as well as hiring additional teachers or the additional training of teachers, funding for counselling and assistance for students and bonuses for teachers. Some countries also compensate schools for the additional costs of preventative measures, for example buying protective equipment or additional disinfection products.

The Recovery and Resilience Facility will, together with the European Structural and Investment Funds, increase the EU funds directed to education and training in an unprecedented way. The Recovery and Resilience Facility (RRF) is the centrepiece of NextGenerationEU, the European Union’s instrument to support recovery from the coronavirus crisis. It makes up to €675 bn available – €312.5 bn in grants and €360 bn in loans. The RRF supports sustainable and growth-enhancing reforms and investments in Member States to help recovery and build institutional capacity, essential to reduce inequalities and divergences in the Union.

Investments and reforms in education and training play an important role in national RRFs. To benefit from support under the Facility, Member States had to submit their Recovery and Resilience Plans (RRP), including a comprehensive set of reforms and investments to be implemented by 2026. While the adoption process is still ongoing, according to provisional calculations, education and skill-related reforms and investments are expected to make up about 13 % of total RRF expenditure. Investment and reforms cover all education levels and sectors. They aim to modernise education and have the potential to make a long-lasting impact. For instance, the RRF will support the move to a one-shift system in Croatia, the consolidation of the school network in Lithuania and a broad reform of school education in Slovakia. In almost all countries, it is expected to give a major boost to the digital transformation of education and enhance the digital skills and competences of the workforce – a prerequisite to boost growth and

the competitiveness of the economy. Measures to boost digital education include the adaptation of the school curricula, developing digital resources and content, teacher training on digital education and the modernisation of the training offering in VET institutions, among others. For instance, in Belgium, the Flemish Community has included in its plan the ambition to set up a knowledge and support centre for digital school education. Germany aims to support the digitalisation of education by investing in digital devices for teachers, learning materials and digital skills, as well as a single digital education platform.

EU-level targets for European cooperation in education and training towards a European Education Area and beyond

During the last decade, considerable steps have been taken to improve the participation of children in early childhood education and care (ECEC) throughout the EU. In the past 5 years, most countries have seen the participation of children between the age of 3 years and the mandatory schooling age in ECEC increase, with Ireland, Croatia, Cyprus, Luxembourg and Poland recording the fastest improvements. On average in the EU, ECEC participation (3+) stood at 92.8% in 2019. This is an increase of 1 percentage point compared to the preceding five years. In 2019, five Member States (Belgium, Denmark, Ireland, Spain and France) reached the target level and Sweden came very close to reaching 96% participation.

Improving access to quality ECEC has been high on the agenda in most Member States during recent years. The Recovery and Resilience Facility may provide further impetus to investment in ECEC across the EU, with about half of Member States making use of it to expand ECEC capacities. Some Member States have set ambitious targets to increase participation under the RRF. For example, Croatia aims to raise the participation rate of the 3+ age group from 76.3% to 90% by 2026. Czechia plans to increase the number of childcare facilities by 40% by the end of 2025. 90 000 places will be created in Germany and 60 000 in Spain (for children aged 0-2).

Investments are also accompanied by reforms in a number of countries. For instance, the compulsory pre-school age is being lowered in Bulgaria and Cyprus (to four years), Belgium and Slovakia (to five years). Croatia and Slovakia are reviewing the financing model of ECEC. Portugal is reducing participation fees. Greece plans to improve early diagnosis and support for children with disabilities and special needs. Slovakia aims to review the recruitment system and support the professionalisation of ECEC staff. A legal entitlement to ECEC will be introduced in Croatia and Slovakia. Romania envisages the further development of an integrated ECEC framework and a large-scale teacher training programme. Denmark is working towards improving quality by introducing minimum standards and increasing staffing. Estonia is defining learning outcomes and learning support needs.

The share of early leavers from education and training decreased steadily over the past decade, but the pandemic risks reversing this positive trend. In 2020, the rate stood at 9.9% on average across the EU – which while below the old target of less than 10%, is now 0.9 percentage points above the new and more ambitious target of below 9%. However, progress of close to 4 percentage points over the past 10 years masks pronounced differences between and within countries. Therefore, sustained efforts are required. At the EU level, the average share of early leavers from education and training is 3.8 percentage points higher among young men (11.8%) than it is among young women (8.0%). There are striking disadvantages for foreign-born young people and regional discrepancies are wide in many Member States. There are also considerable differences between countries, with more than 15% of the young population leaving school early in Spain and Romania. On the other end of the spectrum, in 18 Member States the share of early leavers from education and training is less than 9%, with Croatia having the smallest proportion (2.2%).

Some Member States renewed their efforts to prevent early school leaving in the context of the COVID-19 pandemic. For example, in France compulsory education and training was extended from 16 to 18 years and supported by different measures to mitigate the negative implications of school closures. In Ireland, further support was allocated to schools catering for

students experiencing the highest levels of educational disadvantage to reduce class size and to extend the school completion programme to more schools.

The attainment rates in tertiary education have been increasing steadily over the past decade, but there is still considerable variation between countries and sub-groups within countries. In 2020, the tertiary educational attainment rate stood at 40.5% in the EU, with eleven countries already reaching the target set for 2030. The difference between countries is pronounced, spanning from 24.9% in Romania to 60.6% in Luxembourg. The average share of 25–34-year-olds with tertiary educational attainment is 10.8 percentage points higher among women (46%) than it is among men (35.2%). Moreover, there is a clear urban-rural divide, with the average rate in cities (50.9%) being substantially higher than it is in rural areas (28.9%).

To increase tertiary educational attainment, several countries aim to enhance the access of disadvantaged students to higher education. For example, in Romania some dedicated places are reserved for Roma and 40% of newly created or modernised places in student accommodation will be allocated to disadvantaged students with support from the RRF. Portugal is planning to create an additional 15 000 places in student accommodation by 2025 with support from the RRF. In France, 30 000 new places in study programmes will be created and 100 000 students could benefit from state-guaranteed student loans. Slovakia is launching a new scholarship programme for students, in particular for those from disadvantaged backgrounds.

More than half of the countries will use the RRF to support transformation in higher education. Actions will include the modernisation of study programmes, expanding study places, launching new study courses, among which micro-credentials, the review of the funding model, the development of quality assurance and governance mechanisms, developing graduate tracking mechanisms and supporting the internationalisation of higher education. For example, with support from the RRF Latvia is implementing a comprehensive higher education reform, which envisages complex structural changes across three pillars: governance, funding, and human resources. Portugal will foster careers in science, technology, engineering, the arts and mathematics (STEAM), while Finland will support a programme to attract and retain national and foreign talent.

The basic skills proficiency of the younger generation has not improved during the past decade. This is not only a worrying social issue, but also has a braking effect on the EU's future economic competitiveness and resilience. Unfortunately, the EU has not met its target to reduce underachievement in basic skills to less than 15% and little progress has been made over the past 10 years. The underachievement rate stood at 21.7% in reading, 22.4% in mathematics and 21.6% in science, the last time the PISA test was conducted (2018). Despite progress in some countries throughout the period 2009–2018, performance in science and reading deteriorated at the EU level, while it remained stable in mathematics. PISA results suggest that countries tend to obtain similar results across the three domains. Countries such as Estonia, Finland, Ireland and Poland have low underachievement rates in all three domains. By contrast, in Bulgaria, Romania, Cyprus and Malta, more than one in five pupils underachieve across all three domains, significantly reducing their future opportunities in professional and private life.

Some Member States launched targeted programmes to compensate for the interruption to learning, but considerable further efforts are likely to be needed in most countries. In the Netherlands, €282 m was made available in 2020 for schools to assist students to reduce the negative impact on their education due to the pandemic. In Ireland, a COVID Learning and Support Scheme (CLASS) has been put in place for the 2021–2022 school year to help schools mitigate the adverse impacts of the pandemic on the interruption of students' learning and negative effects on their well-being. In Slovakia, additional tutoring was provided to pupils in need and further measures are planned under the Recovery and Resilience Facility (RRF). In Romania, REACT-EU will support additional remedial measures.

Despite compensatory measures taken by Member States, inequalities are likely to increase following the pandemic. It is, therefore, important that Member States reinforce their efforts to promote inclusion and to enhance access to quality education for all. France continues its reform aiming to improve the basic skills of disadvantaged pupils by reducing class size. In Malta, between 2021 and 2024 about 1 000 underachieving pupils aged 6 will join the 20 week Reading

Recovery Programme. Ireland is piloting a School Inclusion Model to fully comply with the UN Convention on the Rights of Persons with Disabilities regarding participation in mainstream education. In Ireland, the 2021 supplementary programme provided for additional hours of in-home support for children with special educational needs and to those at risk of educational disadvantage during periods of school closures and reopenings. At tertiary level, socioeconomic inequalities were addressed by: doubling the Student Assistance Fund, providing funding to support Traveller students' access to universities, a laptop loan scheme and funding for HEI (Higher Education Institution) access services.

Digital skills are becoming crucial for all citizens to participate in an increasingly digital world. Over the past two years, the COVID-19 crisis has further emphasised the importance of both basic and advanced digital skills for sustaining our economies and societies. Digital skills became a prerequisite for participation in learning, working and socialising, thereby accelerating the digital transformation. With only partial data available on the digital skills of pupils and based on the International Computer and Information Literacy Study (ICILS), the share of underachievement in digital skills only approached the EU level target value in Denmark in 2018 (16.2%), while it reached a high of 50.6% in Luxembourg (in 2018). The data from 2018 suggest that a significant effort is necessary to reduce the share of underachievement in digital skills across all EU Member States for the EU-level target to be achieved by 2030.

The Recovery and Resilience Facility will be a major source of funding for digital education, making up approximately one third of RRF spending on education and skills.

Most countries will invest in the digital infrastructure and connectivity of schools, often with a focus on disadvantaged and rural schools. In Italy, 100 000 classrooms will be transformed into flexible and connected learning environments. Slovakia aims to increase the share of schools with highly equipped and connected classrooms from 30% to at least 90%. A number of Member States will equip learners and teachers with digital devices to reduce the digital divide. For instance, in Austria 80 000 pupils per year will receive digital equipment funded under the RRF. A broad range of measures will aim to improve the digital competences of pupils through the adaptation of the school curricula, developing digital resources and content, teacher training, as well as modernising the training offer in VET institutions. In Belgium, the Flemish Community is setting up a knowledge and support centre for digital school education. In higher education, significant investments are planned for the development of digital infrastructure and digital teaching resources, the adaptation of study courses and digital training for academic staff. Funding will also be devoted to the development of digital skills of the adult population in the majority of Member States. For example, in Latvia, all employees that were placed on short-time work schemes between January and March 2021 may have access to e-learning courses to improve digital skills, using vouchers worth up to €500.

The COVID-19 pandemic has interrupted already-slow progress in adult learning across the EU. Member States have agreed on an EU-level target of at least 47% adult learning by 2025 and 60% by 2030. Both targets apply the improved measurement of adult learning to be applied in 2022. Many Member States are taking action to increase the share of adults participating in learning and most have envisaged to use RRF for upskilling and reskilling measures. In particular, several countries are planning to introduce or develop measures to provide direct financial support to individuals for learning purposes to be complemented by non-financial measures enabling adults to engage in learning. For instance, in the Netherlands, a public individual learning and development account (*STAP – Stimulans Arbeidsmarktpositie*), will enter into force as of 1 January 2022. Anyone with a link to the Dutch labour market will be able to receive a subsidy up to €1 000 to cover their training costs for personal development and employability.