HUMAN RIGHTS AND THE ROLE OF HIGHER EDUCATION AND INTELLECTUALS IN THE CONTEXT OF DIGITALIZATION

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Abstract:

The multiple crises we are currently involved in lead us to the elements that have led to the "global learning crisis". However, current educational trends and challenges related to: expanding access to educational opportunities, including historically marginalized populations, literacy, computing, quality of education, relevance of learning, creating lifelong learning systems and favorable environments, have made that in a period very short the whole learning model to be subject to change. Moreover, according to existing studies at European level, the rapid digitization of the last decade has transformed many aspects of work and daily life. Driven by innovation and technological evolution, digital transformation is reshaping society, the labor market and the future of labor. Employers face difficulties in recruiting highly skilled workers in several sectors of the economy, including the digital sector. Too few adults hone their skills or retrain to fill these vacancies, often because training is not available at the right time and place.

The use of digital technologies is also crucial for achieving the goals of the European Green Pact and achieving climate neutrality by 2050. Digital technologies are strong drivers for the transition to a green economy, including the transition to a circular economy and the decarbonisation of energy, transport, construction, agriculture and other industries and sectors. In parallel, it is important to reduce the climate and environmental footprint of digital products and to facilitate the transition to sustainable behaviors in both the development and use of digital products.

The education and training system is increasingly part of the digital transformation and can capitalize on its benefits and opportunities. However, it must

effectively manage the risks of digital transformation, including the risk of a digital divide between urban and rural areas, in which case some people may benefit more than others. The digital transformation in education is supported by advances in connectivity, the widespread use of digital devices and applications, the need for individual flexibility and the growing demand for digital skills. The crisis caused by the COVID-19 pandemic, which severely affected education and training, accelerated change and provided a learning experience. In this paper we aim to reflect the defining elements of the global learning crisis, but especially to present Digital Education Action Plan, adopted in 2018, the EU and which directly influences our learning process in the current and future 2021-2027.

Keywords: *education, digital technologies, human rights.*

Introduction

Starting from existing global documents that guide us in our search for solutions for the future, we mention the objectives of the Global 2030 Agenda that help us to frame certain urgent responses for decision makers. It is noteworthy that in accordance with these documents and the pandemic reality, two major directions are identified, namely: a planet transformed by human activity; and digital, biotechnological and neurological development. A planet transformed by human activity based on a new understanding of ecologically oriented humanity, which integrates our way of relating to the Earth. Moreover, we appreciate that this direction, identified by specialists, requires an urgent rethinking of education by 2050.

In the process of continuing education, the process of continuous adaptation of the individual to these changes is particularly important. Certain types of adaptation to climate change is a fact of our day, for example in extreme weather events, have already become necessary. And, even if efforts to put the world on a sustainable path are fully successful, changes in the Earth's ecosystems are likely to have many ramifications for providing educational opportunities by 2050 and beyond. According to studies by the UN, UNICEF, OECD, the educational process needs to respond to climate change, biodiversity loss, environmental destruction and lifestyles that far exceed the planet's carrying capacity, being a key inspiration for regenerative forms of education.

Digital, biotechnological and neuroscience developments are disciplines that can pose significant threats to the diversity of knowledge, cultur-

al inclusion, transparency and intellectual freedom for a particular segment of the population. Algorithmic recommendations, platform imperialism and current models of digital infrastructure governance present great challenges for supporting education as a global common good. Developments in biotechnology and neuroscience have the potential to unleash a hitherto inconceivable engineering of human beings. It is particularly important in protecting the rights of the individual[1], regardless of challenges, proper ethical governance and a new understanding of humanism are needed to guide these technological developments towards a sustainable, just and peaceful future. Such trends will depend on open data, open science and a broad understanding of the right to education to include the right to data, information and privacy. These two transitions will profoundly change the educational scenarios that will unfold over the next 30 years. The issues they raise are at the heart of all current debates on education, in particular on the digitalisation of education and the emergence of the 'hybrid' school, a topic which will be discussed in depth at both the EU and UN levels. These transitions are joined by two other emerging trajectories that are decisive for the way we define them.

Recent data indicate different levels of digital education in the Member States. Evidence from the 2018 OECD PISA exercise showed that many low-income households did not have access to computers. Eurostat figures for 2019 indicated that broadband internet access varies significantly across the EU, from 74% of households for the lowest income segment to 97% for the highest income segment. Regarding teacher training, the International Study on the Teaching-Learning Process initiated by the OECD in 2018 showed that only 39% of teachers in the EU felt well or very well prepared to use digital technologies in their daily work, with differences between Member States.

In recent decades, there have been many initiatives and investments in education technology and the development of digital skills. Despite progress and excellent examples of innovation, these initiatives have often been short-lived or on a limited scale and have had a marginal effect at the system level. This may be due, in part, to the fact that the potential for digitizing education has not been widely seen and understood. The crisis caused

1 Ioan-Gheorghe Rotaru, *Om-Demnitate-Libertate (Man-Dignity-Freedom),* Cluj-Napoca, Risoprint Publishing House, 2019, p. 271.

by the COVID-19 pandemic[2] put us for the first time in a situation where there were not many options available to provide education and training outside of digital technology. I learned a lot, and many teachers, students and parents faced a steep learning curve. At the same time, the pandemic also exposed the shortcomings that need to be addressed in order to successfully integrate digital technologies into education and training systems.

Efforts to control the COVID-19 epidemic have led to the closure of buildings, campuses and other places of education and training and to a forced shift to emergency digital education. These urgent modalities have included the widespread adoption of online and distance learning (For a glossary of terms used, see the Commission staff working document accompanying this document).

In the first Digital Education Action Plan, adopted in 2018, the EU addressed digitalisation in education through a series of measures *(The first Digital Education Action Plan was adopted in January 2018 as part of the vision to establish a European Space It included 11 actions).*

The Action Plan will support the goal of the Skills Agenda to ensure that 70% of people aged 16 to 74 have at least basic digital skills by 2025. The new Action Plan also supports the objectives of the recently adopted proposal by the Council. Commission Recommendation of the Council on Vocational Education and Training (VET) for Sustainable Competitiveness, Social Equity and Resilience, with a particular focus on digital transformation in the vocational education and training sector.

The action plan can benefit from the Erasmus program, the European Social Fund, the European Regional Development Fund and smart specialization policies, the European Interconnection Mechanism, the Digital Europe program and the Europe Horizon program. In addition, the Action Plan is part of the EU's response to the crisis caused by the COVID-19 pandemic, to direct Member States to prioritize funding for digital education under the Recovery and Resilience Mechanism, in which flagship investments are retraining and retraining. , as well as the stimulation of very high capacity broadband connectivity, but also in other instruments of cohesion policy.

2 Ioan-Gheorghe Rotaru, "Spiritual Lessons observed through the Coronavirus Crisis", *Dialogo. Issue of Modern Man*, vol.6, nr.2. 2020, Publisher: EDIS - Publishing Institution of the University of Zilina. Powered by: RCDST (Research Center on the Dialogue between Science & Theology), Ovidius Univesity of Constanta. Romania, pp. 71-82.

Methodology of the research

In order to underpin the research methodology, the classical observation and examination instruments, research methods based on the basic principles of scientific research, namely: "competence, objectivity, truth, methodical, demonstration, correlation, evaluation of results, utility and psychomoral" (Ristea and Franc, 2013). It will use procedures based on factual analysis, intensive documentation at the level of domestic and international literature, using the databases and the scientific material existing in the endowment of the libraries of specific institutes in Romania and internationally.

The methodology of the paper has as direct instruments the collection of data and information from the literature and from the existing practice in public and private institutions, but especially scientific articles published on specialized research networks (Research Gate, Academia. edu, etc.), articles published in different journals, relevant books in the field of reference, legislation, analyzes and studies, official documents of various tax bodies, tax documents and interactive database of the National Bank of Romania, other relevant sources identified at the libraries: the European Commission, OECD, published annually, data to be processed in order to be able to provide a general and analytical picture of the most important changes taking place in the European Union as a whole, but also globally - considered to be representative of the understanding of the phenomena studied, and especially in Romania.

The information support of the research was provided by the monographs, books, scientific papers, materials of the scientific conferences, the research scientific papers, as well as other materials, which are presented in the scientific papers and publications on the official pages of national and international research institutes, international financial institutions (research centers), etc.

Results and discussions

The pandemic brought to the fore the online learning process, and the tools to support the process developed very rapidly during this period. However, after an experience of over a year with this totally different process and with which both teachers, but especially students were used to working,

the change brought both beneficial elements, but also many elements that were debated. In a paper by Prof. Peter C. Herman is a professor of English literature at San Diego State University and author of Unspeakable: Literature and Terrorism from the Gunpowder Plot to 9/11 (Routledge, 2020), elements such as be: moving from face to face online eliminated the opportunity to learn *"from other students,"* and splitting into smaller groups or commenting on each other's writing did not replace the real thing. In a traditional classroom, "there is this level of intimacy that simply cannot be developed in an online setting.

The university experience is really about making human connections. One school noted with understanding that schools "are like small towns. There is much more than just classrooms and having online classes, which takes so much away from the student experience". However, there are also elements that made students prefer Zoom courses, such as: first, transforming the courses into Zoom meetings that began and ended at the same time as the regular class helped to *"restore a certain kind of balance and structure"* in their lives. One student said she was "*grateful for the normalcy of the recurring course meetings*." However, there are situations in which teachers think that it is possible that after the pandemic recedes and normalcy returns, school decision-makers will try to keep as many classes online as possible, being administrative issues that could lead to resource optimization. However, now, after the experience of the last year, both students and teachers want to return to the traditional class as soon as possible, now that they have both experienced. Certainly, online teaching has its place and it will remain a clear option, especially for students who would not otherwise be able to attend college and given the health risks, and the optional form of teaching can be in the strategy of universities as a plus given by digitization of educational resources.

Moreover, in order to know both the new teachers and the students the directions left in the official documents, it is necessary to start from this date, as well as from the statistical data that reflect the existing reality at a given moment. Therefore at European level, is supported the Digital Education Action Plan (2021-2027), is a renewed European Union (EU) policy initiative to support the sustainable and effective adaptation of the education and training systems of EU Member States to the digital age.

The Digital Education Action Plan

- offers a long-term strategic vision for high-quality, inclusive and accessible European digital education;
- addresses the challenges and opportunities of the COVID-19 pandemic, which has led to the unprecedented use of technology for education and training purposes ;
- seeks stronger cooperation at the EU level on digital education and underscores the importance of working together across sectors to bring education into the digital age;
- presents opportunities, including improved quality and quantity of teaching concerning digital technologies, support for the digitalisation of teaching methods and pedagogies and the provision of infrastructure required for inclusive and resilient remote learning.

To achieve these objectives, the Action Plan sets out two priority areas:

1. Fostering the development of a high-performing digital education ecosystem

This includes:

- infrastructure, connectivity and digital equipment;
- effective digital capacity planning and development, including up-to-date organisational capabilities;
- digitally competent and confident teachers and education and training staff;
- high-quality learning content, user-friendly tools and secure platforms which respect e-privacy rules and ethical standards.

2. Enhancing digital skills and competences for the digital transformation

This requires:

- basic digital skills and competences from an early age;
- digital literacy, including tackling disinformation;
- computing education;
- good knowledge and understanding of data-intensive technologies, such as artificial intelligence (AI);
- advanced digital skills, which produce more digital specialists;
- ensuring that girls and young women are equally represented in digital studies and careers.

Why is action needed?

Digital transformation has transformed society and the economy with an ever deepening impact on everyday life. However, until the COVID-19 pandemic, its impact on education and training was much more limited.

The pandemic has demonstrated that having an education and training system which is fit for the digital age is essential.

While COVID-19 demonstrated the need for higher levels of digital capacity in education and training, it also led to the amplification of a number of existing challenges and inequalities between those who have access to digital technologies and those who do not, including individuals from disadvantaged backgrounds.

The pandemic has also revealed a number of challenges for education and training systems related to the digital capacities of education and training institutions, teacher training and overall levels of digital skills and competences.

From July to September 2020, the Commission launched an open public consultation to gather the views and experiences of all citizens, institutions and organizations from the public and private sectors on the impact of COVID-19 on education and training, the related switch to distance and online learning and their vision for the future of digital education in Europe.

The public consultation highlighted that:

- almost 60% of respondents had not used distance and online learning before the crisis;
- 95% consider that the COVID-19 pandemic marks a turning point for how technology is used in education and training;
- respondents expressed that online learning resources and content need to be more relevant, interactive and easy-to-use and not depend on the financial resources of a town or municipality;
- over 60% felt that they had improved their digital skills during the crisis, with more than 50% of respondents wanting to build upon them.

With a total of more than 2,700 responses from 60 countries and 127 position papers submitted, the consultation helped to inform the Commission's proposal for a renewed Digital Education Action Plan,

which was adopted by the College of Commissioners on 30 September 2020.

The Digital Education Plan puts forward the following actions for the period 2021-2027:

Priority 1: Fostering the development of a high-performing digital education ecosystem:

- Action 1: Strategic Dialogue with Member States on the enabling factors for successful digital education;
- Action 2: Council Recommendation on blended learning for primary and secondary education;
- Action 3: European Digital Education Content Framework;
- Action 4: Connectivity and digital equipment for education;
- Action 5: Digital transformation plans for education and training institutions;
- Action 6: Artificial intelligence and data usage in education and training.

Priority 2: Enhancing digital skills and competences for the digital transformation

- Action 7: Common guidelines for teachers and educators to foster digital literacy and tackle disinformation through education and training;
- Action 8: Update the European Digital Competence Framework to include AI and data-related skills;
- Action 9: European Digital Skills Certificate (EDSC);
- Action 10: Council recommendation on improving the provision of digital skills in education and training;
- Action 11: Cross-national collection of data on student digital skills and introduce an EU target for student digital competence;
- Action 12: Digital Opportunity Traineeships;
- Action 13: Women's participation in STEM;
- Digital Education Hub.

Strengthening cooperation and exchange in digital education at EU level
The EU can play a more active role in:

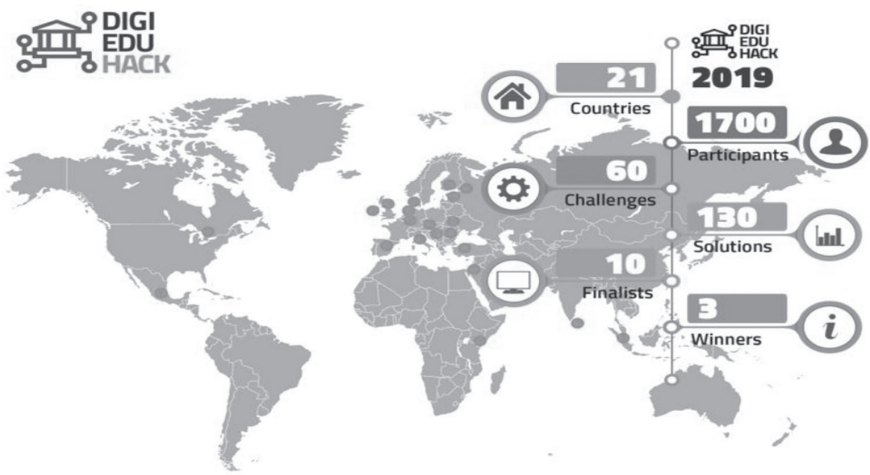
- identifying, sharing and scaling up good practice;

- supporting Member States and the education and training sector with tools, frameworks, guidance, technical expertise and research;
- fostering cooperation between all stakeholders by creating a new European Digital Education Hub to:
  - link national and regional digital education initiatives and actors;
  - support cross-sector collaboration and new models for exchange of digital learning content, addressing issues such as common standards, interoperability, accessibility and quality-assurance.

Strengthening cooperation and exchange in digital education at EU level

The Hub will serve as a think-tank, supporting the development of policy and practice, and monitor the development of digital education in Europe, including the implementation of the new Digital Education Action Plan. The Hub will also support user-driven innovation and engaging through the Digital Education Hackathon (https://digieduhack.com).

Figure 1: The first edition of the Digital Education Hackathon in numbers

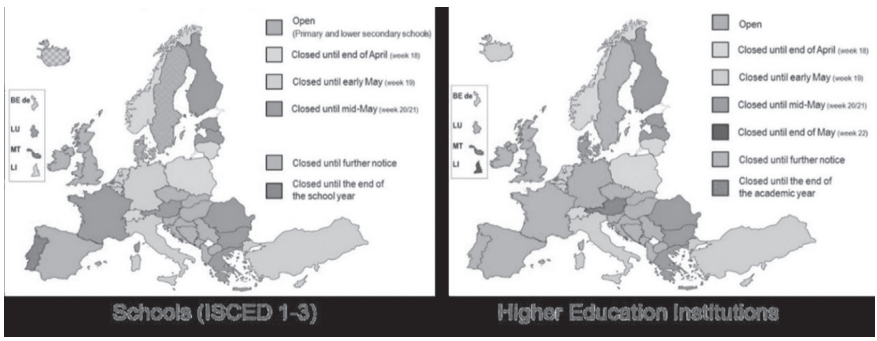


Source: DigiEduHack (2019)

Feedback from stakeholders was highly positive: participants perceived their involvement in the first Digital Education Hackathon very useful (94%) and confirmed their intention to take part in the next edition

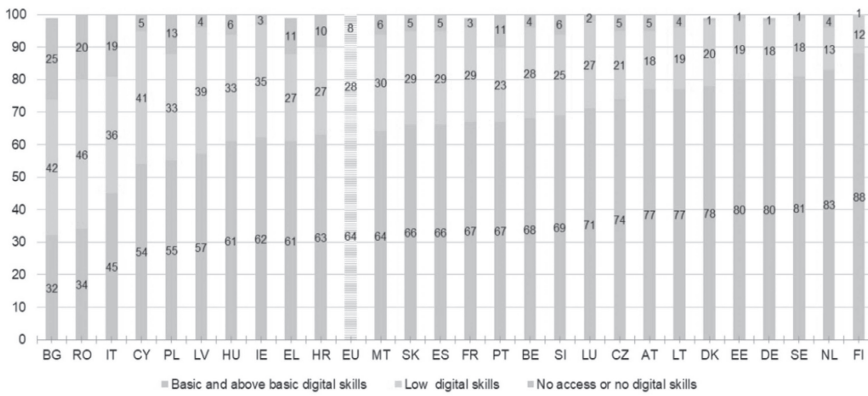
(77%); more than half of the hosting organizations (54%) expressed their willingness to further work on implementing the most innovative ideas. The Hackathon generated policy and technical solutions to problems identified by educational stakeholders on the ground.

Figure 2: Schools and higher education closure in Europe in April 2020



Source: EURYDICE (2020)

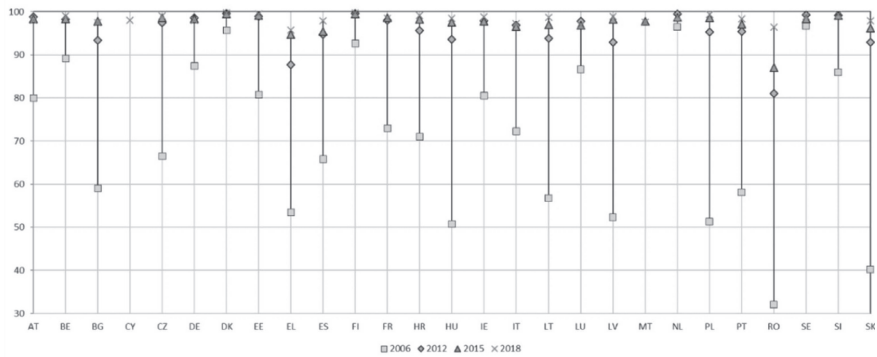
Figure 3: Level of digital skills in EU households with children



Source: Eurostat (2019) - Percentage of individuals (16-24) living in households with children (0-16) by digital skills level, country and EU level

Even though research efforts are underway, at present, robust data is missing on whether and how the distance and online teaching and learning practices put in place in response to the COVID-19 crisis ensured effective and equitable access to quality learning opportunities for all.

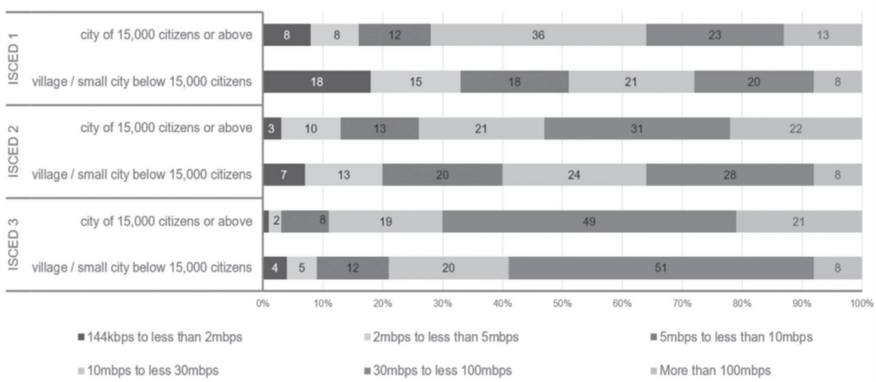
Figure 4: Students' access to internet at home



Source: OECD (2018, 2015, 2012 and 2006)

Reading notes: data by Member States not available for PISA 2009. Data not available for CY in 2006, 2012 and 2015 and for MT in 2006 and 2012. The original name of the variable according to OECD terminology is: "A link to the internet".

Figure 5: Internet speed according to location of schools

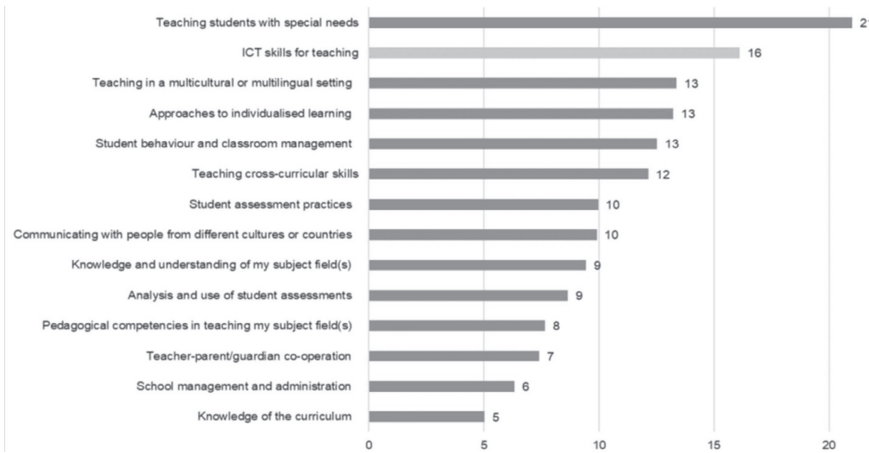


Source: Source: 2nd Survey of Schools (2019) – Percentage of students, all ISCED levels, EU level

EU broadband targets foresee that by 2025 all schools should have access to Gigabit internet connectivity (Gigabit internet connectivity is a broadband service with up to gigabit-per-second download speeds. It is typically delivered over fiber optic lines and provides speeds of 1,000Mbps, which is also referred to as 1 Gbps or Gigabit internet). These findings

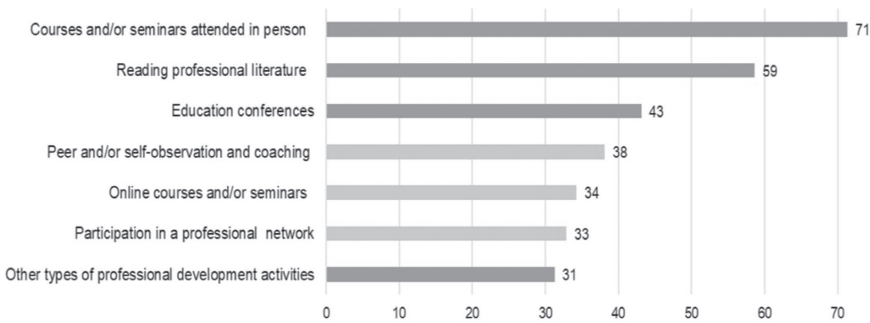
therefore highlight the need to further support school access to high-speed internet, as already recognized in the Communication on Shaping Europe's Digital Future (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Shaping Europe's digital future. COM(2020) 67 final).

Figure 6: Teachers' need for professional development



Source: OECD (2018) - Percentage of teachers reporting their need for professional development (EU-23)

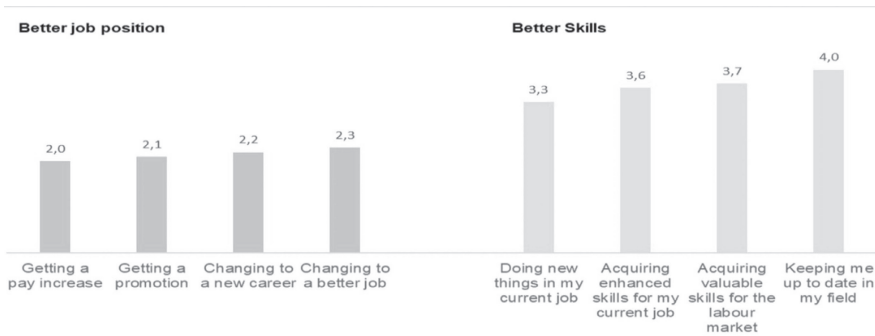
Figure 7: Type of professional development attended by teachers



Source: OECD (2018) - Percentage of teachers who participated in the various professional development activities (EU-23 average)

Exchanges between teachers and educators using digital tools in teaching and learning are taking place though a number of platforms for peer learning and professional development, but efforts are needed to further recognise and reward their use (European Commission(2019). 2nd Survey of Schools: ICT in Education. Objective 1: Benchmark progress in ICT in schools. Luxembourg: Publications Office of the European Union). For instance eTwinning, one of the largest and most dynamic educational networks in Europe, has involved 760,000 teachers from 200,000 schools since its creation 15 years ago. More than 100,000 projects have been run using eTwinning, involving students at all educational levels from 44 participating countries (36 European countries and 8 neighbouring countries) (Pateraki, I.,2018, Measuring the impact of eTwinning activities on teachers' practice and competence development - Monitoring eTwinning Practice Framework. Central Support Service of eTwinning - European Schoolnet, Brussels).

Figure 8: Workers' benefits from taking MOOCs (1-5 scale)

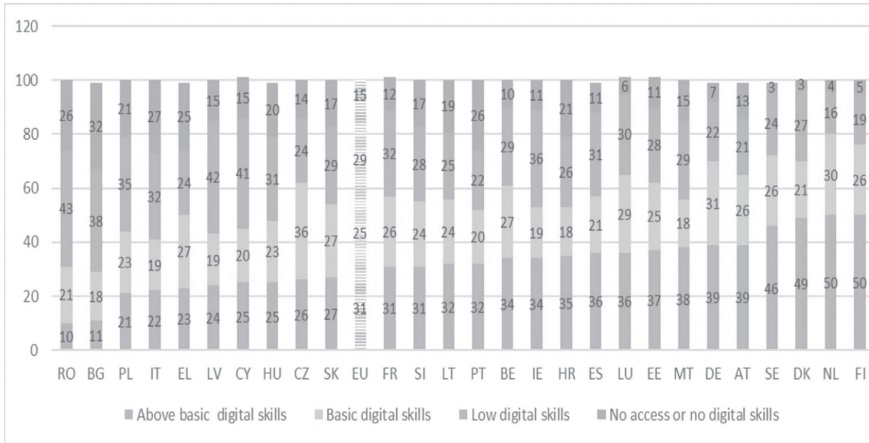


Source: JRC MOOC Survey (2019)

Scale of usefulness from 1 (not useful) to 5 (very useful). Average values. N=268.

Massive Open Online Courses (MOOCs), one of the more widespread forms of online learning, are recognised by job seekers and workers as an effective tool for acquiring the skills needed in the labour market and for keeping them updated .

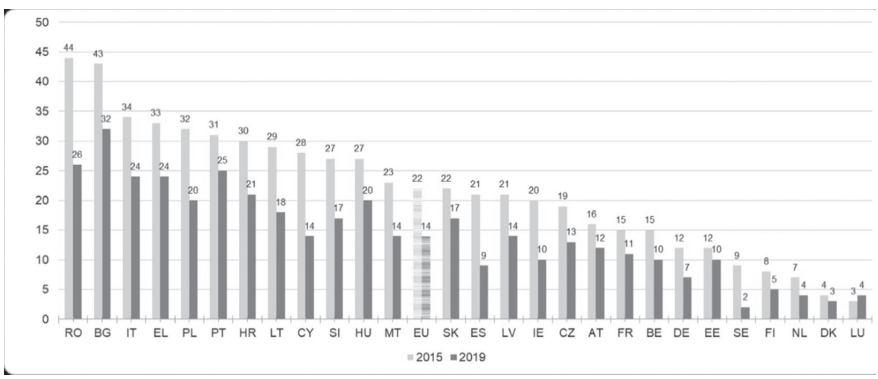
Figure 9: EU population digital skills



Source: Eurostat (2019) – Percentage of individuals, by digital skills level

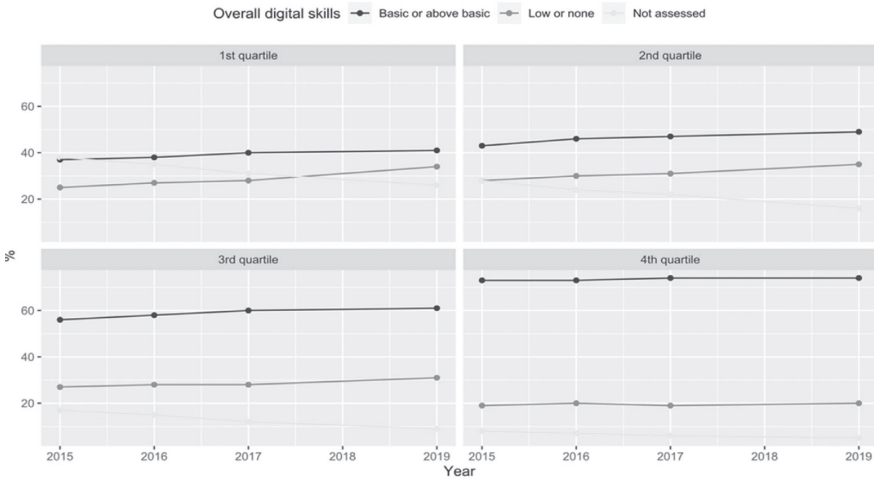
Major disparities still exist between Member States: the share of people with basic or above basic digital skills ranges from 29% in Bulgaria and 31% in Romania (despite noticeable progress in both countries) to 80% in the Netherlands and 76% in Finland.

Figure 10: Decrease of individuals not using internet



Source: Eurostat (2019) – Percentage of individuals not using internet in the last 3 months

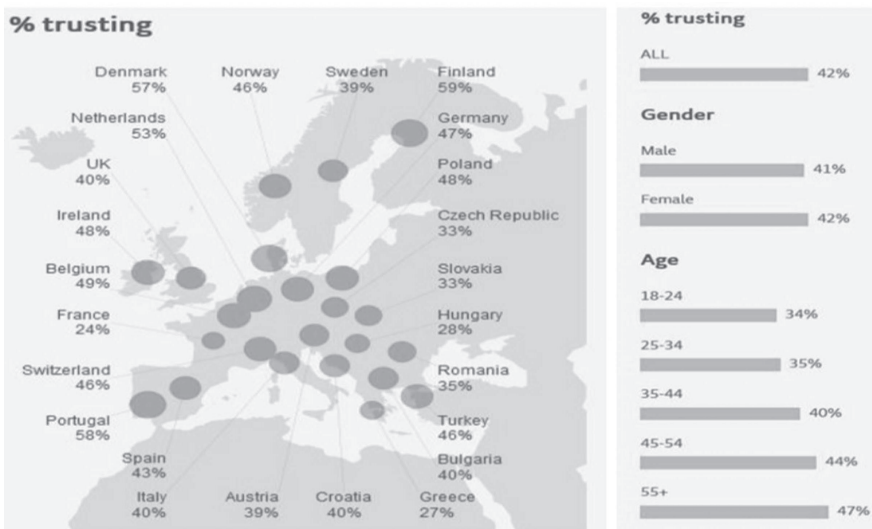
Figure 11: Level of digital skills in the EU by household income



Source: Eurostat (2019) – Individual level of digital skills by household income

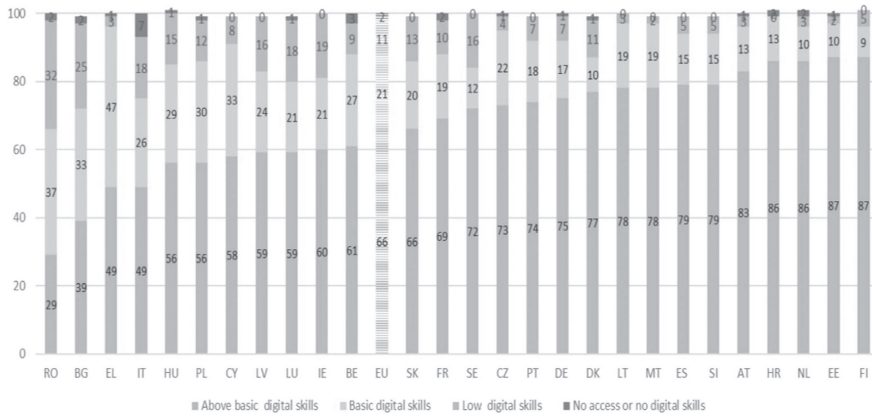
Chart based on aggregate data for EU27. Data is available for all Member States, except for Denmark and Sweden in 2015.

Figure 12: Percentage of trust in the news



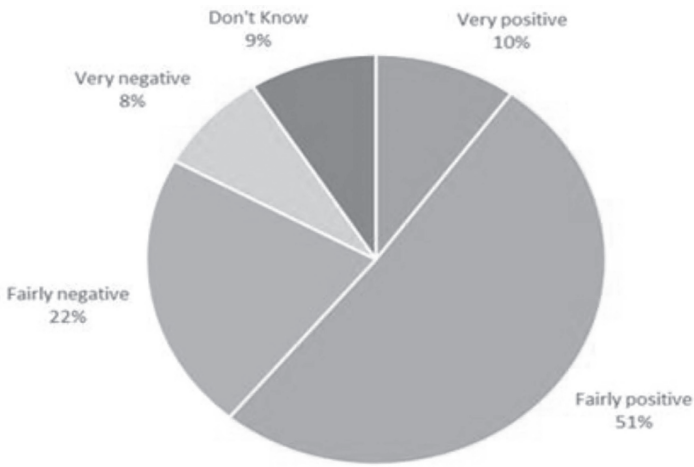
Source: Reuters Institute (2019)

Figure 13: EU students' digital skills



Source: Eurostat (2019) - Percentage of students, by digital skills level

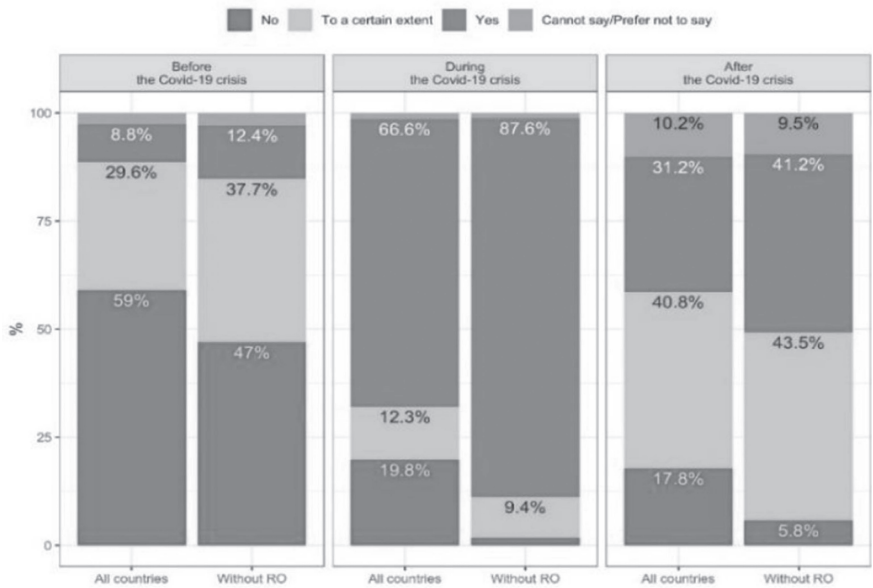
Figure 14: Views on robots and AI among citizens



Source: Eurobarometer (2017)

As AI systems rapidly evolve, with applications in many different areas, there is a growing and pressing need not only for professionals but also for citizens to have basic understanding of AI to engage positively, critically and ethically with this increasingly pervasive technology (https://ec.europa.eu/digital-single-market/en/news/elements-artificial-intelligence-course-gives-basic-introduction-ai).

Figure 15: Use of distance and online learning before, during and after the COVID-19 crisis



Source: Open public consultation on the new Digital Education Action Plan (2020)

Conclusion

According to a study by the European Commission, Resetting education and training for the digital age, the crisis caused by the COVID-19 pandemic has led to the widespread use of digital learning practices in education and training within the EU. However, there have been many voices in several Member States stating that the difficult circumstances of the pandemic have meant that this has been done quickly and often unplanned. Measures implemented by Member States and institutions to ensure the continuity of education have ranged from television lessons to online learning management systems or training using simulations. Approaches varied from country to country and within the country, but also between levels and sectors of education and training. This reflected the different levels of digital maturity in different parts of the system. The main areas of interest of those publicly consulted on the measures adopted by states during this period were the ways to ensure access, equity and inclusion. They were concerned about the emergence of digital divide.

People with disabilities also reported difficulties: on the accessibility of digital technology and educational materials; availability of assistive technology; technical assistance provided to students with disabilities and teachers' competence on disability and accessibility issues.

Adult education service providers have seen dropouts by a large number of learners, in some cases up to three-quarters of the group. In some countries, regional or local authorities have provided digital equipment and tools to adult learners and providers. Although helpful, these measures were not sufficient for the significant needs of the sector. Some providers have had to close all activities for several weeks or months, especially in cases of on-the-job learning, as this requires physical presence.

EU Member States should encourage the trend of recent months, with a view to developing a high-quality, accessible and inclusive digital teaching, learning and assessment system. In particular, Member States should make full use of the European Union's Recovery and Resilience Mechanism to adapt their education and training systems to the digital age. This will help ensure that all Europeans, whether they live in urban or rural areas, on the outskirts or in the capital, and regardless of their age, have the digital skills they need to live, work, learn and to thrive in the 21st century.

Transforming education and training systems is an essential part of the vision of a Europe prepared for the digital age.

Making the digital leap in education and training will be vital for citizens to reach their potential without leaving anyone behind. It will also be essential to demonstrate the efficiency, relevance and legitimacy of education and training systems in preparing - and shaping - the future.

The European Commission supports the *Digital Education Action Plan* as a basis for cooperation and joint action to address the challenges and opportunities of education and training in the digital age.

Relevant elements of the Report ***Thinking Higher and Beyond: Perspectives on the Futures of Higher Education to 2050*** publishing in 7 May, 2021/ https://www.iesalc.unesco.org/en/2021/05/07/launch-of-the-report-thinking-higher-and-beyond-perspectives-on-the-futures-of-higher-education-to-2050/

- purposes and spaces-times of education: shifting demographics and human mobility; and the uncertain future of work. Shifting demographics and human mobility Demographic shifts underway and projections

for 2050 also have considerable implications for the organization of education. Extended human longevity could mean that in some areas four generations will be co-living in the same space-time in a way not ever seen in history. Aging populations will be common in some regions; a massive youth bulge will be the defining characteristic of others, namely in Africa. Growing human mobility, together with forced migration—especially climate migration—have many potential implications for how education is organized, who learns, when, where, what, and in what languages. Adult education, for instance, may need to be entirely rethought; lifelong learning will be reshaped when traditional human life-stages take on new and varied contours across cultures. The uncertain future of the world of work Transformative disruptions are emerging in the world of work that will have massive, yet-unknown effects. Technological advancements, particularly around artificial intelligence and automation, will create new jobs and will complement and augment the capabilities of workers in existing jobs. Some jobs will be lost, with uneven impact across sectors and areas of the world. Increasing pressure to green economies, close gender gaps, and address global inequalities are critical emerging labor market issues. Already the rise of "gig" economies is changing the relationships between education and employment by altering traditional credentialing structures. What the economic world of 2050 will look like is a very open question in terms of what will happen with underemployment and precarious employment and whether the informal economy will assume even greater significance for billions around the world. A reexamination of the importance of care work and discussions of enhanced welfare provisions or universal basic incomes could be transformative disruptions. Traditional pathways connecting education to work may have to be reinvented. A broader reconsideration of what is meant by economic well-being and how education can support it may be necessary. The demographic shifts deserve very special attention, as they will inevitably reconfigure the landscape of education and the communities and publics that need to be taken into account. Issues related to the future of work, are at the heart of school to work transition and will need to be deeply rethought in the light of realities of work that are likely to be radically different in 2050. Finally, to close Part 1, the Commission focuses its attention on two issues of the greatest importance and which directly affect ed-

ucation: radical uncertainty about governance and democratic participation; and the need for intellectual decolonization and epistemic diversity. Radical uncertainty about governance and democratic participation Governance crises and the democratic backsliding currently seen in many parts of the world create radical uncertainty in the political domain. The acceleration of prejudice and discrimination, authoritarianism, and infringements on the freedom of expression all have great consequence for an

- education rooted in human rights, citizenship and civic participation at local, national and global levels. At the same time, there is, in many areas, increasingly active citizen mobilization and activism. The unknown trajectories of these political transformations will be with us at least for several decades—with many implications for education, both because these disruptions will shape educational agendas and because what occurs both in regard to educational access and in curriculum and pedagogy will, in turn, shape political transformations around the globe. Intellectual decolonization and epistemic diversity How cultural diversity and knowledge epistemologies will encounter one another in the future remains a dynamic, open question. The Commission can identify a set of key principles intended to provide guidance (for example, an imperative to sustain diversity, not merely include it). However, the Commission also recognizes that it is not possible to know precisely how this will all unfold. Will social justice and anti-racist movements force societies to profoundly rethink the ways they organize themselves? Will the dominant languages of instruction shift and the languages used in students' homes become more favored in education? These questions have great bearing on the possible reimagining of curricula and teaching based in non-majoritarian points of view, alternative traditions and indigenous ways of being and knowing. The longstanding grounding of UNESCO's humanistic approach in commitments to pluralism, cultural heritage, and indigenous languages is a reminder that these are not entirely new concerns. Nonetheless, the Commission perceives ongoing conversations about decolonization, reparative futures, and how to settle truth vs "fake news" claims as a critical, open, and transforming category of disruption that has many implications for human development and will fundamentally influence—and be influenced by—what occurs in the domain of education over the next decades. These two aspects

will be central to the writing of the report and its recommendations. Theworlds of education in the future must be able to respond to all these emergent transformations—and must seek to shape them. These trends and disruptions underline the urgency of rethinking the ways in which we understand and organize education. Education cannot do it alone. But, to understand the limits of education is, at the same time, to recognize all its potential. Each of these issues needs an appropriate educational response, a task the Commission will explicitly address in Part 2 of the Report. It is in this section that the Commission defines its visions for the futures of education and advances concrete proposals to translate them into policy and practice. 2. Rethinking Education towards 2050 Education across the globe today falls well short of our aspirations for ways that schools and learning broadly can support wellbeing and equity for all, and a healthy relationship with the planet. Thus, we must ask: have our current education systems reached the limit of their possibilities? Do our difficulties lie in the very ways education itself is organized? Do some of our challenges in fact stem from what and how we educate? The Commission presents concrete proposals in response to these questions in this central and most extensive part of the Report. The Commission considers that a new "social contract for education" must be based on the defense of education as a public and common good. The Commission proposes commons-centered education to ensure overarching coherence to efforts at improvement and change. The transformation of education must be built on defending and expanding the inherited legacy of public education and the teaching profession. To innovate is not only to discover "new things". The new can be a renewal of heritage that is tried and true. In many areas it is urgent to resist changes that jeopardize human dignity and rights, democracy, equal opportunities and equity. In other cases, regeneration calls for us to resume old battles, for a public and democratic education, and for a school of cooperation and creation that is capable of welcoming and developing all human beings, in their diversity, regardless of who they are and where they come from.

- The proposals made by the Commission focus on three areas:

  (a) the place of education in wider society,
  (b) the organization and governance of education, and
  (c) the content and methods of teaching and learning.

The place of education in wider society: strengthening a common public education This first area of focus is dedicated to the new landscapes of education. For two centuries, educational policies and approaches focused on the organization and management of education systems comprised of institutions. We now need to think about education in a much broader perspective, within the framework of a wide range of connections, spaces and times. It is this idea of an education that goes beyond institutional dimensions that defines this first area. In this context by public education the Commission does not refer solely to state-sponsored schooling. Public education must be seen, above all, as a way of reinforcing our common belonging to the same humanity while valuing differences and diversity. Learning and studying together with others is the best way to promote a life in common, a convivial society. For that, we need a public education that brings us into dialogue with the unknown. To build a common public education is to call for a broad public sphere of discussion, engagement, and action around education. A coherent sense of purpose in education only comes when something common arises in a public space. This common public education will only exist with strong social participation and a robust capacity for deliberation. It is not just a matter of consulting "stakeholders" but of publicly organizing collective decision-making processes on education. This requires the presence and involvement of all who are concerned with education. As many are aware, a broad understanding of public education considers learners of all ages and learning in all areas of life and, for example, encompasses museums, libraries and community facilities, sports, theatre, science centers and cultural productions. Education that brings together

- diverse human beings in a public space is one of the best tools available for forming and realizing common purposes. For example, when thinking about the place of *education in wider society with a horizon of 2050*, it is necessary to devote attention to new policies and practices for "adult education", as we consider projections that human lifespans will regularly exceed 100 years. The Commission bases its perspective on the need to renew and rebuild new educational ecosystems in which it is possible to study, work and learn together. Education is the place we come together to share knowledge, to think together, to learn together, to encounter difference. The Commission sees a vital need for many

kinds of educational institutions including schools and universities to be sure, but also libraries, museums, community radio, public access television, spaces of the digital commons—as well as institutions not even dreamed of yet. In this institutional diversity, which extends to informal and nonformal education, we must find answers to old and new problems. As community centers, schools can offer powerful supports for self-reliance and for cultivating ecologically sustainable relationships with nature. Most important is that the school environments foster social relationships. Education and learning are about human interactions, dialogue and exchange. Self-education is important, but it is not enough. What we know depends, in large part, on what others know. It is in these relationships and interdependencies that education occurs. Human beings learn, but human beings are also capable of being taught—this beautiful dynamic, which connects us to one another and also intergenerationally, must never be forgotten. Imagining new educational ecosystems implies reinventing architecture, curriculum and pedagogy. School buildings should be designed or remodeled with the same boldness and creativity with which they were first invented in the 19th century. New educational ecosystems must allow students to have experiences that they would otherwise not be presented with. It is for this that schools exist. It is this that distinguishes schools from home learning or learning in digital spaces. In offering this defense of schools, and the specificity of the work that is done within them, the Commission does not ignore the importance of links between schools and other social spaces and other educational institutions. Educational work will need to be increasingly carried out through these connections and articulations. New inclusive educational eco-systems will not appear spontaneously. Teachers, with their professional knowledge and experience, have an essential role to play in creating them. With the same determination that built the school model in the 19th century, we now have to invent new educational institutions and environments. And we need to examine the governance systems and structures of education, respecting the importance of democratic participation. Fortunately, all over the world, tens if not hundreds of thousands of teachers have advanced in these directions. Their work needs to become better known and better supported. Inclusion is to be found through this diversity, and should be a guiding design principle. The content and methods of

teaching and learning: fostering knowledge co-construction and pedagogical commoning We need to welcome different ways of thinking and being in the world, particularly those that have been historically marginalized. In this sense, thinking to the future must involve some repair of the past, a decolonization of the curriculum, and the unlearning of any number of things that have contributed to our current challenges. In this regard too, the Commission puts forwards a view of education as regenerative. In addition to traditional disciplines, the curriculum has to encompass the major themes and problems of the world and develop itself through research and learner-driven projects. In addition to traditional skills, the curriculum must also integrate critical thinking and all that is needed to support citizenship and democratic participation on local and global scales. The principle of reciprocity is central. Empathy, as the ability to put ourselves in another's place with full affective openness, is a fundamental element of education. A curriculum is never organized with "completed knowledge", but rather with knowledge that is always under review and being updated. This awareness should lead us to teach all subjects as if they were heritage and part of an intergenerational conversation—knowing that students will contextualize and give new meaning to their learning, and this way further the continual renewal of the world that education allows. The Commission sees a curricular and pedagogical future that will both shape and be shaped by digital technology. A wide range of competencies feed into this, including interpersonal, communicative, team-work cooperation, coordination, empathy, perspective-taking, trust, service orientation, conflict resolution, negotiation. Again, we do not need to completely invent afresh. Excellent examples of all educational work in these directions are readily at hand and needs to be encouraged. Fundamental changes in curriculum and pedagogy are necessary if we are to build a regenerative education for a common humanity. Teachers from early childhood through adult education will face new roles and challenges—and will need to engage in much collaborative work, both within the profession and in relationship with other groups and institutions. Effective teaching needs to be understood as the result of collaboration, rather than the sole production of the individual educator. Needless to say, this implies a reinforcement of the importance of the teaching profession and increased attention to teacher education and professional

development. Key roles for higher education Higher education has a key role to play in strengthening the knowledge and educational common. Universities house much of the world's potential for knowledge and research production. Higher education institutions currently serve an estimated 200 million students, a not insignificant portion of the world's population. All projections point to a continuous growth in the coming decades. Universities have a noble tradition of supporting the common. Academia has treated its scholarly productions as shareable goods for centuries. Open science and open access find a ready ally in higher education institutions. Inter-university cooperation and internationalization efforts are examples of openness with great promise for contributing to the global common. A final point is the decisive significance of universities in producing research and enabling the circulation of knowledge, which both supports educational policymaking and strengthens the school and pedagogical innovation.

- The fact that this open and collaborative scientific movement suffered enclosures after the discovery of vaccines does not diminish the initial dynamic and only alerts us to misappropriations that occur when we shift away from a focus on the global common good. In education as in health, one individual's wellbeing is tied to all others. There is much that education can learn from international cooperation in the field of health. Like the coronavirus, ignorance, misinformation and lack of education are "contagious". It is not possible to build a just, sustainable and peaceful world if all human beings, regardless of their origins, cultures and conditions, do not have access to quality education. We depend on all of us. This awareness must be the foundation for strengthening international cooperation in education and for strengthening the public funding of education, both domestic and international. 3. A Manifesto for Public Action This part of the Report will consolidate the main messages, presenting a summary of the key recommendations. The section is designed to be able to be autonomous, echoing elements from the introduction to provide the starting point, rationale and framing of the Report, so that it can be published and circulated as an overview of the Report. In essence it constitutes a manifesto for public action and regenerative education, written from the viewpoint of an extended humanism that captures a necessary rethinking of human relationships with the planet, one another and technology, and presents a case and strategy for building education as a public and common good.

- Intergenerational debate and action on the futures of education—making recommendations on social dialogue, futures literacy, and collective "thinking together to act together" work. This invitation is consistent with UNESCO's entire initiative on the futures of education, which aims to catalyze ongoing debate and action on the futures of education that will help us all collectively, in current and future generations and in dialogue with our past, shape the future of humanity and the planet.

The important documents provided in the two supporting instruments of both the European Commission and the UN report are defining and relevant for the learning model both in academia and in lifelong learning under the aegis of the concept of long life learning. Therefore, we appreciate that in addition to the compulsory curriculum at the level of each discipline, it is our duty as teachers to adapt to current challenges and create new teaching and learning models for our students, so that they have knowledge especially in the context of future professions. , where the elements of digitization and technology are part of them. Moreover, regardless of the learning tools used to have permanently in our minds and consciousness The right to higher education is enshrined in Article 26 of the Universal Declaration of Human Rights which states that "Higher education shall be equally accessible to all on the basis of merit" (United Nations, 1963).

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