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REPORT

on shaping digital education policy
(2020/2135(INI))

Committee on Culture and Education

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Rapporteur for the opinion (*):
Anna Zalewska, Committee on Employment and Social Affairs

(*) Associated committee – Rule 57 of the Rules of Procedure

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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on Shaping digital education policy
(2020/2135(INI))

The European Parliament,

– having regard to Articles 165 and 166 of the Treaty on the Functioning of the European Union,

– having regard to the Charter of Fundamental Rights of the European Union, in particular Article 14 thereof,

– having regard to Article 2 of the Protocol to the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms, concerning the right to education,

– having regard to Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC,

– having regard to the motion for a resolution of the Committee on Culture and Education of 22 September 2020 on the future of European education in the context of COVID-19,

– having regard to its resolution of 17 April 2020 on EU coordinated action to combat the COVID-19 pandemic and its consequences[1],

– having regard to its resolution of 11 December 2018 on education in the digital era: challenges, opportunities and lessons for EU policy design[2],

– having regard to its resolution of 12 June 2018 on modernisation of education in the EU[3],

– having regard to its resolution of 14 September 2017 on a new skills agenda for Europe[4],

– having regard to the Council conclusions of 9 June 2020 on shaping Europe's digital future[5],

– having regard to the Council conclusions of 26 May 2020 on European teachers and trainers for the future[6],

– having regard to the Council conclusions of 18 November 2019 on the key role of

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[1] Texts adopted, P9_TA(2020)0054.
[2] OJ C 388, 13.11.2020, p. 2.
[3] OJ C 28, 27.1.2020, p. 8.
[4] OJ C 337, 20.9.2018, p. 135.
[5] OJ C 202 I, 16.6.2020, p. 1.
[6] OJ C 193, 9.6.2020, p. 11.

lifelong learning policies in empowering societies to address the technological and green transition in support of inclusive and sustainable growth[7],

– having regard to the Council recommendation of 22 May 2018 on key competences for lifelong learning[8],

– having regard to the Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning[9],

– having regard to the Council conclusions of 30 May 2016 on developing media literacy and critical thinking through education and training[10],

– having regard to the Council recommendation of 19 December 2016 on upskilling pathways: new opportunities for adults[11],

– having regard to the Council conclusions of 27 May 2015 on the role of early childhood education and primary education in fostering creativity, innovation and digital competence[12],

– having regard to the Council recommendation of 20 December 2012 on the validation of non-formal and informal learning[13],

– having regard to the Commission communication of 30 September 2020 entitled 'Digital Education Action Plan 2021-2027: Resetting education and training for the digital age' (COM(2020)0624) and to the accompanying staff working document (SWD(2020)0209),

– having regard to the Commission communication of 30 September 2020 on achieving the European Education Area by 2025 (COM(2020)0625),

– having regard to the Commission communication of 1 July 2020 on a European Skills Agenda for sustainable competitiveness, social fairness and resilience (COM(2020)0274),

– having regard to the Commission communication of 17 January 2018 on the Digital Education Action Plan (COM(2018)0022),

– having regard to the Commission communication of 14 November 2017 on strengthening European identity through education and culture (COM(2017)0673),

– having regard to the Commission communication of 30 May 2017 on school

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[7] OJ C 389, 18.11.2019, p. 12.
[8] OJ C 189, 4.6.2018, p. 1.
[9] OJ C 189, 15.6.2017, p. 15.
[10] OJ C 212, 14.6.2016, p. 5.
[11] OJ C 484, 24.12.2016, p. 1.
[12] OJ C 172, 27.5.2015, p. 17.
[13] OJ C 398, 22.12.2012, p. 1.

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development and excellent teaching for a great start in life (COM(2017)0248),

– having regard to the Commission communication of 7 December 2016 on improving and modernising education (COM(2016)0941),

– having regard to the report by the Organization for Economic Co-operation and Development (OECD) entitled 'Education responses to COVID-19: an implementation strategy toolkit',

– having regard to the report by the OECD entitled 'OECD Skills Outlook 2019: Thriving in a Digital World',

– having regard to the report by the UN Educational, Scientific and Cultural Organization (UNESCO) entitled 'Skills for a connected world',

– having regard to the report by the European Centre for the Development of Vocational Training of 4 June 2020 entitled 'Digital gap during COVID-19 for VET learners at risk in Europe',

– having regard to Rule 54 of its Rules of Procedure,

– having regard to the opinion of the Committee on Employment and Social Affairs,

– having regard to the position in the form of amendments of the Committee on Women's Rights and Gender Equality,

– having regard to the report of the Committee on Culture and Education (A9-0042/2021),

A. whereas inclusive, equitable and properly funded quality education is a key driver of the green and digital transitions; whereas education represents an investment in our common future, contributing to social cohesion, sustainable economic growth, job creation and employment and thereby to a fair a society; whereas education is a critical instrument in individual development and self-realisation and enhances participation in democratic life;

B. whereas equality between women and men is a core value of the EU enshrined in Articles 8 and 19 of the Treaty on the Functioning of the European Union;

C. whereas digital technologies are reshaping society, making basic digital skills and digital literacy now essential for all citizens;

D. whereas the first principle of the European Pillar of Social Rights (EPSR) outlines the importance of maintaining and acquiring skills to 'ensure equal opportunities and access to the labour market' and stipulates that everyone has the right to 'quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market';

E. whereas mastering basic transversal skills, such as numeracy, critical thinking and social communication skills, is a fundamental prerequisite for the acquisition of digital skills and competences; whereas, at the same time, there will be an increased need in the future for digital skills, such as coding, logistics or robotics, which will impact not only

IT education, but the curriculum as a whole; whereas the Digital Competence Framework for Citizens acknowledges the importance of soft skills, including communication, collaboration and content creation, which are often taught through the humanities, arts and social sciences; whereas an interdisciplinary approach to the study of science, technology, engineering, arts and mathematics (STEAM) can lead to a better, more human-centric design of digital solutions;

F.   whereas basic education in cyber hygiene, cyber safety, data protection and media literacy must be appropriate to the age and oriented to the development of learners in order to help them become critical learners, active citizens, internet users and shapers of a democratic digital society, make informed decisions, and be aware of and able to counter the risks associated with the internet, such as online disinformation, harassment and personal data breaches; whereas cybersecurity-related teaching programmes should be introduced in curricula;

G.   whereas the digital transformation is shaping the labour market, with, accordingto Commission estimates[14], in a number of job categories as much as 90% of jobs expected to require someform of digital skills in the futureand 65 per cent of children enteringprimary school today ultimately expected to work in jobs that do not yet exist;whereas advanced digital skills are in high demand, which will likely entail anincreased focus on the STEAM fields;

H.   whereas the impact of new technologies, such as robotics and Artificial Intelligence (Al), on employment needs to be fully explored; whereas it is already clear that digital proficiency is quickly becoming ubiquitous skill required for jobs with little or no previous connection with the digital sphere, including manual labour jobs; whereas reskilling and upskilling are necessary to enable people to adapt to the changing needs and realities of an increasingly digitised labour market; whereas theCOVID-19-driven shift to teleworking presents new digital skills, communication and other challenges; whereas employers should provide digital training and digital equipment to employees, paying due attention to specific needs, such as the provision of reasonable facilities for persons with disabilities; whereas the vocational education and training (VET) sector plays a crucial role in equipping future workers with the skills and qualifications they need for the evolving labour market;

I.   whereas 42 per cent of Europeans still lack even basic digital skills[15],with significant disparities within and between Member States and based on socioeconomic status, age, gender, income, level of education and employment; whereas only 35 per cent of people aged 55-74 possess basic digital skills, compared to 82 per cent of 16- to 24-year-olds[16],making older people more vulnerable to digital exclusion; whereas the Skills Agenda aims to ensure that 70 per cent of 16- to74-year-olds have basic digital skills by 2025, an average increase of two percentage points per year as against an annual increase of 0.75 percentage points between 2015 and 2019; whereas learners will never be on an equal footing to acquire digital skills, with such large gaps in basic skills levels;

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[14] https://ec.europa.eu/digital-single-market/en/news/ict-work-digital-skills-workplace
https://futureskills.pearson.com/research/assets/pdfs/technical-report.pdf
[15] Digital Economy and Society Index (DESI) Report 2020, European Commission
[16] DESI Report 2020

J.   whereas inequalities in access to digital infrastructure and equipment persist, with rural and remote areas and deprived urban areas often suffering from poor connectivity and lower-income households often not having access to computers; whereas 10 per cent of households in rural areas of the EU do not have access to fixed-line internet and a further 41 per cent are not covered by broadband;

K.   whereas there is a digital skills gender gap of 11 per cent[17]; whereas, according to Eurostat, only one in three STEM graduates is a woman, despite 54% of higher education students being female; whereas attitudes to STEM subjects do not differ between boys and girls in primary education, but interest among girls appears to wane from the age of 15; whereas less than three per cent of teenage girls express an interest in working as an ICT professional;

L.   whereas gender disparities in education and training translate into the workplace, with only 17 percent of jobs in the ICT sector held by women and the share of men working in a digital sector 3.1 times greater than that of women [18] , the gender gap is particularly evident in the AI sector, where only 22 per cent of professionals globally are female; whereas such disparities impact the scope for women to work in well-paid, future-oriented sectors and similarly limit diversity within digital sector, for example with respect to technology design;

M.   whereas it is important to understand the factors that influence girls 'and women's education and career choices, including gender bias, and to motivate them to pursue STEM and ICT studies and careers; whereas, in this regard, it is necessary to further develop solutions for career guidance;

N.   whereas digital technologies harbour substantial potential for teachers, trainers and educators and learners across education sectors and settings in terms of accessible, open, social and personalised technologies that can bring about more inclusive learning pathways; whereas smart use of digital technologies, driven by innovative teaching methods and empowering learners, can equip citizens with core competences for life, such as creative thinking, curiosity and problem-solving skills; whereas the use of digital must never be considered as a cost-saving measure ; whereas teachers' freedom to choose the best combination of teaching methods and content should remain at the heart of the educational process;

O.   whereas teacher-student interaction is crucial to the well-being and development of students and in-person learning must therefore remain at the core of education provision; whereas digital tools and technologies cannot substitute the role of the teacher, but nevertheless offer a range of benefits asa complement to in-person learning, including in the form of hybrid models of education; whereas excessive use of technology and digital equipment can cause problems, such as sleep deprivation, addiction and a sedentary lifestyle; whereas special attention must be paid to younger children and learners with special educational needs or disabilities, for whom online learning poses a particular challenge;

P.   whereas digital technologies should be introduced in a learner-focused, age-appropriate

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[17] European Commission 'Women in Digital Scoreboard' 2019.

[18] Commission communication of 5 March 2020 entitled "A Union of Equality: Gender Equality Strategy 2020-2025", COM/2020/152 final

and development-oriented way; whereas digital learning strategies need to take into account research on the effects that early use of digital technology may have on the development of young children;

Q.   whereas the development of digital infrastructure and technologies in education requires significant public investment, including in IT staff in educational establishments; whereas private investment also contributes substantially to developing e-learning solutions;

R.   whereas access to digital infrastructure, including high-speed internet and to equipment and content of high quality and tailored to educational needs is a prerequisite for digital learning; whereas the Covid-19 pandemic and the sudden digital transition to distance or online education laid bare the gaps in access and connectivity within and between the Member States, with different effects on the different education sectors; whereas as many as 32 per cent [19] of pupils and students in some Member States did not have access to the internet and digital tools during the Covid-19 lockdown in the spring of 2020;

S.   whereas the sudden shift to online and distance learning also revealed a lack of readiness within education systems in most parts of Europe and gaps in the digital skills of teachers, educators, parents and learners andin their ability to use digital technologies effectively and safely; whereas, prior to the crisis, only 39 per cent of teachers in the EU felt well or very well prepared to use digital technologies for teaching, with significant differences among Member States; whereas teachers have nonetheless shown that they can adapt to profound changes within education systems if they are empowered through sufficient flexibility and autonomy and make best use of the innovation potential of online and distance learning;

T.   whereas the shift to online and distance learning has exacerbated existing inequalities, leaving disadvantaged and vulnerable learners, learners with special educational needs and learners with disabilities further behind, increasing drop-out rates across education sectors, and revealing an absence of pastoral and social support in the digital environment; whereas inequalities in early childhood have negative impact on learning outcomes and employment prospects in later life; whereas there is an urgent need to improve the quality and inclusiveness of online education;

U.   whereas the Covid-19pandemic will herald profound changes for our way of life and has underscored the need to deliver full-scale quality education for all in order to prepare for potential future crises, enhance longer-term resilience in education systems and lay the foundations for a successful digital transition;

V.   whereas the content of teaching and the organisation of education systems is a national competence, new challenges nevertheless call for effective coordination, and where appropriate European Union digital education policies and tools for the medium and longer term as an important dimension of the European Education Area;

W.   whereas availability of quality online education is often not an alternative, but the only option for certain groups such as those working full-time or out of work in rural and

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[19]   https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/how-families-handled-emergency-remote-schooling-during-covid-19-lockdowspring-2020

remote regions or for disabled people;

X.   whereas education is an investment in the future and an important instrument for the development and self-realisation of each individual; whereas digital education could help to address challenges such as disinformation, radicalisation, identity and data theft, cyberbullying and online scams; whereas education, training and lifelong learning will play a key role in the just transition to the digital economy;

The revised Digital Education Action Plan: vision, governance, funding and measuring performance

1.   Highlights that a rights-based approach to digital education, in accordance with the European Pillar of Social Rights, must be guiding principle in digital education policy to ensure that the right to inclusive and quality education for all becomes a reality; underlines that the post-pandemic recovery and revitalisation of education policy is inextricably linked to other challenges the Union and the world are facing and emphasises the need to link digital education policy to other policy areas to promote a more inclusive, gender-balanced, innovative and greener society;

2.   Welcomes, in this regard, the updated Digital Education Action Plan and its extended scope and ambition, with specific targets addressing notably persistent gaps in digital skills, the promotion of quality computer and IT education, or better connectivity in schools, as a further step towards a more comprehensive digital skills and education strategy; considers that the Plan will have been a success if, by its end, digital education has truly become part of education policy with clear, consistent and positive results in terms of availability, access, quality and equity across the Union; acknowledges the different starting points of Member States in this process, which should be factored into the roll-out of the Plan;

3.   Commends the decision to align the Plan with the 7-year multi-annual financial framework (MFF) since this enables a longer-term perspective and ties it in with the relevant funding instruments; underlines the importance of the Plan in delivering the European Education Area and, in turn, the importance of the European Education Area in delivering the Plan, which should ensure transparency and accountability in its implementation;

4.   Notes, however, that effective delivery of the Plan also depends on coordination across a broad range of programmes and among the Member States; calls on the Commission to ensure effective synergies between the different programmes and more consistent and effective coordination across all relevant digital education policies at the EU level with a view to reducing fragmentation and avoiding overlaps between national and European funding instruments and policies and thereby increasing impact;

5.   Points to the contribution of the European Structural and Investment Funds, the Connecting Europe Facility, Horizon Europe, the European Solidarity Corps, Creative Europe and Erasmus+ to funding different facets of the Plan; welcomes the significantly reinforced budget for the Erasmus+ programme and guards against overburdening it with new policy ambitions given that the overriding focus must be to make the programme more inclusive;

6.   Points to the importance of the 'Connect' and 'Reskill and upskill' investment priorities

in the Recovery and Resilience Facility for driving the digital education agenda; encourages the Member States to dedicate at least 10 % of the Facility's funding to education; reiterates its position in encouraging the Member States to significantly increase public spending on education in recognition of the key role education plays in strengthening growth, creating jobs and boosting economic and social resilience; recalls as well that at least 20 % of the funds to be supplied under the Recovery and Resilience Facility (RRF) have been earmarked for the digital transition and urges the Member States to use funds under the Facility to strengthen the digital capacity of education systems and invest, for example, in digital infrastructure for schools, pupils and vulnerable groups, particularly in excluded areas;

7. Underlines the value of pilot projects and preparatory actions (PPPAs) initiated by Parliament in ensuring more Union-wide cooperation to tackle the educational gaps between Member States, regions and rural and urban areas, for example the new preparatory action aimed at increasing accessibility to educational tools in areas and communities with low connectivity or access to technologies; calls for their the mainstreaming of successful PPPAs into Union programmes; welcomes, in this regard, the inclusion of a media literacy action in the new Creative Europe programme, building on the successful 'Media literacy for all' pilot project and preparatory action and calls for sufficient funding to ensure the new action is effective;

8. Notes that the new Plan sets specific targets to address persistent digital education gaps, such as with respect to connectivity, digital skills and online learning content; welcomes the Commission's scheduled mid-term review of the plan and its intention to ramp up data collection; calls on the Commission to develop comprehensive monitoring system for all digital education policies which should be used to share good practice across the EU and feed into the mid-term review; reiterates the need for a clear implementation timetable and for clear benchmarks and milestones to be presented to both Parliament and Council; remains convinced that the plan needs a clearer governance and coordination structure, in which Parliament should be involved, to monitor developments and performance on an ongoing basis; calls on the Commission, therefore, to establish a forum bringing together the Member States, Parliament and other relevant stakeholders and experts, including education providers and civil society organisations;

9. Urges the Commission to increase the role and visibility of education, including digital education, in the European Semester exercise and include in its focus references to the economic impact of education to include social objectives and the quality of educational provision; notes that Member States will come out of the Covid-19 crisis with historically high debt levels; points out that the classification of education as expenditure in national accounting has sometimes led to a sizeable cut in education budgets in previous crises; stresses that the digital transition in education will not be possible without substantial investment;

10. Notes that the Covid-19 crisis has emphasised the need for the Member States to coordinate digital education policies and measures more effectively and to share best practices through a multi-stakeholder approach to education policy to ensure that it meets the needs of EU citizens and put learners at the centre; welcomes, therefore, the Commission's commitment to establish a European Digital Education Hub as a first step towards a co-creation process and ongoing monitoring system that linksnational and

regional digital education strategies and involves key stakeholders and experts, including civil society organisations, representing different approaches from inside and outside mainstream education; considers that the new hub offers a channel through which the Member States should promote cooperation between education and training institutions to improve digital education provision; commends the ambition to use the hub to establish a strategic dialogue with the Member States on the key enabling factors for successful digital education in view of a Council Recommendation; urges the Commission to work quickly to bring forward the date of publication of the draft Recommendation to 2021;

11. Calls on the Commission, while respecting the principle of subsidiarity to supervise implementation at national level and ensure fair representation and independence within the hubs and advisory services and in stakeholder consultation; calls on the Commission to fully involve Parliament increasing European and national hubs and advisory services and in nominating relevant stakeholders; reminds the Commission, when it develops the concept for the planned European Exchange Platform, to avoid overlap and duplication with the aims of the hub;

12. Underlines the need for the European Union to act as a global reference in terms of quality digital education and calls on the Commission to work closely with relevant global and regional institutions and stakeholders to boost access to quality digital education across the world

13. Underscores the pivotal role of research in delivering the plan and achieving effective and appropriate digital education for all and welcomes the Commission's recognition of this; calls on the Commission and the Member States to invest more in interdisciplinary research to assess the long-term impacts of digitalisation on learning and the effectiveness of digital education policies, thereby informing their future design and implementation, including by anticipating new types of jobs and skills and adjusting education curricula accordingly;; underlines, , the need for ongoing research into the various impacts of digital technologies on the education and development of children, linking education sciences, pedagogy, psychology, sociology, neuroscience and computer science so as to achieve as deep an understanding as possible of how the minds of children - and adults - respond to the digital environment and the attendant digital education challenges;

Fostering a high-performing digital education ecosystem

14. Underlines that the Covid-19 pandemic has shown that not all learners can access and therefore benefit from digital education and distance and online learning; notes that gaps exist between and within the Member States and have a disproportionate impact on people from disadvantaged backgrounds and those living in remote or rural areas; deplores the persistent digital divide in the Union; regrets that in some Member States, efforts to provide access to quality digital education have failed, leaving too many pupils without access to education for several months; shares the Commission's analysis that fast and reliable internet and quality digital equipment in educational establishments, non-formal settings and the home are prerequisites for effective digital education; points out that, by the same token, certain Member States are far ahead in providing digital infrastructure and equipment and therefore in delivering digital education solutions; underscores the need to counter the digital divide as an absolute

priority and believes that public-private partnerships - driven by the needs of educational establishments can speed up the pace of delivering solutions;

15. Insists that broadband should be considered a public good and its infrastructure adequately funded to ensure that it is universally accessible and affordable as a critical step in closing the digital divide; notes, furthermore, the potential that the deployment of 5G may offer and calls on the Commission to study the potential contribution of 5G to digital education initiatives; calls for specific measures and funding schemes to enhance access for all educational institutions, especially those in remote, rural and mountain areas with low connectivity and limited access to emerging technologies such as artificial intelligence (AI),robotics, blockchain, open source, new educational devices or gamification, in the light of their growing importance and potential;

16. Welcomes the plan's focus on supporting school and university connectivity through the Connecting Europe Facility and efforts to publicise EU funding opportunities; calls on the Commission to work closely with Member States, local authorities and stakeholders to ensure that EU support dovetails with national schemes, in particular to support disadvantaged groups; calls on the Commission to target support beyond schools to reach all formal and non-formal educational establishments; recalls the need for educational establishments to benefit from support from trained staff to oversee networks and applications and to provide training and assistance on data protection;

17. Stresses the importance of the Union taking the lead in digital education by facilitating access to innovations and technologies for teachers, learners and parents; calls, in this regard, for new initiatives in education by making full use of new technologies such as AI and robotics, that will also raise awareness about the opportunities and challenges associated with them in educational settings; recalls that an ethical and human-centric approach should be ensured for the use of AI and robotics; notes that smart use of AI can ease the workload of staff, make educational content more engaging, facilitate learning in a number of disciplines and support more tailored teaching methods adjusted to the needs of individual students; is concerned by the lack of AI-specific higher education programmes and research in the Union, which risks undermining the EU's competitive edge; calls for increased public investment in AI;

18. Encourages the European Commission and the Member States to provide schools (teachers and students) not only with technical support and Internetconnection, but also a necessary support on safe and reliable software and to promote flexible models of education and support for distance learners using such means as e-resources, e-materials, videos, e-mentorship and free online training; highlights, in that regard, that local cultural and community institutions, such as libraries and museums, are key providers of such digital resources; warns against the negative effects of the vendor lock-ins of educational resources on pedagogical independence and calls on the Commission and the Member States to guarantee such independence from any interference or interests; insist son the need for an open and transparent digital education ecosystem with regard to content, devices and technologies; underlines that open technologies support a sense of cooperation and that free and open source solutions, reuse of content in the public domain and interoperable hardware and software solutions enhance access and create a more balanced digital space;

19. Underlines the need to recognise the legal and ethical principles related to intellectual

property in the context of the increased creation and dissemination of educational digital content; welcomes and endorses the Intellectual Property in Education network managed by the European Union Intellectual Property Office and encourages the development of Intellectual Property-related skills among learners and teachers; recalls the exception to copyright with respect to the use of works and other subject matter in digital and cross-border teaching activities laid down in Article 5 of Directive (EU)2019/790;

20. Points to interesting innovative initiatives making the online environment and playground safe, interesting and fun , at every stage of education; underlines the relevance of bringing together pedagogical, cognitive and psychological approaches to education and adapting online and offline formats accordingly; notes in this respect the approach proposed in the European strategy for early childhood education and care;

21. Recalls the importance of offering teachers, students and parents high-quality, accessible digital education content from diversified sources and encourages the Member States to earmark funding for the acquisition of professional and secure digital educational resources developed using European innovation, including quality educational content co-created with experts; calls on the Member States to promote initiatives enabling businesses and civil society organisations to share high-tech innovation with the education community;

22. Considers that the Union can play a key role in helping develop and make available high-quality educational content; notes with satisfaction the growing number of digital education platforms being set up to enable access tore sources and the sharing of good practices, such as eTwinning, the Electronic Platform for Adult Learning in Europe (EPALE) and the School Education Gateway; calls on the Commission to further promote and scale up such successful initiatives through relevant programmes such as Invest EU and Erasmus+ and for the Member States to better tap into their potential; considers the European exchange platform to have potential as a tool to ensure better cooperation between stakeholders and education actors at European level and calls on the Commission to complete its planned feasibility study with due speed;

23. Encourages the Member States to embrace innovation and digital technologies in their education and training systems in a smart,learner-centred way to achieve an effective blended learning approach going forward; recalls, nevertheless, the fundamental importance off in-person education and stresses that digital tools should be used to complement and enhance classroom teaching; considers that there is a need to reflect on the negative impact of prolonged "screen time" on the well-being of learners; underlines that the Covid-19 pandemic has exposed clear gaps in education provision that online learning cannot easily fill and needs to further address, notably with respect to school meals, pastoral support and physical exercise;

__Enhancing digital skills and competences for the digital transformation__

24. Believes that embracing and maximising the potential of digital technologies has to go hand-in-hand with modernising existing curricula and learning and teaching methods; stresses in this regard the importance of providing financial support for training courses designed for teachers; insists, therefore, that greater attention be devoted to accessible teacher training as the plan is rolled out so as to ensure that teachers and educators not

only possess digital skills, but can also teach them; encourages, in this regard, investments in specialisation courses in digital teaching skills for both teachers and IT professionals aspiring to teaching; highlights the value of mentorship as a training and development tool; stresses the essential role of Erasmus+ and teacher mobility for the acquisition of skills; notes the potential of the future Teacher Academy and calls on the Commission top resent to the Parliament a clear concept and budget; calls for a pan-Union initiative to develop new pedagogical and assessment methods for the digital environment, recognising specific digital challenges such as asynchronous learning and the importance of fostering critical engagement;

25. Underlines the increasingly important role played by parents, families and tutors in distance learning and the need for them to have good internet, digital and technical skills as well as the appropriate equipment and calls for them to be given special training and support mechanisms; stresses the need to assist families with digital tools in order to increase access to remote education calls on the Commission to conduct a dedicated study on digital parenting[20]to develop a consistent and effective approach across Member States to help parents;

26. Underlines the challenge of harmful and illegal content and activities in the digital environment, including in terms of mental health and well-being, such as online harassment including cyberthreats and cyberbullying, child pornography and grooming, data and privacy breaches, dangerous online games, disinformation,; warmly welcomes, therefore, the increased focus on digital and information literacy through education and training in the revised plan; believes that healthcare professionals, educational institutions, civil society and non-formal education providers, in partnership with parents, need to develop an age-appropriate curriculum to enable learners to make informed and appropriate choices and avoid harmful behaviour;

27. Recalls that it is essential for people to have the tools and skills to navigate the various threats in the digital environment and in particular to detect and critically appraise disinformation and fake news; welcomes, in that regard, the swift adoption of the recent Media Action Plan and its focus on media literacy and calls on the Commission to review regularly the Code of Practice on Disinformation and take adequate measures to ensure social media counters online disinformation; looks forward to the planned guidelines for teachers and educational staff on fostering digital literacy and tackling disinformation; calls on the Commission to be more ambitious and to work with national and local stakeholders to launch large-scale digital literacy campaigns; notes the importance of widely promoting existing initiatives such as EU Code Week and the Safer Internet Day;

28. Highlights that any development in the field of digital education must go hand-in-hand with a robust framework of data protection and avoid any commercial exploitation of learners' data; stresses that the highest safeguards must apply to the data of minors, including for research and teaching purposes; calls on the Commission, in cooperation with the European Data Protection Board(EDPB), to address the specific nature of educational data and the data relating to pupils and learners;

29. Stresses that traditional, humanistic and soft skills, such as social skills, empathy,

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[20] Digital parenting describes parental efforts and practices for comprehending, supporting, and regulating children's activities in digital environments, helping them notably to use the internet safely.

problem-solving and creativity, should continue to be nurtured as part of efforts to teach digital skills and literacy, notably through large-scale digital literacy campaigns; stresses the importance of the digital dimension of citizenship education and regrets the limited ambitions of the new Digital Education Action Plan with regard to the promotion of digital citizenship;

30. Recalls the need for advanced digital skills and encourages the Member States to set up national programmes in education that would promote an increase in the number of IT students and graduates; stresses that such classes could be developed under the umbrella of high-tech companies and universities;

31. Highlights the importance of green education and education about the environment and calls for the development of specially designed curricula across Europe taking into consideration the environmental impact of digital education;

32. Stresses that, in line with the European Social Partners' Framework Agreement on Digitalisation, companies deploying new and emerging technologies have a responsibility to provide adequate reskilling and upskilling to all employees concerned so they can learn how to use digital tools, adapt to the changing needs of the labour market and stay in employment; stresses the role of social partners through collective agreements on the definition and regulation of digital skills and continuing training, in identifying skills needs, in developing on-the-job training and in updating education and training curricula; recalls the new working realities generated by the pandemic, such as teleworking, and encourages educational and training institutions and employers to put in place proper training to prepare people for this new working environment;

33. Underscores the importance of digital skills assessment and monitoring and points in that regard to the value of existing tools, such as the European Digital Competence Framework and the SELFIE self-assessment tool; welcomes the extension of SELFIE to teachers; calls on the Commission to boost the currently limited take-up of such tools;

34. Stresses, furthermore, the need for better, more innovative recognition, validation and certification - and therefore portability - of digital skills, qualifications and credentials; applauds the plan to develop a European Digital Skills Certificate as a tool to facilitate validation and portability in linewidth the Digital Competence Framework; recalls the need for the scheme to be developed in close cooperation with the Member States to avoid duplication and overlap with existing schemes; calls on the Commission to build the Certificate into Europass and potentially the future European Student Card;

35. Welcomes the Commission's efforts to digitise education and qualifications, including the new Europass platform and the planned Europass Digital Credential Infrastructure; draws attention, at the same time, to the need to improve the functionality of the Europass platform as regards searching for and receiving job and course offers, to carry out relevant updates of the information on the platform concerning current courses, training, job offers, and to designate the institutions responsible for this process; calls on the Member States to promote the new Europass platform better in education and training institutions and among their staff and with employers;

36. Underlines the need to enhance digital resources, tools and mechanisms at Union level to open up lifelong learning opportunities for all and to enable full and quality access to higher education courses and materials; takes note of the development of a new,

globalized digital environment and market for higher education and the need for higher education organisations in Europe to remain relevant and thrive in this environment; call son the Commission and Member States to create synergies among universities via a Online European University platform for diverse, multilingual distance and online education content and programmes to be accessible across Europe;

37. Recalls the vital role that VET and adult education play in providing reskilling and upskilling opportunities through a lifelong learning approach; welcomes the Council recommendation on VET for sustainable competitiveness, social fairness and resilience and its overall aims of modernising EU policy on VET, streamlining European cooperation in the process and simplifying VET governance; calls on the Commission to adopt a holistic approach to VET and adult learning that encompasses formal, non-formal and informal learning and enables learners to acquire a diverse range of skills that are important for the digital and green transitions, contribute to social inclusion, active citizenship and personal development and enable people to adapt to an evolving labour market; underlines the importance of green skills acquisition;

38. Underlines the difficulties faced by VET institutions, which rely on hands-on training, in adapting to the digital environment; calls for adequate solutions and proper funding in order to ensure that VET education can be effectively delivered; welcomes the planned expansion of the Digital Opportunity traineeships to VET learners and to teachers, trainers and educational staff;

39. Recalls that digital skills acquisition is a lifelong endeavour and that policies should therefore focus on all demographics, not only those of working age; stresses that this requires a cross-sectoral, holistic approach to education, based on the recognition that learning happens within and outside compulsory education and frequently takes place in non-formal and informal settings; calls, therefore, for support to non-formal learning providers to increase capacity and resources tobe able to offer accessible quality digital education and training; calls on the Commission to factor in differing levels of technological advancement between education sectors and institutions and to pay particular attention to harder-to-reach areas and groups when producing recommendations and guidance;

40. Warns that social and educational inequalities in early childhood have a negative impact on educational attainment and employment prospects in later life; reiterates the need for access to quality education and more efforts to develop digital and media skills from an early age; welcomes the announcement of the European Commission to introduce a European Child Guarantee in order to tackle child poverty; urges Member States to allocate a significant amount of the European Social Fund (ESF+) resources under shared management for the implementation of said Guarantee, in particular to support targeted actions and structural reforms that effectively address children's exposure to poverty or social exclusion; recalls that lower educational attainment often equates to lower digital proficiency and welcomes, therefore,the recommendation in the reinforced Youth Guarantee that people not in education, employment or training undergo a digital skills assessment and receive training; notes the potential of the ESF+ programme to support lifelong learning;

41. Insists on the need to close the digital divide and recalls that special attention should be paid to ensuring access to quality digital education and content and improving digital

proficiency for lower-skilled adults, persons with disabilities, persons from vulnerable or marginalised groups, older people and people living in remote or rural areas; points out that, in 2018, just 4.3 % of low-skilled adults used any form of adult learning;

42. Deplores, therefore, the continued absence of measures targeting lower-skilled adult learners and older people in the plan; stresses that this omission undermines the essential lifelong learning dimension of digital education and hampers efforts to ensure that everyone has essential life skills; calls on the Commission, therefore, to work with national, regional and local authorities to put further measures in place to incentivise digital education for adults by making it available and accessible, which would prepare people who have completed their formal education to live and work in the digital environment and ensure that they can truly benefit from and help shape the digital transition;

43. Stresses the importance of developing policies to ensure that people with disabilities have the same opportunities and access to quality digital education; encourages the Member States to work with organisations representing persons with different disabilities to examine the challenges and opportunities posed by digital education and to take account of the specific needs of persons with disabilities when developing effective digital education policies; urges the Commission and Member States to identify and invest in special features for digital education designed and adapted for people with disabilities; considers that digital education offers great opportunities for students with learning difficulties as it allows for tailored pedagogical approaches to their diverse abilities; calls for more investments to provide the support that these groups have too often been lacking;

44. Underscores the need for gender mainstreaming across education, skills and digitalisation policies and specifically within the action plan; considers that digital education has a key role to play in increasing the participation of girls and women in the digital age; stresses that the digital gender gap is an economic, societal and cultural issue and calls on the Commission and the Member States to address that gap through a multi-level, holistic policy approach; salutes the Commission's 'Women in Digital Scoreboard' and underscores the need for the collection of data disaggregated by gender and age to inform understanding of the digital gender divide;

45. Emphasises the need to focus on better inclusion of girls in digital education from a very young age; stresses that a concted effort is required to encourage and motivate more girls to study STEM and STEAM subjects and to follow coding, computing and ICT courses at school and university; reiterates that the gender gap in education spills over into the jobs market and stresses the need to encourage and facilitate access for women to the high-tech and digital sectors, while also combating the gender pay gap with adequate strategies and funding;

46. Considers that it is essential to create a positive and inclusive environment that promotes female role models to motivate girls to choose STEM,STEAM and ICT subjects and to counter unconscious bias and gender stereotypes with respect to subject and career choices; believes that the private sector has a role to play, in cooperation with education and training institutions, NGOs and other civil society organisations in developing effective initiatives and campaigns in this area; points to the value of the Commission's "Women in Digital" Task force and the "Digital4Her" initiative;

47.   Instructs its President to forward this resolution to the Council and the Commission.

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EXPLANATORY STATEMENT

Introduction

According to UNESCO, nearly 1.6 billion learners in more than 190 countries – 94 % of the global learner population – were affected by the closure of education and training institutions at the height of the COVID-19 crisis with over 60 % of learners around the world still being impacted.[1] The same story played out across formal and non-formal education settings – crèches, pre-schools, VET colleges, universities, youth clubs and adult education colleges closed their doors and, in many cases, when the infrastructure was available to them, shifted online. Digital education was more than a tool; it became a necessity and a widespread solution to face the lockdown and provide education to as many learners as possible. This new reality underlined the need for a European approach to digital education and for the EU to work with global institutions and actors, like the United Nations, the World Bank and the Council of Europe, in identifying tailored solutions for the new challenges.

While there has been much innovation and remarkable creativity by educational establishments and their staff, enabling many to continue learning, the overall picture has been of a rushed digital transition, which has left those who were already behind even further behind. In some parts of the world, remote learning is virtually impossible to deliver. In Romania, close to 1 million children, representing 32 % of pupils in Romania, did not have access to education for several months due to low access to basic infrastructure[2].By contrast, around 90 per cent of high-income countries have offered remote learning, mostly online[3], but this still leaves 10 per cent of schoolchildren with no form of learning, with huge inequalities according to socioeconomic status. Research[4] has shown that, even in wealthy Member States, not all households have one usable device or an Internet connection. These are the bare basics for any form of online learning.

The pandemic has highlighted many other gaps in the digital education ecosystem. Apart from access in the first place, schoolchildren need teachers who are digitally proficient enough to deliver effective online learning and a ready-made set of resources for the online environment. Digital tools are useful for teaching and learning. But education requires more than having access to digital devices; it calls for an integrated approach, taking into consideration the psychological, social, pedagogical and practical requirements of teaching and learning. Parents are also key in guiding children online. Learners with learning difficulties or special educational needs require tailored support that has too often been lacking. Despite everyone's efforts, the lack of digital skills among teachers and trainers and the shortage of effective teacher training in digital learning has been laid bare. Parents too

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[1] Up-to-date figures are provided by UNESCO at https://en.unesco.org/covid19/educationresponse.

[2] Study conducted by the Romanian Institute for Evaluation and Strategy on education during the status of emergency - https://cdn.edupedu.ro/wp-content/uploads/2020/05/ires_accesul-elevilor-din-romania-la-educatie-online_studiu-national_aprilie-2020.pdf.

[3] School closures, government responses and learning inequality around the world during Covid-19', Brookings Institution, 14 April 2020 - https://www.brookings.edu/research/school-closures-government-responses-and-learning-inequality-around-the-world-during-covid-19/.

[4] 'Covid-19 and Social Mobility: Impact Brief - School Shutdown', 20 April 2020 - https://www.suttontrust.com/wp-content/uploads/2020/04/COVID-19-Impact-Brief-School-Shutdown.pdf.

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have struggled, some because they lack the language, literacy, numeracy or digital skills required to help their children. Special actions, financially supported by European and national programmes, are needed to support parents and tutors in developing the skills required to help their children. Many adults and children alike have themselves been grappling for the first time with basic digital literacy, cyber hygiene, privacy and media literacy, data protection, cyberbullying and dangerous online games. Disinformation has also become a particular challenge during the health crisis. Again, the statistics are stark: there is a direct correlation between income and level of education on the one hand and a propensity to use the internet for information and education on the other[5].

On the one hand, therefore, the Covid-19 crisis has provided a compelling test bed for digital education policy and, on the other, has exposed myriad failings. In a working document published in early September 2020, your Rapporteur called for an update to the 2018 Digital Education Action Plan (DEAP)[6] that would develop a coherent and integrated approach to digital education, with clear objectives, financial support and a timetable, leading to a common approach at European level involving all relevant stakeholders.

Shaping a common European digital education policy.

In order to build a coherent digital education policy, we have to understand the importance of education in shaping the future of our societies and in driving a successful digital and green transition. Recently, the OECD stated that the lockdown has had a huge impact on education leading to severe training and skilling gaps that will generate a loss of productivity for individuals across the world, a significant drop in income and a reduction of GDP in the medium and long term that can only be overcome by more investment in education. Clear investment targets are therefore needed at EU, national, regional and local level. At least 10 % of the Recovery and Resilience Facility is needed to provide solutions to the current education and skills needs, while Member States should continue increasing their funding for education.

Despite the undisputed success of the flagship Union education and training programme, Erasmus+, Member States have hesitated to engage in further more intensive forms of cooperation and the lack of a true European Education Area has prompted mixed responses to education and training in the current COVID-19 crisis. The transition towards digital education has not been accompanied by further Member State cooperation on the solutions and tools used and funding for education has remained limited despite the growing needs of the educational systems. The new reality has pointed to the need for common quality standards at EU level that could enable us to build education systems across Europe that are inclusive and that provide practical, fit-for-purpose solutions to the digitalisation of education. It is clear that digital technologies harbour substantial potential for teachers and learners across education sectors and settings, enabling access to a range of materials and formats, and that these new tools are useful not only for distance learning but could also be adapted to enhance in-person learning. We need to learn the lessons from the pandemic to deliver full-scale quality digital education for all in the event of a potential second wave.

Digital inclusion goes hand-in-hand with social inclusion and this is widely reflected in EU statistics. Forty-three per cent of Europeans lack basic digital skills with significant disparities

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[5]   Adult   learners   in   a   digital   world',   EPRS,   October   2019   - https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2019)640141   -   and   'The 2018 International Computer and Information Literacy Study', European Commission.
[6] https://cultnet.in.ep.europa.eu/home/welcome/work-in-progress/draft-reports.html.

within and between Member States and based on socioeconomic status, age, income, gender, level of education and employment. These structural deficiencies can only begin to be resolved through a coherent, integrated and targeted European Digital Education Policy that has be implemented at a faster pace. Therefore, your Rapporteur urges the Commission to bring forward the date of publication of the various Council Recommendations on digital education to 2021.

Our assessment of the 2020 Digital Education Action Plan.

In December 2018, the European Parliament called on the European Commission to be more ambitious and develop a comprehensive digital skills and education strategy[7]. The new Plan provides us with a new, more strategic approach, but, in order for it to be successful, we need to ensure that, at the end of its implementation, digital education is a significant part of education policy with clear, consistent and positive results in terms of access and quality across the EU.

It is clear for the European Parliament that for any strategy to be effective, it needs proper funding. In this regard, we welcome that the Plan is aligned with the 7-year multi-annual financial framework (MFF) but would also call for better coordination and effective synergies across the broad range of programmes that support it, including Erasmus+, the European Social Fund Plus and the Connecting Europe Facility. At the same time, we underline the value of pilot projects and preparatory actions initiated by the European Parliament to ensure more Union-wide coordination to tackle education gaps between Member States. In particular, a recently adopted pilot project focused on improving connectivity in rural, mountain and remote areas could be a key starting point for a pan-European initiative to reduce the gaps between and within Member States.

A high-performing European digital education ecosystem.

Despite the lack of a European response, the current pandemic has shown the existence and development of a European digital education ecosystem with successful initiatives across Europe initiated by local authorities, entrepreneurs and innovators, NGOs and universities, trade unions and private companies, professors, learners, researchers and even parents. European society has shown resilience in the face of the current challenges and managed to generate innovation that has made us proud of what we can achieve together. The ICS Capozzi-Galilei School in Italy, for instance, developed a 'Science Escape Room', a virtual tool to provide students with an immersive learning experience and enhance science literacy. The Polytechnic University of Catalonia in Barcelona devised a mobile platform – 'Student4Students' – to connect high school pupils interested in IT careers with university IT students. The Institute for Global Digital Policies, at SNSPA, and E-Civis Association, in Bucharest, designed the first Romanian educational tablet, an adapted low-cost digital device with personalised educational content and secure digital learning apps.

But such positive examples need support to exist and scale up at European level. Too often, such initiatives have been ignored and the potential they foster at European level has remained untapped. The first step is to consider broadband internet a public good and ensure it is universally accessible. The same thing must apply to emerging technologies, such as Artificial Intelligence, robotics, gamification, new educational devices or blockchain. We call,

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[7] 2018/2090(INI): Education in the digital era: challenges, opportunities and lessons for EU policy design' - https://www.europarl.europa.eu/doceo/document/TA-8-2018-0485_EN.html.

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therefore, for the creation of an AI and robotics initiative in the field of digital education. We also need to identify solutions for fast and reliable internet and quality digital education in educational establishments, in non-formal settings and at home. This means tackling all the difficulties faced for instance by VET institutions, which rely on hands-on training, but also to make sure people from disadvantaged groups, people with disabilities, lower-skilled learners, seniors and people from rural and remote areas benefit from special attention in order to increase their digital proficiency and get access to digital education. Women, too, need support to continue with computing and STEM studies and the enduring gender gap in the high-tech sector must be closed. We need to put our know-how and resources together and initiatives, like the creation of an Online European University, the development of a pan-European educational platform, the proposal to create Teacher Academies or the implementation of the European Digital Skills Certificate (EDCS), supported by European institutions and stakeholders, could be examples that enable the creation of a European framework for digital education.

Nelson Mandela said: "Education is the most powerful weapon which you can use to change the world". Now, the world is changing at a faster pace due to the pandemic and new technologies. We are on the cusp of a new era for education. It is time for Europe to shape its own digital education policy offering all learners access to quality digital education across the continent and beyond.

4.12.2020

OPINION OF THE COMMITTEE ON EMPLOYMENT AND SOCIAL AFFAIRS

for the Committee on Culture and Education

on shaping digital education policy
(2020/2135(INI))

Rapporteur for opinion (*): Anna Zalewska

(*)   Associated committee – Rule 57 of the Rules of Procedure

SUGGESTIONS

The Committee on Employment and Social Affairs calls on the Committee on Culture and Education, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

A.   whereas the European Union is based on a set of common, fundamental values; whereas Member States have the responsibility to ensure equal access to education for all; whereas Member States should create conditions conducive to the development of digital competences for all and ensure equal access to digital content and services, including ensuring the digital accessibility of public entities' websites and mobile applications; whereas vulnerable groups often have no or only limited access to digital resources, including up-to-date technology and equipment, which are costly to obtain and maintain, leading to a growing digital access gap across the Union and contributing to social exclusion;

B.   whereas the first principle of the European Pillar of Social Rights (EPSR) outlines the importance of maintaining and acquiring skills to 'ensure equal opportunities and access to the labour market' and stipulates that everyone has the right to 'quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market';

C.   whereas inequalities in access to IT tools and the internet still exist and whereas numerous regions, in particular rural areas and disadvantaged regions, suffer from poor connectivity; whereas this reduces opportunities for developing digital skills and contributes to the digital divide and to divisions in the labour markets, which may deepen as time passes; whereas according to the OECD's Programme for International Student Assessment (PISA) study from 2018, many low-income homes had no access to computers; whereas access to computers in schools also varies greatly between and within the Member States; whereas 10 % of households in rural areas of the EU do not

have access to fixed-line internet and a further 41 % are not covered by broadband[1]; whereas countries that have high levels of urbanisation, a high percentage of the population with higher education and higher levels of broadband and mobile internet access in homes also have a greater number of citizens with basic or advanced digital skills[2];

D.   whereas 85 % of citizens used the internet in 2019 and only 58 % possessed at least basic digital skills[3]; whereas the level of digital proficiency has specific socio-economic and gender, age, geography and accessibility-related aspects which must be addressed; whereas the employment landscape is rapidly evolving and it is estimated that 65 % of today's children entering primary school will ultimately end up working in completely new kinds of jobs that do not yet exist[4];

E.   whereas a significant gender gap in digital skills still persists and is expected to widen; whereas only 17 % of tech sector jobs are held by women in spite of the fact that 54 % of students in tertiary education are female; whereas according to Eurostat, only one in three science, technology, engineering and mathematics (STEM) graduates is a woman; whereas efforts to tackle gender bias and inequality in the digital sector are insufficient; whereas the gender gap is particularly evident in artificial intelligence (AI), where only 22 % of professionals globally are female, thereby solidifying a male-biased trajectory for the digital sector in the foreseeable future;

F.   whereas older people are more vulnerable to digital exclusion; whereas only 35 % of people aged 55-74 possess basic digital skills, compared to 82 % of people aged 16-24;

G.   whereas the COVID-19 pandemic has exposed and exacerbated deep inequalities in access to education and digital connectivity in some countries and regions in the EU;

H.   whereas the COVID-19 pandemic has shown how certain disadvantaged social groups, such as the Roma, have been disproportionately hit by the crisis as digital education has often not been accessible and/or affordable for their children owing to a lack of adequate – or any – IT equipment, internet connection and electricity, which has further deepened inequalities in education;

I.   whereas the COVID-19 pandemic has exacerbated the existing disadvantages faced by persons with disabilities and special needs when accessing the internet; whereas according to the European Disability Forum, one in three persons with disabilities has never used the internet; whereas Article 9 of the UN Convention on the Rights of Persons with Disabilities lays down the requirement for access to information and communication technologies and systems on an equal basis with others;

J.   whereas the COVID-19 pandemic has highlighted the shortage of digital skills, their importance for all citizens regardless of employment sector or personal background, and the need to improve them, including through education and training; whereas it is

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[1] Commission Digital Economy and Society Index 2020 – values for the EU-27 and the UK.

[2] UNESCO working paper on education policy entitled 'Managing tomorrow's digital skills – what conclusions can we draw from international comparative indicators?', p. 17.

[3] Commission Digital Economy and Society Index 2020.

[4] The World Economic Forum, 'The future of jobs', September 2018.

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necessary to invest in digital infrastructure and equipment enabling students, teachers and workers to participate in remote learning at home and in educational facilities; whereas special focus, in this regard, should be given to families with many children, single parents and low-income households; whereas the quality and availability of teaching during the pandemic has varied, depending on the availability of infrastructure and facilities, the presence of educators with digital competences, including the ability and willingness to adapt teaching methods, and the existence of usable and accessible digital content, tools, services and platforms;

K.   whereas up to 32 % of pupils and students did not have access to the internet and digital tools during the COVID-19 crisis and thus had very limited access to education; whereas the digital divide in early childhood has a negative impact on employment prospects in later life; whereas prior to the crisis, only 39 % of teachers in the EU felt well or very well prepared to use digital technologies for teaching, with significant differences between Member States; whereas in its Digital Education Action Plan for 2021-2027, the Commission indicated that in some Member States the number of hours spent by pupils on educational activities has fallen by as much as half during the pandemic; whereas even the temporary closure of educational establishments can have significant consequences for pupils and whereas a reduction in teaching time can have an adverse effect on learning outcomes and widen existing social inequalities[5]; whereas the COVID-19 crisis has highlighted the need for a multi-stakeholder approach when defining the goals, mechanisms and means of digital education policies;

L.   whereas classroom-based training remains essential as digital tools should not fully replace face-to-face teaching and the benefits related to it; whereas online learning and teaching, as well as digital tools, should remain complementary to regular schooling and teaching methods as well as to the expertise and judgement of educators; whereas teachers and educators remain responsible for the education of children in school; whereas special attention should be paid to schoolchildren of pre-primary age, primary schoolchildren, and children with special educational needs who have a learning problem or disability that makes it more difficult for them to learn remotely;

M.   whereas reskilling and upskilling are necessary in order to adjust to the long-term teleworking conditions which are set to become increasingly widespread because of the COVID-19 crisis; whereas employers should provide digital training and digital equipment to all employees, paying due attention to specific needs, such as the provision of reasonable facilities for persons with disabilities;

N.   whereas the aim of digital education is to prepare students to use digital technologies skilfully in different areas of life;

O.   whereas upskilling and reskilling, including by means of online training and the development of digital skills for all, are both an individual and social responsibility and vital in order to adapt to the changing needs of an increasingly digitised labour market and new working realities such as telework, to combat discrimination and job losses, to improve access to basic services and to address digital and social exclusion, especially for elderly people; whereas early and lifelong education have considerable potential to

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[5] The Commission Joint Research Centre, technical report entitled 'The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets', 2020.

close the gap between the skills available and the needs of the labour market; whereas during the confinement period, online communication was one of the main means of communication for families to stay in touch;

P.   whereas digital literacy is quickly becoming a ubiquitous skill required for jobs which previously had little or no connection with the digital sphere, including vocational or manual labour jobs;

Q.   whereas it is difficult to identify a clear link between a given intervention and an observed increase in digital qualifications, owing to a lack of research into digitalisation strategies and evaluation reports both for individual projects and national strategies; whereas there is a clear need for both quality data gathering and the exchange of best practices among Member States along with a multi-stakeholder approach involving social partners, in particular businesses, international organisations, academia and civil society;

R.   whereas digital education is a continuous and often lifelong learning process; whereas supporting digital readiness in general and vocational schools, as well as personalisation and innovation in education systems, may help to improve learning outcomes for learners at all ages, help to achieve greater fairness, increase the quality, inclusiveness and effectiveness of education, and address job polarisation; whereas any digital education strategy should apply a lifelong learning approach and cover all education and training sectors, in both formal and non-formal education settings;

S.   whereas education is an investment in the future and an important instrument for the development and self-realisation of each individual; whereas digital education could help to address challenges such as disinformation, radicalisation, identity and data theft, cyberbullying and online scams; whereas education, training and lifelong learning will play a key role in the just transition to the digital economy;

T.   whereas vocational education and training (VET) is an essential part of European education systems, equipping young people and adults with the qualifications and competences they need for employment and lifelong learning; whereas VET accounts for about half of upper secondary graduates in the European Union; whereas VET will play a crucial role in addressing the challenges of the green and digital transitions and will be key to provide workers with the qualifications they need for the EU labour market;

1.   Underlines that the COVID-19 pandemic has shown that not all learners can access distance learning, in particular those from disadvantaged backgrounds and those based in rural and remote areas; calls on the Commission and the Member States to step up investments in quality digital infrastructure and equipment, digital education and the development of digital skills and qualifications in rural, sparsely populated, remote and peripheral areas in order to ensure that the EU takes a leading role in shaping the digital age; reiterates its repeated calls for an ambitious budget for and substantial investments in education; stresses the importance of a number of EU instruments for the development of formal and non-formal education as well as investment in digital literacy, educational infrastructure and digital equipment in schools, such as the European Structural and Investment Funds, the Connecting Europe Facility, Horizon

Europe, Erasmus+, the European Solidarity Corps and the new Digital Education Action Plan; stresses, furthermore, that investments at national level are also necessary; recalls that at least 20 % of the funds to be supplied under the Recovery and Resilience Facility have been earmarked for the digital transition, which could help strengthen the digital capacity of education systems;

2.   Calls on the Member States to ensure that all households and public institutions have access to electricity and high-speed internet as well as the necessary equipment and IT tools, which are key for improving the digital skills of school students and their families and for participation in online education; emphasises the need to support parents and children with regard to distance learning by providing them with the necessary digital infrastructure as well as technical and digital skills; highlights that differences in socio-economic backgrounds resulting in varying degrees of access to electricity, digital connectivity, digital equipment and skills create a digital divide between students;

3.   Stresses the need to align the revised Digital Education Action Plan with the relevant principles of the EPSR, the UN Sustainable Development Goals and the European Strategy for Gender Equality;

4.   Stresses the need to pay specific attention to continuous training and access thereto as well as to the professional development of teachers, trainers and educators at all levels, including in VET; underlines the necessity to provide them with digital equipment in order to improve their digital skills, including skills assessments and certification mechanisms as well as their understanding of potential challenges for students, through programmes such as eTwinning, the Electronic Platform for Adult Learning in Europe (EPALE), Erasmus+ and the School Education Gateway; stresses the need to put teachers, trainers and educators at all levels at the heart of the digital education process, in both its design and its execution;

5.   Highlights the need to ensure effective social dialogue on VET and adult learning in order to consolidate efficient governance of vocational training at all levels, as well as the need to respect full qualifications and the recognition and validation of training, work experience, and non-formal and informal learning;

6.   Highlights the urgent need to develop policy initiatives designed to reduce the digital skills gap and improve digital literacy; calls on the Commission and the Member States to work together to reduce inequalities in education by removing barriers to equal access to and participation in digital education and training for learners and workers of all ages in order to improve digital qualifications and address digital exclusion in line with the EPSR; underlines that particular attention should be paid to vulnerable groups and minorities for whom bridging the digital skills divide can represent a means to break the vicious cycle of social and labour exclusion;

7.   Stresses that the Member States should ensure that educational institutions and educators are well prepared to provide distance learning; calls on the Member States and the relevant national and regional authorities to provide adequate digital infrastructure, teaching materials and skilled teachers, which are a precondition for delivering online learning efficiently; stresses that following the COVID-19 pandemic remote learning could become part of a modern blended learning approach, namely an

integrated, hybrid learning method that combines traditional learning methods, i.e. direct contact with the trainer, with remote, computer-based activities; underlines, however, that remote learning should not become a standard for schoolchildren of pre-primary age and primary schoolchildren and should not fully replace face-to face teaching;

8.   Considers that Member States should seek to integrate digital technologies into education more comprehensively by developing programmes and targeted investments with the ultimate aim of ensuring that their citizens are ready and prepared for future jobs that require digital skills; stresses that doing so would enable Member States and their citizens to grasp the full potential of the digital transition in the EU labour market and fully benefit from the existing uses of new working methods by companies, such as teleworking;

9.   Stresses the need to boost the role of social partners by ensuring that digital education policy encourages collective agreements on the definition and regulation of digital skills and continuing training, by consulting with social partners on competency needs and on updating the curricula of education and training systems, and by working together with workers' representatives to devise on-the-job training adapted to the needs of the workforce;

10.   Calls on the Member States, with the support of the Commission and the aid of EU funding tools, where eligible and available, to ensure that vulnerable children, young people and adults in the EU have access to adequate technological resources and equipment enabling them to acquire basic digital skills which can provide far greater opportunities for social and economic inclusion;

11.   Notes that VET can make a vital contribution to delivering the European Green Deal by helping to define and implement the so-called 'green skills' for the economy and for all people; recalls that the EPSR, the Skills Agenda for Europe and the European Pact for Skills need to be aligned with green skills;

12.   Encourages Member States to promote flexible models of education and support for distance learners using such means as e-resources, e-materials and free online training;

13.   Warns that social and educational inequalities in early childhood have a negative impact on educational attainment and employment prospects in later life; reiterates the need to improve access to quality education and to make more concerted efforts to develop digital and media skills at an early age; welcomes the Commission's announcement that it intends to introduce a European Child Guarantee in order to tackle child poverty; underlines that Member States should allocate at least 5 % of European Social Fund (ESF+) resources under shared management to support activities under the European Child Guarantee and insists that a separate budget line under ESF+ needs to be created for the European Child Guarantee, with an allocation of EUR 20 billion;

14.   Highlights that the COVID-19 crisis has already left many people jobless, not least young people, who invariably find themselves in precarious employment more often; welcomes, in this context, the Commission's plans to strengthen the European Youth Guarantee; considers that young people in general, and in particular those not in education, employment or training (NEETs), who register for the Youth Guarantee

schemes should be supported in developing and enhancing digital skills to facilitate upskilling and reskilling towards the green and digital transitions; emphasises that it is necessary that Member States continue to invest sufficient ESF+ resources in measures to support youth employment and should therefore allocate at least 15 % of their ESF+ resources under shared management to targeted actions and structural reforms to support quality youth employment;

15. Stresses the need to teach basic digital skills and to strengthen the critical thinking and media use skills of children and young people, as this will enable them to assess and overcome the dangers posed by fake news, cyber-bullying, radicalisation, cyber-security issues and fraud, as well as increase their data privacy awareness; stresses that particular attention should be paid to teaching methods and not solely to the use of digital tools; underlines the importance of lifelong learning and of providing education systems with sufficient resources in this regard; emphasises the need, in this context, to help teaching staff to master the challenge of preparing students and apprentices for life and work in the digital age;

16. Underlines the need to promote soft skills such as human empathy, creativity and problem-solving abilities within STEM-specific competences, especially with a view to the deployment of automation and AI systems; points to the need to build the competences necessary for creating and using AI-based technologies, for enhancing the ethical framework governing the use of such tools, and for data processing; stresses that companies deploying AI, robotics and related technologies have a responsibility to provide adequate reskilling and upskilling to all employees concerned so they can learn how to use digital tools and work with cobots and other new technologies, thereby adapting to the changing needs of the labour market and staying in employment; stresses, in this regard, the importance of the European Social Partners' Framework Agreement on Digitalisation; recalls that this agreement outlines the responsibility of employers to upskill and reskill workers in particular in view of the digitalisation of jobs;

17. Stresses the importance of developing policies which ensure that persons with disabilities have the same opportunities and access to qualitative digital education; encourages the Member States to work with organisations representing persons with different disabilities to examine the challenges and opportunities posed by digital education and to take account of the specific needs of persons with disabilities when developing effective digital education policies; calls on the Member States to foster adult learning that provides lifelong learning opportunities, to improve employability and to ensure that all of their citizens fully benefit from the digital transition in the EU labour market, including vulnerable groups; calls for accessible and affordable digital skills programmes tailored to the needs of the elderly; urges the Commission to put forward an ambitious proposal in the framework of the post-2020 European Disability Strategy to ensure affordable and effective accessibility of information and communication technologies and systems for persons with disabilities on an equal basis with others;

18. Welcomes the proposal for a Council recommendation on VET for sustainable

competitiveness, social fairness and resilience[6]; supports the proposal's overall aims of modernising EU policy on VET, streamlining European cooperation in the process and simplifying VET governance; highlights that VET systems should play an equally important role for adults in need of upskilling and reskilling; calls on the Commission to adopt a holistic approach to VET and adult learning that encompasses formal, non-formal and informal learning; calls on the Commission and the Member States to maximise their efforts to invest in affordable, accessible, inclusive and high-quality VET; calls on the Member States to make VET more attractive and accessible to adult learners and to forge stronger links and closer cooperation between VET for adults and non-formal adult learning in order to promote key competences, including good basic skills, digital skills, and transversal and other life skills which provide strong foundations for resilience, lifelong employability, social inclusion, active citizenship and personal development; stresses that developing green skills is one of the measures to provide a skilled labour force that is also an agent of sustainable development and growth; calls on the Member States, furthermore, to devise effective qualification strategies including concrete targets within their national VET and adult learning policies to support workers and the unemployed;

19. Stresses the need to monitor the impact of digitalisation, to anticipate new types of jobs and necessary qualifications and skills, and to use this data to design up-to-date digital education modules and curricula; calls on the Commission to set clear guidelines for digital national strategies and to improve tools for monitoring action under the Digital Education Action Plan, which will help to build synergies between projects in this area and allow for an assessment of the effectiveness of the projects that are being implemented and their impact on the development of digital competences; calls on the respective national and regional authorities to facilitate and encourage the exchange of good practices and know-how and to carry out mapping of existing digital education programmes and monitor the main beneficiaries thereof, while paying particular attention to their accessibility for vulnerable groups and student attainment in the area of digital competences, including IT skills, at primary and secondary school level; calls on the Member States to analyse the state of digital education during the COVID-19 pandemic;

20. Calls on the Member States to enhance their exchange of best practices on the creation of viable digital education policies and on how best to tackle potential challenges arising from the implementation of digital education reforms; emphasises the need to learn from the COVID-19 crisis by sharing the good practices of some Member States in terms of using digital tools for education;

21. Recalls that the COVID-19 crisis has highlighted the need for a multi-stakeholder approach to education policy, including teachers and trainers, students, parents, social partners, NGOs, local authorities and community organisations in both the design and delivery of national digital education policies in order to ensure that those policies meet the needs of EU citizens and put learners at the centre; underlines the importance of involving social partners, in particular businesses and educational and training institutions, as well as the research and innovation sectors, in the process of bridging the digital skills gap in Europe; calls on the Member States to promote initiatives through

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[6] Proposal for a Council recommendation of 1 July 2020 (COM(2020)0275).

which businesses and start-ups can present high-tech innovation to students, including tools and instruments that facilitate digital learning; calls on the Member States to intensify cooperation in the area of digital certification and to promote this approach among key stakeholders, i.e. representatives of qualification providers and social partners, in particular employers;

22. Stresses that the digital gender gap is an economic, societal and cultural issue which should be addressed through a holistic approach; calls on the Member States to ensure gender equality in digital education policies and to tackle the existing digital gender gap; highlights the need to encourage the participation of girls and women in STEM subjects, digital education and the ICT labour market;

23. Welcomes the idea of the establishment by the Commission of a European Digital Education Hub, which could support Member States by setting up a network of national advisory services on digital education, connect the different stakeholders, link national and regional digital education strategies, monitor the implementation of the Digital Education Action Plan and track the development of digital education in Europe;

24. Takes the view that in order to promote fruitful future careers, training programmes are needed that encourage the responsible use of technological tools, combining manual activities, play, creativity and ingenuity and social skills that make human contact possible and lead to the development of personal relations without having to resort to electronic and digital devices;

25. Stresses the need to support the physical health of pupils and students, which might have been debilitated by long hours spent in front of the computer screens for predominantly digital education during the COVID-19 crisis; calls on the Member States to launch targeted campaigns raising awareness about the necessity of physical exercise;

26. Highlights the importance of connecting digital education with other policy areas to show how digital education can help to enhance equality and counter discrimination and promote more inclusive, innovative and greener economies;

27. Encourages the Member States to support and promote collaboration between educational and training institutions, including cross-border cooperation, as part of efforts to incorporate and update the use of digital technologies in educational and training facilities and promote the development of more advanced digital skills;

28. Encourages the Member States to set up national programmes for secondary schools that would promote an increase in the number of IT graduates; stresses that such classes could be developed under the umbrella of high-tech companies and universities;

29. Welcomes the Commission's efforts to digitise education and qualifications, including the new Europass platform and the planned Europass Digital Credentials Infrastructure; draws attention, at the same time, to the need to improve the functionality of the Europass platform as regards searching for and receiving job and course offers, the need to carry out relevant updates to the information on the platform concerning current courses, training and job offers, and the need to designate the institutions responsible for this process;

30. Calls on the Member States to intensify their promotional activities concerning the new Europass platform among schools, teachers, universities, students, education and training institutions and employers;

31. Encourages the Member States to create opportunities for local institutions, such as libraries, community centres and social service centres, to perform an additional function as centres of digital competence development, offering a catalogue of additional services related to digital competence development;

32. Calls on the Commission and the Member States to increase funding for interdisciplinary research on the various aspects of learning in the digital environment as a specific priority, with particular emphasis on psychological (behavioural), methodological, tool-related, labour-market and new-profession aspects;

33. Encourages the Member States to set up national systems for the digital education of adults, which would prepare people who have completed their formal education to live and work in the digital environment and retrain people working in Industry 4.0; stresses that the focus of such programmes should be on upskilling and reskilling in employees' workplaces, rather than on external courses organised by entities that do not have knowledge of the specifics of the company.

INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

Date adopted	1.12.2020
Result of final vote	+: 51 −: 0 0: 4
Members present for the final vote	Atidzhe Alieva-Veli, Abir Al-Sahlani, Marc Angel, Dominique Bilde, Gabriele Bischoff, Vilija Blinkevičiūtė, Andrea Bocskor, Milan Brglez, Sylvie Brunet, David Casa, Leila Chaibi, Margarita de la Pisa Carrión, Klára Dobrev, Jarosław Duda, Estrella Durá Ferrandis, Lucia Ďuriš Nicholsonová, Rosa Estaràs Ferragut, Nicolaus Fest, Loucas Fourlas, Cindy Franssen, Helmut Geuking, Elisabetta Gualmini, Alicia Homs Ginel, France Jamet, Agnes Jongerius, Radan Kanev, Ádám Kósa, Stelios Kympouropoulos, Katrin Langensiepen, Miriam Lexmann, Elena Lizzi, Radka Maxová, Kira Marie Peter-Hansen, Dragoş Pîslaru, Manuel Pizarro, Dennis Radtke, Elżbieta Rafalska, Guido Reil, Daniela Rondinelli, Mounir Satouri, Monica Semedo, Beata Szydło, Eugen Tomac, Romana Tomc, Yana Toom, Marie-Pierre Vedrenne, Marianne Vind, Maria Walsh, Stefania Zambelli, Tatjana Ždanoka, Tomáš Zdechovský
Substitutes present for the final vote	Alex Agius Saliba, Marc Botenga, José Gusmão, Eugenia Rodríguez Palop

FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

51	+
ECR	Margarita DE LA PISA CARRIÓN, Lucia ĎURIŠ NICHOLSONOVÁ, Helmut GEUKING, Elżbieta RAFALSKA, Beata SZYDŁO
GUE/NGL	Marc BOTENGA, Leila CHAIBI, José GUSMÃO, Eugenia RODRÍGUEZ PALOP
ID	Dominique BILDE, France JAMET, Elena LIZZI, Stefania ZAMBELLI
NI	Daniela RONDINELLI
PPE	Andrea BOCSKOR, David CASA, Jarosław DUDA, Rosa ESTARÀS FERRAGUT, Loucas FOURLAS, Cindy FRANSSEN, Radan KANEV, Ádám KÓSA, Stelios KYMPOUROPOULOS, Miriam LEXMANN, Dennis RADTKE, Eugen TOMAC, Romana TOMC, Maria WALSH, Tomáš ZDECHOVSKÝ
Renew	Atidzhe ALIEVA-VELI, Abir AL-SAHLANI, Radka MAXOVÁ, Dragoş PÎSLARU, Monica SEMEDO, Yana TOOM
S&D	Alex AGIUS SALIBA, Marc ANGEL, Gabriele BISCHOFF, Vilija BLINKEVIČIŪTĖ, Milan BRGLEZ, Klára DOBREV, Estrella DURÁ FERRANDIS, Elisabetta GUALMINI, Alicia HOMS GINEL, Agnes JONGERIUS, Manuel PIZARRO, Marianne VIND
Verts/ALE	Katrin LANGENSIEPEN, Kira Marie PETER-HANSEN, Mounir SATOURI, Tatjana ŽDANOKA

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4	0
ID	Nicolaus FEST, Guido REIL
Renew	Sylvie BRUNET, Marie-Pierre VEDRENNE

Key to symbols:
+ : in favour
- : against
0 : abstention

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11.11.2020

POSITION IN THE FORM OF AMENDMENTS
OF THE COMMITTEE ON WOMEN'S RIGHTS AND GENDER EQUALITY

for the Committee on Culture and Education

on shaping digital education policy
(2020/2135(INI))

On behalf of the Committee on Women's Rights and Gender Equality: Jadwiga Wiśniewska (rapporteur)

AMENDMENTS

The Committee on Women's Rights and Gender Equality presents the following amendments to the Committee on Culture and Education, as the committee responsible:

Amendment 1

Motion for a resolution
Recital A a (new)

Motion for a resolution	*Amendment*
	Aa. whereas equality between women and men is a core value of the EU enshrined in Articles 8 and 19 of the Treaty on the Functioning of the European Union;
	Or. [en]

Amendment 2

Motion for a resolution
Recital B a (new)

Motion for a resolution	*Amendment*
	Ba. whereas there is a digital skills gender gap of 11 %[1]; whereas women are

significantly underrepresented in the information and communication technologies (ICT) sector (accounting for 17 % out of 8 million specialists in the EU) and among science, technology, engineering and mathematics (STEM) graduates (36 %), with the share of men working in a digital sector being 3.1 times greater than that of women, despite the fact that girls outperform boys in digital literacy[2]; whereas the share of women in this sector is decreasing and the percentage of women in ICT careers still remains below 2 % of women's total share in the European labour market;

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[1] European Commission, 2019 Women in Digital Scoreboard.

[2] Commission communication of 5 March 2020 entitled 'A Union of Equality: Gender Equality Strategy 2020-2025', COM(2020)0152.

Or. [en]

Amendment 3

Motion for a resolution
Recital C a (new)

Motion for a resolution	*Amendment*
	Ca. whereas the average percentages of females working in AI and cybersecurity worldwide are 12 % and 20 %, respectively, despite the fact that the demand for labour in these two domains has increased drastically over the years; whereas the low numbers of women working in innovative technologies can have a significant impact on the design, development and implementation of these technologies, leading to the perpetuation of existing discriminatory practices and stereotypes and the development of gender-biased algorithms; whereas

realising the full potential of women's digital skills can contribute significantly to boosting the European economy, especially given that there are around one million vacancies in Europe for digital experts, that 70 % of companies are delaying investments because they cannot find people with the right digital skills[3] and that in some job categories, more than 90 % of jobs require specific types of digital skills[4];

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[3] Commission report of 17 June 2020 on the impact of demographic change.

[4] Commission communication of 1 July 2020 entitled 'European Skills Agenda for sustainable competitiveness, social fairness and resilience', COM(2020)0274.

Or. [en]

Amendment 4

Motion for a resolution
Recital D a (new)

Motion for a resolution	*Amendment*
	Da. whereas there is still a lack of interest among girls in pursuing ICT and STEM tertiary studies, which is leading to a loss of social and economic opportunities and is preventing a potential reduction in gender inequality and the gender pay gap; whereas girls become interested in STEM subjects around the age of 11 and lose interest at 15; whereas 73 % of boys aged 15 to 16 feel comfortable using digital devices that they are less familiar with, compared with 63 % of girls in the same age bracket;

Or. [en]

Amendment 5

Motion for a resolution
Recital D b (new)

	Motion for a resolution	*Amendment*

| | | *Db.*   whereas attitudes towards STEM subjects do not differ between boys and girls during primary education, but cultural discouragement and a lack of awareness and promotion of female role models hinder and negatively affect girls' and women's self-confidence and their opportunities to pursue STEM and ICT studies, related careers and digital entrepreneurship, and lead to discrimination and fewer opportunities for women in the labour market, especially in future-oriented sectors, which offer higher-quality and better-paid jobs;* |

Or. [en]

Amendment 6

Motion for a resolution
Recital E a (new)

	Motion for a resolution	*Amendment*
		Ea. whereas women have lower confidence in their own digital skills, despite digital skills being needed in life and at work, especially now that COVID-19 lockdowns are forcing a significant number of people to rely on an internet connection to work, study or buy food;*

Or. [en]

Amendment 7

Motion for a resolution
Recital F a (new)

	Motion for a resolution	*Amendment*
		Fa. whereas emphasis should be placed on the factors that motivate and help girls to become interested in STEM studies, related careers and digital entrepreneurship, such as promoting*

female role models, having the support of teacher-mentors, gaining peer group approval and developing creativity and practical experience;

<div align="right">Or. [en]</div>

Amendment 8

Motion for a resolution
Recital G a (new)

Motion for a resolution	*Amendment*
	Ga. whereas the spread of COVID-19, the disruption of education caused by the closure of schools and other education facilities, and forced social isolation and restrictions, on the one hand sparked concerns about the impact of interruptions to education on vulnerable students because of their socio-economically disadvantaged backgrounds or place of residence, such as girls in rural, remote and depopulated areas who face more barriers to enrolling in digital education and accessing good ICT infrastructure and services, including the internet and broadband, and on the other hand proved that there is a clear need for efficient, well-functioning and inclusive digital education with increased investment in digital literacy skills and online education, as well as a need to speed up the process of raising awareness and implementing new technologies;

<div align="right">Or. [en]</div>

Amendment 9

Motion for a resolution
Paragraph 1 a (new)

Motion for a resolution	*Amendment*
	1a. Calls on the Commission and the Member States, when developing digital education policies, to ensure that they address the digital gender gap – which is

an economic, societal and cultural issue that slows down the growth of the EU economy – with multi-level and holistic policies, and to ensure that all students have the skills needed to carry out the tasks of future jobs in the changing labour market and have equal opportunities that enable them to tackle future challenges relating to global competitiveness and the digital economy, by promoting a human-centred approach to technology that respects fundamental values and gender equality; calls on the Commission to incorporate an institutional horizontal strategy in its Digital Education Action Plan to combat gender inequality; draws attention to the fact that the insufficient use of human capital associated with gender inequalities has a negative impact on research and innovation-related business and overall economic development, and also has harmful social consequences;

Or. [en]

Amendment 10

Motion for a resolution
Paragraph 2 a (new)

Motion for a resolution	*Amendment*
	2a. Calls on the Commission and the Member States to develop high-quality, inclusive and non-discriminatory digital education which will ensure that the digital society includes everyone and is a pre-requisite for a successful digital transformation and the full implementation of the Digital Agenda for Europe, which will leave no one behind, will benefit everyone and will contribute to gender equality; stresses that increasing the number of young girls and women embarking on a digital education and entering the ICT labour market by employing more people with a wider skills and talent greatly contributes to the formation of an all-inclusive society, to

the building of a more sustainable and inclusive economy through scientific, digital and technological innovation and to the closing of the gender pay gap; welcomes the Gender Equality Strategy's focus on gender equality in the digital transition, in particular the updated Digital Education Action Plan, the updated Skills Agenda for Europe and the Council recommendation on vocational education and training; underlines the need for gender mainstreaming across all EU policies regarding education, skills and digitalisation; welcomes the Commission's Women in Digital Scoreboard, which will monitor women's participation in the digital economy; encourages the Member States to add computer science education to their national curricula and implement changes that will make digital education appealing to girls as well as boys from an early age; stresses that digital education must be planned and created to allow boys and girls to express their interests and skills in the digital sphere and encourage their creativity and innovation; encourages a more social approach to ICT and STEM education to underline the social impact of these careers through, for example, including introductory social science courses in each technical subject as part of digital education;

Or. [en]

Amendment 11

Motion for a resolution
Paragraph 5 a (new)

Motion for a resolution	*Amendment*
	5a. Calls on the Commission and the Member States to create new channels to connect with girls and to implement tools that encourage girls and women to engage with the various forms of digital education; stresses that persisting gender gaps within education need to be tackled

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by educating and training teachers and other educators at every stage of education in the process of forming expectations and biases towards digital skills and ICT careers, as from an early age women face discrimination and prejudice with regard to their digital skills and potential to participate in digital education and the ICT labour market; calls for efficient funding and strategies that include positive action, lifelong learning and active encouragement for girls to undertake studies in ICT and STEM subjects; underlines that the most efficient use of resources is to create a dedicated funding instrument to address the digital gender gap; emphasises the need to invest in reskilling and upskilling programmes for women in digital literacy and relevant digital skills; recalls that the digital sector is changing at an increasingly fast pace, and that it is therefore only prudent to implement policies creating lifelong learning opportunities for women and young girls;

Or. [en]

Amendment 12

Motion for a resolution
Paragraph 6 a (new)

Motion for a resolution	*Amendment*
	6a. Insists that the next Digital Education Action Plan is fully gender-mainstreamed; stresses that digital education must play a substantial role in increasing the participation of girls and women in the digital age and, especially, in fields related to digital entrepreneurship, ICT and STEM, as well as in eliminating the digital gender gap and ensuring better digital inclusion and digital literacy by building on best practices; points out that the gender gaps in higher education persist in the job market as only 5 out of the 20 most common occupations in the EU are

gender-balanced (40/60 ratio) according to the European Institute for Gender Equality (EIGE)[5];

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[5] https://eige.europa.eu/news/education-key-breaking-gender-stereotypes , https://eige.europa.eu/publications/study-and-work-eu-set-apart-gender-report

Or. [en]

Amendment 13

**Motion for a resolution
Paragraph 11 a (new)**

Motion for a resolution	*Amendment*
	11a. Stresses that mechanical, technical and digital school subjects quite often have an unconscious male agenda and approach; highlights that education can be the key to breaking gender stereotypes and that these stereotypes should be challenged, not reinforced, in classrooms in order to create gender-sensitive approaches to education and teaching;

Or. [en]

Amendment 14

**Motion for a resolution
Paragraph 12 a (new)**

Motion for a resolution	*Amendment*
	12a. Recalls that an important obstacle women face in participation in online activities and social networks is cyber violence and online harassment, which disproportionately affects girls and women; underlines that women and young girls also face hostility and prejudice throughout their participation in the ICT sector or digital education; notes that the Digital Education Action Plan should aim to provide skills and tools to girls, young women and men to help

them to react to cyber violence, bullying, online harassment and to navigate disinformation; encourages the Member States to set strict codes of conduct and protocols for reporting all cases of harassment to the relevant authorities; stresses that the Istanbul Convention on preventing and combating violence against women and domestic violence should be ratified and applied;

Or. [en]

Amendment 15

Motion for a resolution
Paragraph 13 a (new)

Motion for a resolution	*Amendment*
	13a. Calls on the Commission and the Member States, as well as private actors, to find more attractive and creative ways to showcase female role models with successful careers in ICT and STEM, especially women leaders in digital and technology fields, in order to motivate, inspire and encourage girls to pursue ICT and STEM studies, break existing stereotypes, and boost women's confidence in their digital skills; emphasises that new and emerging technologies such as artificial intelligence, robotics and virtual and augmented reality offer exciting new prospects that intrigue young women and encourage them to participate in the development and implementation of these technologies;

Or. [en]

Amendment 16

Motion for a resolution
Paragraph 13 b (new)

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Motion for a resolution	*Amendment*

	13b. Calls on the Commission and the Member States to put more effort into promoting digital competences among girls to encourage them to invest in digital skills and choose ICT and STEM career paths; stresses the need for awareness-raising to confront discrimination and prejudice against women and the need to promote policies that contribute to the creation of an inclusive environment, in order to maintain the highest possible number of women within the system, once engaged; calls for a bottom-up approach and an inclusive dialogue with the relevant stakeholders, such as private companies, non-governmental organisations, state institutions, policymakers and civil society, with a view to equipping girls with digital skills, providing inspirational role models, strengthening gender equality and ensuring the protection of women and girls' human rights to education, work and a decent livelihood; calls for information on best practice examples and success models to be collected and shared between Member States to ensure educators are aware of the digital education gender gap and its causes, and to incorporate such practices and recommendations into national education and labour market policies by including targeted measures in national action plans;

Or. [en]

Amendment 17

Motion for a resolution
Paragraph 14 a (new)

Motion for a resolution	*Amendment*

	14a. Encourages various private educational initiatives to support girls undertaking digital studies and promote

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women in digital careers and the digital economy through viral stories on social media, professional European networks organised by women for women and tech company initiatives; stresses the importance of the Commission's 'Women in Digital' task force and 'Digital4Her' initiative;

<div align="right">Or. [en]</div>

Amendment 18

Motion for a resolution
Paragraph 14 b (new)

Motion for a resolution	*Amendment*
	14b. Calls on the Commission and the Member States to take into account the situation of women and girls with disabilities and women and girls in outermost regions or rural areas and to ensure their full access to and inclusion in digital education in order to avoid a widening of the digital divide;

<div align="right">Or. [en]</div>

Amendment 19

Motion for a resolution
Paragraph 15 a (new)

Motion for a resolution	*Amendment*
	15a. Calls on the Member States to take into account ongoing concerns about the risk of COVID-19 spreading further, to ensure the highest level of health protection measures for teachers and trainers, to prioritise digital skill training initiatives, to address the issue of the lack of equipment by providing economic and/or material incentives for vulnerable students and students from socio-economically disadvantaged backgrounds, such as girls in rural areas, to adapt adequately to the current situation and to develop tools in order to ensure full access

to and the smooth functioning of digital education; stresses that women undertake the majority of unpaid household chores and care work at home, a share that has increased during the COVID-19 pandemic, and stresses that as a result, women are less likely to spend sufficient time using digital tools and participating in digital education; recommends that the efforts to boost women's participation and gender equality in the labour market and education are strengthened by promoting the equal sharing of care and household responsibilities between women and men and by supporting the equal take-up of parental and carers' leave by women and men; calls on the Commission to incorporate into its digital education policy flexible learning methods specifically designed for women carers and others who are unable to attend classes, but are able to participate in distance learning;

Or. [en]

Amendment 20

Motion for a resolution
Paragraph 15 b (new)

Motion for a resolution	*Amendment*
	15b. Requests the collection of nuanced gender statistics to evaluate policy outcomes, and the collection of data disaggregated by gender and age to get a better picture of the digital gender divide; welcomes, in that regard, the decision to focus EIGE's Gender Equality Index for 2020 on work in a digital world;

Or. [en]

Amendment 21

Motion for a resolution
Paragraph 15 c (new)

Motion for a resolution	*Amendment*
	15c. Notes that the Member States have a key role to play in ensuring the provision of public education in ways which enhance gender equality, provide the required digital skills for all and combat gender stereotypes for girls and boys, in particular in the area of ICT;

Or. [en]

Amendment 22

Motion for a resolution
Paragraph 15 d (new)

Motion for a resolution	*Amendment*
	15d. Stresses that gender budgeting and mainstreaming must be part of any policy, including digital education policies;

Or. [en]

INFORMATION ON ADOPTION IN COMMITTEE RESPONSIBLE

Date adopted	24.2.2021
Result of final vote	+: 26 –: 0 0: 2
Members present for the final vote	Asim Ademov, Andrea Bocskor, Ilana Cicurel, Gilbert Collard, Gianantonio Da Re, Laurence Farreng, Tomasz Frankowski, Romeo Franz, Alexis Georgoulis, Hannes Heide, Irena Joveva, Petra Kammerevert, Niyazi Kizilyürek, Predrag Fred Matić, Dace Melbārde, Victor Negrescu, Peter Pollák, Marcos Ros Sempere, Domènec Ruiz Devesa, Monica Semedo, Andrey Slabakov, Massimiliano Smeriglio, Michaela Šojdrová, Sabine Verheyen, Theodoros Zagorakis, Milan Zver
Substitutes present for the final vote	Marcel Kolaja
Substitutes under Rule 209(7) present for the final vote	Ryszard Antoni Legutko

FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

26	+
ECR	Dace Melbārde
ID	Gilbert Collard, Gianantonio Da Re
PPE	Asim Ademov, Andrea Bocskor, Tomasz Frankowski, Peter Pollák, Michaela Šojdrová, Sabine Verheyen, Theodoros Zagorakis, Milan Zver
Renew	Ilana Cicurel, Laurence Farreng, Irena Joveva, Monica Semedo
S&D	Hannes Heide, Petra Kammerevert, Predrag Fred Matić, Victor Negrescu, Marcos Ros Sempere, Domènec Ruiz Devesa, Massimiliano Smeriglio
The Left	Alexis Georgoulis, Niyazi Kizilyürek
Verts/ALE	Romeo Franz, Marcel Kolaja

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2	0
ECR	Ryszard Antoni Legutko, Andrey Slabakov

Key to symbols:
+ : in favour
- : against
0 : abstention