3rd September 2020

Attn Ms Themis Christophidou
DG EAC
European Commission
1049 Bruxelles
Belgium

Dear Ms Christophidou,

The PwC International Ltd (PwC), on behalf of the PwC network, welcomes the opportunity to respond to the consultation on the Digital Education Action Plan.

We warmly support the Commission's plans to further promote the adoption of digital learning tools and enhance Europe's digital skills. At PwC, we initiated ourselves, as well as contributed to multiple large-scale initiatives (including the Commission's assignments) supporting the abovementioned ambition and developed detailed recommendations and measures that relate to the upcoming Digital Education Action Plan.

Digitisation vs. digitalisation

In the context of digital education, a distinction needs to be made between the two core terms, namely *digitisation* and *digitalisation*. Digitisation here refers to converting the existing physical aspects of education into the digital ones (e.g. developing courses in an electronic format). Digitalisation, in turn, implies reimagining the current education and training processes with the help of digital technologies. The key purpose of digitalisation in education is not just to 'go digital', but to add value and increase effectiveness through modern technologies. Digitalisation is thus far more than digitisation. In fact, digitisation may not even need to be a part of a broader educational transformation enabled by digitalisation.

Digitisation of education and training systems

Our extensive experience of working with education and training providers, supporting structures and policy makers at all levels shows that many of the current initiatives are focused primarily on the digitisation of education. While this may sometimes be an important first step in the journey towards digitalisation, it needs to be justified based on critical assessment and reasonable thinking. It is crucial to look not only at the benefits (e.g. cost-effectiveness, better reach, high scalability), but also at the potential risks and challenges related to digitisation. For example, digitisation of outdated content and ineffective approaches is not a solution. Furthermore, some of the non-digital approaches that currently prove to be effective may lose their effectiveness in a digitised form. To this end, the digitisation of education needs to be performed with great caution, based on a thorough research.

Special attention needs to be paid to assessing the impact and effectiveness of digitisation of education on each target group, based on the outcomes of increasingly growing research base. These include emerging research on the effects of digitisation on cognitive abilities in children and adults; research on the effects of digital learning on social skills and physical health; research on digital addiction in children and adults; research on poor impact of microlearning etc. More research is needed on the abovementioned and related topics.

Based on the above, careful consideration is required when assessing which elements of the education and training systems actually need to be digitised, and which ones should be better continued in a more traditional or blended form.

Implications of COVID-19

The developments of COVID-19 significantly accelerated the digitisation of the current education and training systems. From the perspective of data gathering, it is a valuable experience for analysing lessons learned and assessing impacts. There is a need to go beyond assessing the scale of achieved digitisation and associated challenges, and also cover the actual impact of such accelerated change on the quality of education and training. For example, in some cases in the future, digitised solutions could be used as a back-up option for situations like COVID, while more traditional or blended approaches can still be used as 'the main version' if they prove to be more effective.

Shifting towards digitalisation of education and training systems

Digitalisation, in contrast to digitisation, is a broader concept, and it implies improving the quality of education and training systems through the use of digital technologies. Digital technologies here are enablers rather than purposes. The purposes, in turn, relate to developing intellectually, emotionally and

socially intelligent people for future-proof Europe. Digitalisation implies long-term thinking and creating new opportunities in education that better serve the abovementioned purposes. Examples of relevant strategies and approaches include among others:

- Preparing students for lifelong learning, i.e. making sure the educational offer develops the ability and readiness of students to engage in continuous learning throughout their professional lives;
- Offering 'big picture' education, i.e. keeping in mind the bigger picture of how the educational offer fits into the overall learning trajectory and labour market;
- When developing curriculum goals, considering not only market/company needs (usually referred to as 'employability'), but also societal needs (such as sustainability, ethics) and particularly learner's own needs or individual characteristics (which implies respecting diversity of learners' contexts and capacities);
- Viewing students as change agents and actively engaging them in curriculum development and implementation;
- Shifting from knowledge towards competencies that students should acquire for their personal development and for employment and inclusion in a knowledge society; adding a dimension of Mindsets, e.g. Growth, Innovation, Ethics and Safety;
- Applying cooperative work-based, project-based or problem-based learning, i.e. stimulating students to work on challenging real-life problems for which there are no established answers; encouraging students to contextualise their theoretical learning in relation to how it would be useful in the world around them, improving apprenticeships and traineeships opportunities;
- Paying special attention to the questions of ethics, social inclusion, diversity and sustainability (e.g. incorporating the Sustainable Development Goals (SDGs) into the curricula);
- Teaching students to be mindful of their safety and ergonomics at work, and specifically about the necessity of maintaining good physical and mental health, and the possible consequences of risk exposure (including what can be done about it) etc.[1].

Digital aspects do not always have to be at the core of these approaches, but can rather be used to enhance their effectiveness. From that perspective, it would be more relevant to move from the term 'digital education' towards 'education for the new world', where 'digital' is one of the components.

The concept of digitalisation in the way it is defined above is new to many education and training providers. At the same time, our experience suggests that there are already plenty of promising good

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[1]For more information, please refer to PwC (2020) "Curriculum Guidelines for Key Enabling Technologies (KETs) and Advanced Manufacturing Technologies (AMT)", prepared for the European Commission, contract nr EASME/COSME/2017/004), and PwC (2019) "Digital skills Rethinking education and training in the digital age: Digital skills and new models for learning", Public Sector Research Centre

practice examples of digitalisation. Also here, more research is needed on systemising good practices, analysing impact and facilitating the transition towards digitalisation.

Conclusion

We invite the Commission to integrate this distinction between digitisation and digitalisation into digitalisation rather than digitisation. While digitisation can (but not necessarily have to) be part the upcoming Digital Education Action Plan. If we are to truly advance Europe's education and training systems, we need to approach the topic of digital education from the perspective of of digitalisation, it needs to be performed cautiously based on empirical research. Digitalisation, in turn, implies seeing the bigger picture, having a long-term orientation, and, most importantly, serving the purpose of fitting the education and training system to the needs of the 21st-century Europeans.

The PwC network will be ready to continue providing our support to the Commission for tackling this strategically important challenge. We would be happy to discuss this further with you. If you have any questions regarding our response, please contact Laurent Probst at laurent.probst@pwc.com and Dr. Kristina Dervojeda at kristina.dervojeda@pwc.com.

Yours sincerely,

Michael Stewart
Global Leader, Corporate Affairs and Communications

PwC IL is registered under number 60402754518-05 in the EU Transparency Register

Annex: Detailed suggestions for the Digital Education Action Plan

Below we provide our inputs regarding each of the specific elements of the upcoming Digital Education Action Plan.

Digital capacities for resilient education and training systems

The top priority measures we suggest include:

- Establishing communities of practice, where good practices and experiences can be exchanged by education and training providers themselves[2];
- Supporting Member State intervention both on infrastructures and processes, including significant changes in techniques, equipment and software, integrating digital tools into learning processes and finding the right mix between traditional learning and use of technology;
- Supporting initiatives aimed at upskilling teachers and promoting innovation in teaching (e.g. promoting technology-enabled learning; introducing school and teacher reward mechanisms for innovative approaches etc.);
- Promoting the selection of software solutions that are truly appropriate for the educational and training objectives[3] (e.g. adaptive learning systems).

Digital literacy and competences for the 21st century

We fully support the view of the Commission that digital skills imply the need to adopt not only to technological innovations, but also to emerging societal challenges (e.g. privacy and ethical issues, mental and physical health related to digitalisation etc.). Digital skills go beyond the ability to use digital technology to obtain, produce and share information.

Specifically, digital skills also imply the ability to solve complex problems, and critically process and evaluate (digital) information. Specifically, digital skills include information and data literacy, digital communication and collaboration skills (e.g. netiquette, managing digital identity, interacting through digital technologies), digital content creation, safety (e.g. protecting devices, personal data and privacy,

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[2]For more information, please refer to PwC (2019) "Promoting Online Training Opportunities for the Workforce in Europe", prepared for the European Commission, contract nr EASME/COSME/2017/001)
[3]For more information please refer to PwC (2019) "Digital skills Rethinking education and training in the digital age: Digital skills and new models for learning", Public Sector Research Centre; Fau, S, Moreau, Y., "Managing tomorrow's Digital skills: what conclusions can we draw from international comparative indicators?" Working Papers on Education no. 6, Paris, 2018: Unesco)

protecting health, well-being and environment) and problem solving skills (all based on DigComp 2.0 framework by JRC).

Therefore, the notion of digital skills and the corresponding implications for education and training should be addressed from a broader perspective, including also critical thinking in order to raise awareness against disinformation and fake news.

The Action Plan could consider ways of supporting digital skills self-assessment practices for teachers and enhancing the digital skills of teachers eg ICT training of teachers and training aimed at integrating ICT into teaching methods, so that digital technology is seen not solely as a goal per se but also as a vector for the development of other relevant skills (consistent with DigCompEdu for educators and DigCompOrg for educational bodies).

A trusted digital ecosystem of education content and tools

Following a demand-led approach and serving a highly diversified market requires systems that support just-in-time just-for-me learning solutions for vast numbers of individual learners and groups. Such learning solutions need to include feedback and ratings from learners so that the system can continuously improve, thereby attracting other learners and highlighting the content creators that were most appreciated and had the best outcomes.

Centralised platforms (i.e. a model of "video streaming of online training") can play a valuable role here by aggregating offerings from other smaller, specialised niche players, and offer structure and direction for learners. At the same time, such platforms on their own would hardly be able to deal with a desired level of customisation of the offer, stemming from the requirements of personal learning. While, by using AI-based solutions, such platforms would be able to achieve a high level of personalisation, the choice of the learner would still be limited to what the platform has to offer.

The development of the abovementioned platforms needs to be complemented by the creation and maintenance of effective learning ecosystems, catering the specific needs of individuals, groups, enterprises, value chains and clusters. Content developers need to form a prominent part of these ecosystems, building on close collaboration with all other key stakeholder groups, with a central role assigned to learners themselves. Such learning ecosystems could benefit from the offer of the centralised platforms, but would not be limited to those.

AI-augmented learning ecosystems and platforms need to facilitate access of learners to relevant personal learning solutions from any suitable possible sources. They would also need to include guidance, coaching, assistance, assessment, validation and certification of learning outcomes with developing

personal learning and career paths in connection with attractive job opportunities during the whole professional career[4]).

In line with the New Skills Agenda, supporting the development of skills intelligence tools at the territorial level and encouraging the use of skills intelligence by learning organisations is another crucial topic. Targeted and up-to-date skills intelligence is necessary at the local level in order to facilitate the stakeholder consultation and to define new job profiles in different sectors based on the specific skill sets required. These datasets can support placement services and qualification/curricula design, and they demonstrate the relevance of soft skills and ethical dimension of the labour market requirements, identifying needed competences, including transversal skills such as "adapt to change" and "work as a team"[5].

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[4]For more information, please refer to PwC (2019) "Promoting Online Training Opportunities for the Workforce in Europe", prepared for the European Commission, contract nr EASME/COSME/2017/001
[5]For more information, please refer to Cedefop, Skills-OVATE: Skills Online Vacancy Analysis Tool for Europe).

New Digital Education Action Plan
Public Consultation

> Fields marked with * are mandatory.

Introduction

Making digital transformation work for Europe's economy and society is a key priority of the European Commission, set out in 'A Europe fit for the digital age' strategy. Education and training play a key role in reaching this ambition and ensuring that everyone in Europe can live, work and thrive in the digital age.

The COVID-19 pandemic saw the widespread closure of school and campus buildings in an effort to curb the spread of the virus. More than 100 million learners, educators, education and training staff in Europe and around the world were affected. To ensure that learning, teaching and assessment could continue, digital technologies were used on a massive and unprecedented scale. For many educators, learners and families this has been a very new experience. While some educational institutions have reopened, others remain closed and uncertain as to how the next school and academic year will unfold. Some institutions have said they will teach at a distance until summer 2021.

In September 2020, the European Commission intends to update its Digital Education Action Plan and work further to promote high quality and inclusive education and training in the digital age.

The new Action Plan will reflect on the lessons learnt from the COVID-19 crisis and offer a vision for education and training that makes use of the opportunities that digital transformation brings, while addressing challenges and risks. The new Action Plan will be central to the Next Generation EU recovery period, supporting Member States, education and training institutions as well as citizens in their efforts to deal with the digital change.

To ensure that the new Digital Education Action Plan reflects the education and training experience during the COVID-19 crisis, the Commission is launching this public consultation.

We would like to hear the views of citizens, governmental and non-governmental organisations (international, European, national, regional and local) as well as of representatives from the public sector and industry.

You can respond to the public consultation in a personal or organisational/institutional capacity by filling in the questionnaire. At the end of the questionnaire you will also have the opportunity to submit a position paper if you wish to do so.

If you are under 18 years of age, please do not respond to the questionnaire yourself. Please ask your

parent/carer/adult family member to respond to the questionnaire instead. They will have an opportunity to reflect your experiences during the crisis in their responses.

Please do not include names or any other personal data of third person in the questionnaire. Please refrain from providing data on health.

The public consultation consists of four parts:

Part I: Questions about you
Part II: Questions on education and training during the COVID-19 crisis and the recovery period
Part III: Questions on your vision for digital education in Europe
Part IV: Submission of a position paper (optional)

If you have questions regarding this public consultation, please contact EAC-DIGITALEDUCATION@ec. europa.eu.

About you

*Language of my contribution
- ○ Bulgarian
- ○ Croatian
- ○ Czech
- ○ Danish
- ○ Dutch
- ● English
- ○ Estonian
- ○ Finnish
- ○ French
- ○ Gaelic
- ○ German
- ○ Greek
- ○ Hungarian
- ○ Italian
- ○ Latvian
- ○ Lithuanian
- ○ Maltese
- ○ Polish
- ○ Portuguese
- ○ Romanian

○ Slovak

○ Slovenian

○ Spanish

○ Swedish

* I am giving my contribution as

○ Academic/research institution

○ Business association

● Company/business organisation

○ Consumer organisation

○ EU citizen

○ Environmental organisation

○ Non-EU citizen

○ Non-governmental organisation (NGO)

○ Public authority

○ Trade union

○ Other

* First name

> Vittorio

* Surname

> Allegri

* Email (this won't be published)

> vittorio.allegri@pwc.com

* Organisation name

255 character(s) maximum

> PwC IL

* Organisation size

○ Micro (1 to 9 employees)

○ Small (10 to 49 employees)

○ Medium (50 to 249 employees)

◉ Large (250 or more)

Transparency register number

255 character(s) maximum

Check if your organisation is on the transparency register. It's a voluntary database for organisations seeking to influence EU decision-making.

> 60402754518-05

*Country of origin

Please add your country of origin, or that of your organisation.

○ Afghanistan	○ Djibouti	○ Libya	○ Saint Martin
○ Åland Islands	○ Dominica	○ Liechtenstein	○ Saint Pierre and Miquelon
○ Albania	○ Dominican Republic	○ Lithuania	○ Saint Vincent and the Grenadines
○ Algeria	○ Ecuador	○ Luxembourg	○ Samoa
○ American Samoa	○ Egypt	○ Macau	○ San Marino
○ Andorra	○ El Salvador	○ Madagascar	○ São Tomé and Príncipe
○ Angola	○ Equatorial Guinea	○ Malawi	○ Saudi Arabia
○ Anguilla	○ Eritrea	○ Malaysia	○ Senegal
○ Antarctica	○ Estonia	○ Maldives	○ Serbia
○ Antigua and Barbuda	○ Eswatini	○ Mali	○ Seychelles
○ Argentina	○ Ethiopia	○ Malta	○ Sierra Leone
○ Armenia	○ Falkland Islands	○ Marshall Islands	○ Singapore
○ Aruba	○ Faroe Islands	○ Martinique	○ Sint Maarten
○ Australia	○ Fiji	○ Mauritania	○ Slovakia
○ Austria	○ Finland	○ Mauritius	○ Slovenia
○ Azerbaijan	○ France	○ Mayotte	○ Solomon Islands
○ Bahamas	○ French Guiana	○ Mexico	○ Somalia

○ Bahrain	○ French Polynesia	○ Micronesia	○ South Africa
○ Bangladesh	○ French Southern and Antarctic Lands	○ Moldova	○ South Georgia and the South Sandwich Islands
○ Barbados	○ Gabon	○ Monaco	○ South Korea
○ Belarus	○ Georgia	○ Mongolia	○ South Sudan
● Belgium	○ Germany	○ Montenegro	○ Spain
○ Belize	○ Ghana	○ Montserrat	○ Sri Lanka
○ Benin	○ Gibraltar	○ Morocco	○ Sudan
○ Bermuda	○ Greece	○ Mozambique	○ Suriname
○ Bhutan	○ Greenland	○ Myanmar /Burma	○ Svalbard and Jan Mayen
○ Bolivia	○ Grenada	○ Namibia	○ Sweden
○ Bonaire Saint Eustatius and Saba	○ Guadeloupe	○ Nauru	○ Switzerland
○ Bosnia and Herzegovina	○ Guam	○ Nepal	○ Syria
○ Botswana	○ Guatemala	○ Netherlands	○ Taiwan
○ Bouvet Island	○ Guernsey	○ New Caledonia	○ Tajikistan
○ Brazil	○ Guinea	○ New Zealand	○ Tanzania
○ British Indian Ocean Territory	○ Guinea-Bissau	○ Nicaragua	○ Thailand
○ British Virgin Islands	○ Guyana	○ Niger	○ The Gambia
○ Brunei	○ Haiti	○ Nigeria	○ Timor-Leste
○ Bulgaria	○ Heard Island and McDonald Islands	○ Niue	○ Togo
○ Burkina Faso	○ Honduras	○ Norfolk Island	○ Tokelau
○ Burundi	○ Hong Kong	○ Northern Mariana Islands	○ Tonga

- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China
- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Cuba
- Curaçao
- Cyprus

- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia

- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Russia
- Rwanda
- Saint Barthélemy

- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Western Sahara
- Yemen

⊙ Czechia	⊙ Lebanon	⊙ Saint Helena Ascension and Tristan da Cunha	⊙ Zambia
⊙ Democratic Republic of the Congo	⊙ Lesotho	⊙ Saint Kitts and Nevis	⊙ Zimbabwe
⊙ Denmark	⊙ Liberia	⊙ Saint Lucia	

* Publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

⊙ **Anonymous**

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

◉ **Public**

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

☑ I agree with the personal data protection provisions

* In what capacity are your replying to this questionnaire?

⊙ In a personal capacity

◉ On behalf of an institution or organisation

* What type of organisation or institution do you represent?

⊙ Education and training institution (early childhood education and care, school, higher education institution, vocational education and training provider, adult learning provider)

⊙ Provider of digital tools and technologies for teaching and learning

⊙ Organisation representing providers of digital tools and technologies for teaching and learning

⊙ Academic/research organisation

⊙ Civil society sector/Non-governmental organisation/Voluntary organisation

◉ Private sector

⊙ Employers' association

7

○ Trade union

○ International, national or regional public authority or government

○ Municipality or other type of local public authority

○ Youth and youth work organisation

○ Career guidance/development service

○ Other (please specify)

* Is your main area of activity education and training?

○ Yes

◉ No

Education and training during the COVID-19 crisis and the recovery period

This section collects views on the move to distance and online learning during the COVID-19 crisis and expectations for the recovery phase.
This section refers to:

- **Distance and online learning during the crisis** - learning that took place remotely, away from school and campus buildings using different types of digital tools/internet (for example, digital platforms) or materials that are available via television, radio or printed materials

- **Digital education** – meaning the use of digital technologies for education and training, includes distance and online learning to replace or complement face-to-face interaction and the digital skills and competences that educators and learners need.

* 1.Which of the following measures to ensure continuity of education during the crisis have been implemented in your local area?
(choose all relevant)

☐ Full opening of education and training institutions (early childhood education and care, schools, higher education institutions, vocational education and training providers, etc.)

☑ Partial opening of education and training institutions (early childhood education and care, schools, higher education institutions, vocational education and training providers, etc.).

☐ Full closure of education and training institutions (early childhood education and care, schools, higher education institutions, vocational education and training providers, etc.)

☐ Distance and online learning in real time (for example, "live" online classes)

☑ Distance and online learning in own time (for example, watching videos of recorded lectures, consulting online learning materials, Massive Open Online Courses)

☐ Education and training/public authorities provided digital equipment/tools (for example tablets or laptops) to study from home

☐ Learning material was made available via digital tools, without the internet (for example, television).

☐ None of these measures

☐ Other (specify below)

* Were the measures taken to ensure the continuity of education and training during the COVID-19 crisis successful?

◉ To a great extent

○ Somewhat

○ Very little

○ Not at all

○ No opinion

Please give details.

500 character(s) maximum

> Education systems provided an immediate response to a crisis based on existing processes, human and infrastructural resources. This was not a planned and thought through transition but a quick shift, resulting in wide variety of educational quality. A more systemic approach needs to be taken for any long-term advancements

* 2. What did you need during the crisis period that was not available to you?

at most 5 choice(s)

☐ Request for cooperation from public authorities

☐ Request for cooperation from education and training institutions

☐ Opportunities to cooperate with other businesses

☐ Opportunities to scale existing business

☐ Opportunities to develop new business

☐ Copyright protection

☐ No opinion

☑ Other (please specify below)

Other (please specify):

100 character(s) maximum

We supported MS institutions with finding alternative ways to assess skills and competences

4. Can you give examples of tools that you/your organisation/institution/company have found particularly useful for digital learning, including digital platforms, massive open online courses, corporate training, etc?

500 character(s) maximum

*6. Countries are exploring different options for education and training for autumn 2020. One option is to mix face-to-face and digital education in the education process. What is your view about this option, considering students' learning needs?

- ○ Very positive
- ◉ Slightly positive
- ○ Neutral
- ○ Somewhat negative
- ○ Very negative

*What could be the benefits of mixing face-to-face and distance and online learning? (select all relevant)

- ☐ More flexibility – learning at own pace
- ☑ Face-to-face communication and interaction between learners and educators
- ☑ Face-to-face communication and interaction with peers
- ☑ Less screen time, more physical activities
- ☑ Improved mental health and well-being
- ☑ Ability to do practical work (lab work or other hands-on practical tasks)
- ☐ Opportunity to better support learners from disadvantaged groups (for example, those who do not have access to digital tools or internet at home)
- ☐ Better overview of the learning progress of learners
- ☐ Integration of innovative practices
- ☐ Allow for different forms of examination/assessment and feedback
- ☐ Other (please specify below)

*What about the barriers of mixing face-to-face and distance and online learning? (select all relevant)

☑ Lack of structure of the learning process

☐ Challenges for education and training institutions to ensure online safety

☑ Difficult for learners to adjust to this new ways of learning

☑ Difficult for educators and education and training staff to adapt

☐ Increased workload for educators and education and training staff

☑ Learners without access to suitable digital technologies are excluded

☑ Difficulty for parents/carers/family to combine work and schooling

☐ Other (please specify below)

Please give details.

500 character(s) maximum

> The real advantage of mixing face-to-face (contact) and distance learning reveals itself when we use them according to their advantages. There is no need for face-to-face support at learning knowledge bits, those can be acquired through distance learning. Some skills can be developed only through face-to-face contact, and some also through distance learning, and attitude is mostly developed through life experiences that often happen in human interactions

* 7. Did your organisation/institution/company take any steps to assess the digital skills and competences of its staff during the COVID-19 crisis?

Digital competences refer to the critical and responsible use of digital technologies for learning, work, and overall participation in society (Council Recommendation of 22 May 2018 on Key Competences for Lifelong learning (2018/C 189/01). These can include using digital devices, communication applications and networks to access and use information, collaborate and communicate.

◉ Yes

○ We wanted to, but could not find a tool or platform

○ No, but we had done it before

○ No, but we would like to

○ No, we are not interested

○ No opinion

8. Please select the relevant statement for the digital skills and competences of the staff in your organisation/institution/company.

	To a great extent	Somewhat	Very little	Not at all	No opinion

* The staff in my organisation/institution/company have the necessary digital skills and competences to work remotely.	◉	○	○	○	○
* During the crisis, my organisation/institution/company has taken steps to improve the digital skills and competences of the staff.	◉	○	○	○	○
* The digital competences and skills of the staff my organisation/institution/company improved while working remotely.	◉	○	○	○	○
* The crisis and the switch to remote working has increased the importance of digital skills and competences on the labour market.	◉	○	○	○	○
* My organisation/institution/company is planning to take steps to improve the digital skills and competences of the staff after the COVID-19 crisis.	◉	○	○	○	○

* If your organisation/institution/company is planning to improve the digital skills and competences of its staff, what measures will it take?
(select all relevant)

- ☑ Online training (online courses, massive open online courses)
- ☑ Face-to-face training
- ☐ Short face-to-face training during work time (for example, during lunch breaks)
- ☐ Combined online and face-to-face training
- ☐ Mentoring guidelines for consultation during and after training
- ☐ None
- ☐ Other (please specify below)

* If your organisation/institution/company is planning to improve the digital skills and competences of its staff, what digital skills and competences will it focus on?
at most 5 choice(s)

- ☐ Being able to manage the overload of information and knowledge
- ☐ Being able to identify facts from fake information and content online
- ☐ Navigating online safely- protecting devices and content
- ☑ Navigating online safely- protecting personal data and privacy
- ☑ Interacting, collaborating and communicating through digital technologies
- ☐ Creating digital content
- ☑ Using digital tools to solve problems

- ☐ Understanding the digital world and systems – informatics/computer science, computational thinking, coding
- ☑ Understanding and knowledge of emerging digital technologies, such as Artificial Intelligence
- ☐ Other (please specify below)
- ☐ None
- ☐ No opinion/Prefer not to say

* 10. Looking ahead, how has your view of digital education changed, given the experience in the last months?

It has become:

- ○ Much more positive
- ○ Slightly more positive
- ○ Not changed
- ◉ Slightly more negative
- ○ Much more negative
- ○ No opinion

* 11. Looking at the future, what are the most important lessons from the period of school and campus closure for digital education?

700 character(s) maximum

> Children and teenagers are particularly vulnerable. For their mental health and well-being, they are in high need of face-to-face communication and interaction with teachers, face-to-face communication and interaction with peers, less screen time and more physical activities. For these groups, digital education can be a helpful substitute for situations like COVID, but declaring this "the new normal" should by all means be avoided.

12. Are there good examples of partnerships and cooperation that your organisation/institution/company established during the crisis? Are you planning to continue these in future?

500 character(s) maximum

> We have developed multiple reports for the European Commission outlining the necessary measures to further advance education and training systems, for example, Curriculum Guidelines for Key Enabling Technologies and Advanced Manufacturing Technologies, Promoting Online Training Opportunities for the Workforce in Europe, and Rethinking education and training in the digital age: Digital skills and new models for learning

Vision for digital education in Europe

This section includes questions on the main objectives of digital education in Europe and what support is needed to reach these aims.

* 13. Do you think that the crisis and the temporary switch to distance and online learning will have a longer term impact on education and training?

- ○ Yes
- ● To a certain extent
- ○ No
- ○ No opinion

Please give details.

500 character(s) maximum

[ ]

* 14. What would be the main advantages of digital education in the future?

at most 3 choice(s)

- ☑ Flexibility, learning at own pace
- ☐ Innovative and engaging ways of learning
- ☑ Easier communication and interaction in the community
- ☐ Innovative tools and online platforms
- ☐ Innovative learning materials
- ☐ Fewer distractions for learners
- ☑ Helping learners develop their digital skills and competences
- ☐ New ways to assess learning and get feedback
- ☐ No opinion
- ☐ Other (please state below)

* 15. What would be the main disadvantages of digital education in future?

at most 3 choice(s)

- ☐ Need for a good internet connection and suitable equipment
- ☑ Lack of structure and guidance of the learning process
- ☐ Poor quality or hard to use online learning platforms
- ☐ Difficult to reach educators/students/peers
- ☐ Less face-to-face interaction/communication
- ☐ More distractions, hard to manage time
- ☑ Lack of motivation

☑ Inability to do practical work (for example, lab work or other hands-on practical tasks)

☐ Difficulties with assessment and feedback

☐ No opinion

☐ Other (please state below)

* 16. What are the greatest challenges for digital education in Europe?

at most 3 choice(s)

☐ Insufficient infrastructure and internet at school/campus and outside

☐ Lack of availability of suitable digital tools and technologies

☐ Lack of European high-quality online learning content

☐ Lack of easy-to-use online learning platforms

☑ Lack of teacher training and guidance

☐ Lack of plan and vision for integrating digital technologies in education and training

☑ Insufficient research on digital education

☐ Need to foster innovation

☑ Socioeconomic inequalities between learners

☐ Gender inequality

☐ No opinion

☐ Other (please specify below)

* 17. Which of the following digital skills and competences are the most important for living and working in the 21st century?

at most 3 choice(s)

☐ Being able to focus attention and respect that of others in an "always-connected" environment

☑ Being able to manage the overload of information and knowledge

☑ Being able to identify facts from fake content and information online

☐ Navigating safely online - protecting devices and content

☐ Navigating safely online –protecting personal data and privacy

☐ Interacting, collaborating and communicating through digital technologies

☐ Creating digital content

☑ Using digital tools to solve problems

☐ Understanding the digital world and systems – informatics/computer science, computational thinking, coding

- ☐ Understanding and knowledge of emerging digital technologies, such as Artificial Intelligence
- ☐ No opinion
- ☐ Other (please specify below)

* 19.What does an education and training institution need to be able to provide digital education?

Select all relevant

- ☑ Infrastructure, including internet connection
- ☑ Digital platforms and tools
- ☑ Teachers with relevant digital skills
- ☑ Vision and strategy for using digital technologies in the education and training process
- ☑ Digital resources and materials
- ☑ Strategy from public authorities
- ☑ Funding support from public authorities
- ☑ Closer cooperation with private sector
- ☐ No opinion
- ☐ Other (please specify below)

* 20. Where could the EU add value when it comes to digital education?

at most 5 choice(s)

- ☑ Teacher training and guidance on digital education
- ☑ Connectivity and infrastructure (for example, high-speed internet inside and outside schools and higher education institutions)
- ☐ Provision of digital technologies and tools
- ☑ Support for education and training institutions to develop digital education strategies
- ☐ High-quality European online resources- platforms and content
- ☑ Exchange of good practices and peer-learning
- ☐ Development of digital skills and competences of learners
- ☐ Evaluation and certification of digital skills and competences
- ☐ Regularly updated digital skills and competences frameworks
- ☑ Dedicated measures for disadvantaged groups (from lower socio-economic background or remote areas)

- ☐ Closer cooperation between education and training institutions/organisations and private sector
- ☐ Other (please specify below)
- ☐ No opinion

21. Is there anything else you would like to add?

500 character(s) maximum

> Overall recommendations for the EU policymakers
> - Promote the digitalisation of education only where it leads to higher effectiveness and quality learning;
> - Systematically assess the achieved learning outcomes of the digital education during the COVID crisis in comparison with the traditional methods, to see what works and what does not work;
> - Support the culture change in education systems by continuous professional development of teachers, school heads, teacher educators and acade

Position paper

Should you wish to provide additional information (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) here:

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Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

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