



C/2024/885

6.2.2024

Opinion of the European Economic and Social Committee on the proposal for a Council Recommendation on the key enabling factors for successful digital education and training

(COM(2023) 205 final — 2023/0099 (NLE)),

the proposal for a Council Recommendation on improving the provision of digital skills in education and training

(COM(2023) 206 final — 2023/0100 (NLE))

and new ways of achieving digital inclusion

(exploratory opinion at the request of the Belgian Presidency)

(C/2024/885)

Rapporteurs: **Milena ANGELOVA**

Tatjana BABRAUSKIENĖ

Justyna Kalina OCHĘDZAN

Referral	European Commission, 29.6.2023 Letter from the Belgian Presidency of the Council, 10.7.2023
Legal basis	Article 304 of the Treaty on the Functioning of the European Union Exploratory opinion
Section responsible	Employment, Social Affairs and Citizenship
Adopted in section	4.10.2023
Adopted at plenary	25.10.2023
Plenary session No	582
Outcome of vote (for/against/abstentions)	221/02/04

1. Conclusions and recommendations

1.1. The European Economic and Social Committee (EESC) supports the commitment of the European Commission (EC) and the Belgian Presidency of the Council of the European Union to safeguard digital inclusion for all and is firmly committed to helping create levers to reduce digital vulnerability and close the digital gap. Every European citizen should have the right to access quality and inclusive digital education which enables them to develop the knowledge, skills and competences needed to actively participate in today's increasingly digital world and to be well equipped to be competitive on the labour market and to work in high quality jobs.

1.2. The EESC welcomes the Digital skills and education package ⁽¹⁾ as an important and tangible contribution to the **European Year of Skills** ⁽²⁾. Indeed, digital education is pivotal for personal development, social cohesion, employment, competitiveness and innovation — provided that it corresponds to needs for skills and competences in the context of modern society, its people and the economy, presupposed by the twin transition. With this in mind, the EESC supports the two strategic priorities of the EC's Digital Education Action Plan 2021–2027 ⁽³⁾: fostering the development of a high-performing digital education ecosystem and enhancing digital skills and competences for the digital transformation.

⁽¹⁾ COM(2023) 205 final, COM(2023) 206 final, 18.4.2023.

⁽²⁾ https://state-of-the-union.ec.europa.eu/index_en

⁽³⁾ COM(2020) 624 final.

1.3. The EESC asks that further specific guidance be provided regarding quality and inclusive infrastructure, connectivity and security, and safe data handling for all users. The EESC recommends that, in order to implement effective policies on the development of digital skills, the EC encourage the Member States (MSs) to use a comprehensive approach involving the institutions concerned, social partners, civil society organisations (CSOs), training organisations and the scientific community. The EESC stresses the importance of carrying out targeted measures, including in the framework of the National Coalitions for Digital Skills and Jobs, to enhance the involvement of the social partners — including at sectoral and local levels — and to ensure that relevant stakeholders have sufficient capacity to deliver on their responsibilities. The publicity and visibility of the National Coalitions for Digital Skills and Jobs should be increased, with the aim of involving them more actively in the process of developing learning opportunities and increasing investment in the development of digital skills to achieve better alignment with the new workplace needs.

1.4. The EESC underlines the crucial importance of respecting education and training as human rights and public goods. The digitalisation of education and training institutions needs to ensure equal access to education and training for all and not limit access to education. The challenges and opportunities of comprehensively digitalising education and training institutions need to be carefully analysed to ensure that such a transformation supports rather than hinders quality and equal access to education and training. Digitalisation in schools needs to ensure the social interaction of learners and teachers/trainers in education and training, which helps learners improve key competences, especially social competences. A strong basis of basic skills and key competences, in particular languages, needs to be ensured for digital education. Digitalisation should not be seen as a replacement for in-person teaching. Fatigue and the negative impact of overusing digital equipment on students and teachers need to be taken into consideration.

1.5. Digital skills and competences are important for learners of all ages, apprentices, entrepreneurs and employees within up- and reskilling provisions, given their importance for social life and the labour market. While acknowledging the solid base created by the Council's recommendations on improving the provision of digital skills in education and training and on the key enabling factors for successful digital education and training (Digital skills and education package), the EESC asks that further specific guidance be provided to MSs regarding the necessary infrastructure, connectivity and security, and secure and safe data handling for all users, to support the fair, quality, inclusive and sustainable digitalisation of all education sectors while respecting the subsidiarity principle.

1.6. The EESC considers that it is necessary to pay special attention to the development and improvement of high-quality provision of digital training, through information, motivation, the assessment of skills and identification of gaps and training needs, career guidance and mentoring during training in specific digital skills, as well as the validation of informal and non-formal learning, etc. These are of particular importance for providing targeted and effective support, especially for those with low levels of digital skills. The EESC asks the EC and MSs to promote access to and participation in quality and inclusive employee training and adult learning (AL) by providing appropriate tools and approaches for funding digital skills training to support individuals and businesses, in particular micro, small and medium-sized enterprises.

1.7. The EESC points out that policies and measures aimed at developing and improving digital skills should be an integral part of the overall skills governance system. Democratic governance, paying special attention to social dialogue and civic dialogue, is essential to ensure efficient whole-of-government coordination, to facilitate successful engagement with the relevant education, training and labour market actors, and to enable the development of coordinated skills financing arrangements. That is why the EESC is suggesting to the Commission that it synchronise the two Council recommendations and ask the MSs to prepare single national action plans to achieve the European Pillar of Social Rights (EPSR) goals by co-designing digital strategies and education and training strategies, effective policy coordination with the social partners and relevant stakeholders on digital skills and competences, including updating occupational profiles and skills forecasts, and sustainable investment.

1.8. Supporting and developing digital entrepreneurship is vital because of the key role entrepreneurs play in driving digital innovation and economic growth. Therefore, the EESC calls for a supportive ecosystem to be created. It also advocates promoting collaboration and partnerships between entrepreneurs, educational institutions and relevant stakeholders on support for digital skills development, especially for low-skilled adults⁽⁴⁾. Digital skills development should improve entrepreneurship competences such as creativity, problem-solving, adaptability and risk-taking, and thus empower those involved to embrace entrepreneurship and contribute to digital innovation.

1.9. Incorporating digital competencies into the education process is crucial to prepare students for the rapidly evolving digital landscape. To effectively achieve this, it is necessary to support the improvement of teaching and assessment methods with quality and inclusive digital tools by means of continuous professional development for teachers and trainers and by building teachers' capacity to effectively integrate technology into classrooms, creating flexible and adaptive learning environments, integrating science, technology, engineering, arts and mathematics (STEAM) into curricula and adopting a student-centred approach allowing students to take ownership of their learning, putting more emphasis on problem-based and project-based learning, and fostering collaboration, interdisciplinary learning and creativity.

1.10. The EESC notes that a key factor in success is to ensure a close match between selected DigComp2.2 items and the skills requirements for relevant jobs. Digital skills have never been more essential, as they are no longer 'optional' but are now 'critical'⁽⁵⁾. Therefore, the EESC asks MSs to support action by social partners and CSOs aimed at improving digital skills, eliminating digital exclusion and closing the digital gap in society by improved access to EU and national funding. While fully appreciating the unprecedented funding channelled into support for the digital transformation (EUR 130 billion, or 26 % of the total allocation of national recovery and resilience plans (NRRPs) and a substantial part of the Partnership Agreements), the EESC warns that swift implementation is of the utmost importance, as is the involvement of the social partners and CSOs.

1.11. The EESC requests that broader access be provided for teachers, trainers and school heads to high-quality and relevant continuous professional development (CPD) on digital skills and competences, curricula development and assessment, artificial intelligence (AI) and IT skills, with training taking place during working hours and financially supported by ministries and schools. Equal access to education and steps to tackle teacher shortages are now the main challenges⁽⁶⁾. In order to make quality education and training on digital skills and competences transversally integrated into curricula, teacher shortages must be tackled and the teaching profession made more attractive in order to ensure teachers' replacements when they attend CPD. Attractive salaries and working conditions at the same level as that of other tertiary-qualified professionals are essential to make the teaching profession valued and attractive.

1.12. The EESC asks the MSs to include generative AI models such as ChatGPT in the scope of existing and upcoming regulations on the use of AI and address with the social partners, CSOs and relevant stakeholders the impact of generative AI such as ChatGPT on education and training for all age groups, especially on the working conditions of teachers, academics, researchers and other education personnel. As regards children and adolescents, it is very important to educate them and provide them with the right skills to handle algorithms in a way that prevents harmful effects on their psychology and mental health.

1.13. The EESC recommends that the EC encourage and support MSs in developing and launching large-scale information campaigns on digital learning opportunities so as to reach all individuals, involving the social partners, CSOs, national and local media, and various other relevant enablers at national and local level in these campaigns, applying an individual approach to encourage everybody to take part in such training programmes. The EESC recommends that the MSs enhance implementation of the Council recommendations on micro-credentials with specific attention paid to quality standards.

⁽⁴⁾ Council Recommendation of 19 December 2016 on Upskilling Pathways: New Opportunities for Adults (OJ C 484, 24.12.2016, p. 1).

⁽⁵⁾ Report: *Digital Economy and Society Index 2022. Thematic chapters*.

⁽⁶⁾ Education and Training Monitor 2022 and the European Education Area (EEA) Progress Report.

1.14. The EESC recommends that the EC encourage MSs to focus on equal access to digital education and training and digital tools by:

1.14.1. ensuring the full inclusiveness of digital education and training by ensuring access for learners and teachers with disabilities and providing specialised equipment and solutions for learners with special educational needs and for language minorities and migrants;

1.14.2. eliminating urban-rural and other geographical divides in access to digital education and training, digital tools and the internet;

1.14.3. recognising and neutralising biases in the fields of gender, ethnic background, sexual identity, age, language, religion, political opinion, economic and social status at birth and disability, and in any other field protected by human rights, in real life and in the algorithms creating our digital reality;

1.14.4. implementing gender equality politics at every stage of digital education and training, and reducing gender skills gaps, especially in science, technology, engineering and mathematics (STEM) specialisations, including programming and AI ⁽⁷⁾;

1.14.5. eliminating bias in algorithms, as one of the main sources of inequality in the development of AI technology and digital reality, and paying special attention to eliminating stereotypes and bias so as to avoid, for example, a digital gender gap or other inequalities developing in technology applications. Ethical AI regulations should address both teaching materials and ways of learning, but also the use of data, the development of digital pedagogy, and lifelong learning. The EESC notes that creating technology and services that are more inclusive and respectful to all people requires inclusive language in coding and programming.

1.15. AI plays an increasingly large role in the development of the digital economy. The EESC draws attention to the importance of developing knowledge and skills on AI in European societies in order to avoid digital gaps and to strengthen the EU's competitiveness ⁽⁸⁾. The EESC notes the growing need for AI roles in public and private entities and for AI skills training for workers, individuals of all ages (including both younger and older people), people with disabilities, people with special needs and people from rural areas. The EESC asks the EC and MSs to ensure that everyone, especially decision-and-policy makers, has the relevant information on the challenges and opportunities entailed in the use of AI, as well as the moral, ethical and legal aspects thereof.

2. Key enabling factors for successful digital education

2.1. The COVID-19 crisis created a sudden need to digitalise education and training. In 2019, 50 % of European education systems had an ongoing reform process in the digital education sector. Nevertheless, in half of the education systems, digital competences were not assessed at school through national testing ⁽⁹⁾. According to the Eurydice report ⁽¹⁰⁾, informatics is still a relatively new discipline in school education and is taught in different ways across European countries. It is crucial that comprehensive national strategies on digital education, training and tools, such as the European Commission's SELFIE ⁽¹¹⁾ tool, help achieve a secure digital environment in schools by helping them to implement a model for their comprehensive digitalisation, to assess their degree of digitalisation and to identify suitable further steps in the digital transformation. This entails making a dedicated IT specialist available in education and training institutions at all times to effectively manage their digital resources, maintain a secure environment, and keep them up-to-date with technological advancement.

⁽⁷⁾ In 2018, only 1 % of girls, on average, reported that they expected to work in an ICT-related occupation, compared with 10 % of boys. Women represent about 27 % of science and engineering professionals in the EU.

⁽⁸⁾ According to the Future of Jobs Report 2023 by the World Economic Forum, AI and machine learning specialists top the list of fast-growing jobs.

⁽⁹⁾ Eurydice: Digital Education at School in Europe (europa.eu).

⁽¹⁰⁾ Eurydice: Informatics education at school in Europe — Publications Office of the European Union (europa.eu).

⁽¹¹⁾ SELFIE — European Education Area (europa.eu).

2.2. Education systems are expected to help students and learners to be digitally literate citizens and digitally competent professionals who can harness the benefits of the digital society while navigating its challenges creatively and responsibly, closing the digital gap. To achieve this, it is crucial for MSs to prioritise the development and implementation of a comprehensive digital skills strategy and the provision of sustainable funding to support broad digital competences for every student and learner. Education and training on basic skills and key competences should focus on teaching and learning digital literacy and the challenges and opportunities of using AI. This should also support critical thinking, problem-solving, creativity and innovation, as well as specialised and professional digital skills such as cybersecurity, coding, data analysis, digital collaboration and digital mobility. The MSs need to be motivated to use the DigComp ⁽¹²⁾ for there to be a common understanding of digital competence. It is essential to integrate digital competences across various subjects and grade levels to ensure that students acquire a broad proficiency in these skills. It is also important to improve skills in digital entrepreneurship to improve both the establishment of SMEs and employability.

2.3. The digital transition of education and training needs to be achieved by quality and inclusive education, teaching and assessment of digital competences, improving these with problem-based, project-based and peer-to-peer learning work, including in STEAM fields, while moving away from the traditional model of assessment. This shift will enable students to actively engage with real-world challenges, apply their digital skills and develop a deeper understanding of complex concepts, collaboration and active student engagement in an overall educational experience.

2.4. Digital transitions are already changing jobs. The European Pillar of Social Rights Action Plan sets ambitious targets to support MSs in their digital transformation, aimed at ensuring that 80 % of adults have at least basic digital skills and that 20 million ICT specialists are employed in the EU, with more participation from women. The EESC calls for extra efforts in terms of implementing measures, targeted at decreasing labour shortages and skills mismatches, contributing to sustainable growth, productivity, and innovation that will ensure quality jobs, fair salaries and working conditions. Recognising the importance of the digital skills and competencies of the workforce, it is crucial to implement the 1st principle of the EPSR together with the 2022 European Declaration on Digital Rights and Principles for the Digital Decade, and to ensure proper financing of Vocational Education and Training (VET) along with AL programmes and quality training for all.

2.5. Up- and reskilling for a just transition of the labour market thanks to digitalisation, and obtaining digital skills and competences for jobs is not solely an individual responsibility of learners (including job seekers and the employed) but, having a substantial social and economic impact, is a responsibility of the state, the social partners and society as a whole. Effective national, sectoral and company-level skills and digitalisation strategies should support workers through the provision of relevant and high-quality training. Companies and social partners play an essential role in providing quality apprenticeships and up- and reskilling of workers for the digital transition. Special efforts and investments should be dedicated to the digitalisation of VET to ensure the acquisition of advanced digital skills by future specialists.

2.6. The EESC recalls the Council Recommendation of 22 May 2018 on key competences for lifelong learning ⁽¹³⁾, that stresses that digital competence is broader than just knowledge of digital technologies. It is important to include digital skills and competences in VET and AL from the perspective of fostering critical thinking and democratic citizenship, as well as the fight against fake news and misinformation.

⁽¹²⁾ JRC Publications Repository — DigComp 2.2: The Digital Competence Framework for Citizens — With new examples of knowledge, skills and attitudes (europa.eu).

⁽¹³⁾ OJ C 189, 4.6.2018, p. 1, see point 4 of the Annex.

2.7. Supporting and developing digital entrepreneurship is vital because of the key role that entrepreneurs play in driving digital innovation and economic growth. Entrepreneurs are often the driving force for leveraging digital skills and technologies to create new businesses, generate employment, contribute to economic development and provide a more comprehensive perspective on digital learning.

2.8. The EESC recommends that the EC encourage and support MSs to:

- Allocate dedicated funding and resources to support the digitalisation of VET and AL for all ages, including the unemployed and NEETs (not in employment, education or training), and enhance the overall quality and relevance of VET and AL programmes. This includes: financial support for both employers and their employees when arranging paid educational leave, individual learning accounts or similar funding mechanisms co-governed with the social partners. It is essential that appropriate investment be ensured for infrastructure upgrades of education and training institutions, curriculum development with the use of DigComp, professional development of teachers and trainers, free access to quality digital learning resources, and establishing grants and scholarships to support students pursuing digital-focused VET programmes;
- Further support the cooperation of VET institutions in centres of excellence etc.;
- Review and update VET and AL provision to incorporate digital competences important for everyday life and advanced digital skills for jobs. It is important to enhance the availability of and access to education and training for learners of all backgrounds and ages on emerging technologies such as advanced robotics and automation, AI, the internet of Things etc., which will enhance their employability. In addition, MSs need to ensure that VET and AL reflect real-world digital challenges and provide hands-on experiences for learners to enhance their understanding of digital technologies and their relevance in the workplace;
- Promote diversity in access to digital skills and competence development for all ages and gender-balanced uptakes of IT sector work. Gender equality in the IT sector needs to be achieved by promoting STEAM from early age, supporting equal access for female students and learners to IT studies and by ensuring that the IT sector provides a gender-equal supportive work environment and career development possibilities, including ensuring that women obtain leadership and decision-making roles ⁽¹⁴⁾;
- Create and develop a supportive ecosystem by fostering collaborations between VET and AL institutions and labour market experts, technology companies and start-ups to provide specialised training programmes within VET. Special attention should be devoted to digital entrepreneurship, including support for access to funding and financing opportunities, mentorship programmes, incubators and accelerators, a regulatory environment that fosters innovation and entrepreneurial activities, the establishment of knowledge sharing platforms etc. Such collaboration could facilitate valuable experiences, exposure to workplace practices, and relevant skills development, equipping students with the necessary tools to excel in digital job roles;
- Ensure quality and effective apprenticeship for learners of all ages in any sectors involved in digital transitions, and in the digital sectors. It is important to enhance the implementation of the Council Recommendation on a European Framework for Quality and Effective Apprenticeships to support the co-designing of training programmes and offering fair quality, inclusive, and effective apprenticeships that ensure a skilled workforce for companies as an investment, and quality jobs for young professionals and those workers and unemployed who need reskilling.

⁽¹⁴⁾ The EIGE publication entitled Work-life balance in the ICT sector shows that increasing diversity can enhance an organisation's capacity to innovate by some 2,5 %.

2.9. The EESC supports the idea that procurement supporting digitalisation of education and training institutions needs to ensure quality, transparency, accessibility and sustainability. The EESC underlines the need to ensure that public procurement for digitalisation of education and training facilities and equipment has a social dimension and guarantees quality services and good working conditions.

2.10. The EESC welcomes the proposal to support teachers, trainers, school leaders and learners and suggests to MSs that they ensure they know and use the *Guidelines for teachers and educators on tackling disinformation and promoting digital literacy through education and training*⁽¹⁵⁾ and the toolkit on how to spot and fight disinformation, as well as the *Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators*⁽¹⁶⁾.

2.11. The proposed recommendations of the EC lay a good foundation for the development of education and training systems regarding digital competencies and skills. In order to ensure national competence on education and training, the EESC underlines that the existing European Citizens' Digital Skills Framework can support digital skills acquisition but it should not be used to assess students' skills. The EESC recommends that the EC and MSs develop the European framework for digital skills with a broader focus, while taking into account educational levels and other skills, especially transversal skills, paying special attention to work with AI, ChatGPT, social media, algorithms and the protection of personal data, as well as combating fake news and digital bullying.

2.12. The EESC recommends that specific frameworks such as DigCompEdu, DigComp at Work and others be further developed. Further, frameworks at sector level may be elaborated within the Pact for Skills projects with the involvement of relevant social partners, CSOs and other stakeholders as guidelines for digital skills development for the labour market. Despite the relatively low level of general digital skills of citizens in most MSs, a number of specific skills are also needed to enable the performing of specific tasks, to be discussed with social partners when occupational profiles are updated.

3. Workforce and labour market

3.1. To ensure the timely support and equipment of the workforce with the necessary digital knowledge, skills and competencies, it is necessary to develop and make available in an accessible and affordable manner more flexible training programmes and methods and tailored offers including distance learning and shorter training programmes corresponding to learners' needs. Wider use of digital technologies in the process of training adults is vital as is the conducting of online distance learning courses, at any time and from any place, including vocational training, in order to support work-life balance and family responsibilities. Solutions must be found to increase motivation and access to online training, with the support of training accounts and vouchers for job seekers and those who need upskilling and reskilling, by providing quality career guidance for all and guaranteeing recognition of training courses. A multi-faceted approach that addresses the recognition of non-formal and informal learning, as well as skills validation and certification, is essential to ensure that all individuals can benefit from and participate in the digital transformation.

3.2. The EESC believes that in order to respond to changes in the demand for digital skills, it is necessary to promote lifelong learning and ensure that all individuals have access to quality and inclusive lifelong learning at every stage and transition of career and life. In response, it is necessary to provide more flexible and accessible forms of learning, including specially developed forms of learning that correspond to the characteristics of individual target groups, offering innovative learning methods and electronic learning tools and resources.

⁽¹⁵⁾ Guidelines for teachers and educators on tackling disinformation and promoting digital literacy through education and training (europa.eu).

⁽¹⁶⁾ Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators — Publications Office of the European Union (europa.eu).

4. On the path to accessibility, inclusion and equality in digital skills and education

4.1. Every European citizen should have the right to access quality and inclusive digital education which enables them to develop the knowledge, skills and competences needed to actively participate in today's increasingly digital world. The EESC fully supports the view of the Belgian Presidency of the Council of the European Union that 'digital transition must go hand in hand with digital inclusion' and it is committed to helping create levers to reduce digital vulnerability and close the digital gap.

4.2. A lifelong perspective on inclusive digital education starts from an early age, through adulthood to old age. MSs should be encouraged to improve the framework and conditions for providing better quality, inclusive and accessible education and lifelong learning opportunities for all through reforming and developing the education system, training and lifelong learning.

4.3. Working on understanding, recognising and neutralising biases in the fields of gender, ethnic background, sexual identity, age, language, religion, political opinion, economic and social status at birth and disability, and in any other field protected by human rights in real life and in the algorithms creating our digital reality, is one of the milestones of digital inclusion. Particular attention should be paid to ensuring learners do not replicate their teachers' biases and limitations.

4.4. The gender skills gap is very visible in STEM specialisations, including programming and AI. In 2018, only 1 % of girls, on average, reported that they expected to work in an ICT-related occupation, compared to 10 % of boys⁽¹⁷⁾. Women represent about 27 % of science and engineering professionals in the EU⁽¹⁸⁾. Research by Engineering UK has shown that 73 % of 11–14-year-olds do not know what engineers do and 42 % of teachers do not feel confident giving engineering career advice.

4.5. It is important to encourage MSs to develop research and international cooperation in the areas of digital education and digital pedagogy. Governments and organisations should invest in expanding internet infrastructure to under-served areas and offer subsidised devices to low-income individuals, CSOs and businesses. Customer support centres and digital help desks should be set up to help people navigate digital services and deal with technical challenges while taking courses to acquire minimum basic skills.

4.6. The Digital Economy and Society Index (DESI) identifies large territorial differences in different parts of Europe as well as between rural and urban areas. Such kinds of inequality should be mentioned at the level of MSs' policies and reforms. It is important to ensure that everyone has access to the internet, as well as the device and skills required to take advantage of the digital public services they need. It is the responsibility of authorities to ensure that everyone has access to services and that no one is left behind. This is important in rural areas and in those with poor or non-existent internet connections.

5. AI knowledge and skills as a factor in digital inclusion

5.1. AI plays an increasingly large role in the development of the digital economy. The EESC draws attention to the importance of developing knowledge and skills on AI in European societies in order to avoid digital gaps and to strengthen the EU's competitiveness. The EESC notes the growing need for AI roles in public and private entities and for AI skills training for workers, individuals of all ages (including both younger and older people), people with disabilities, people with special needs and people from rural areas.

⁽¹⁷⁾ <https://eige.europa.eu/publications-resources/toolkits-guides/gender-equality-index-2020-report/men-dominate-technology-development>

⁽¹⁸⁾ <https://eige.europa.eu/publications-resources/toolkits-guides/gender-equality-index-2020-report/men-dominate-technology-development>

5.2. It is necessary to eliminate bias in algorithms — one of the main sources of inequality in the development of AI technology and digital reality — and to pay special attention to eliminating stereotypes and biases in order to avoid introducing elements such as a digital gender gap or other inequalities in technology applications. Ethical AI regulations should address both teaching materials and ways of learning, but also the use of data, the development of digital pedagogy, and lifelong learning. The EESC notes that creating technology and services that are more inclusive and respectful to all people requires inclusive language in coding and programming.

5.3. Public and private entities are using AI to gain insights from data, automate processes, enhance customer experiences and develop new products and services or improve existing ones. The most important roles related to AI management and support include data product manager, AI strategist, AI quality control officer, AI ethics officer, AI usability expert, AI auditor and AI legal counsel⁽¹⁹⁾.

5.4. As the *AI Skills Needs Analysis* indicates, in addition to technical abilities, AI professionals require various soft skills such as problem-solving, critical thinking and communication skills, as well as transversal skills, including accessibility, ethics, privacy and security. They also need knowledge of how to operate within organisations, such as project management skills, DevOps and understanding of business processes. These skills are crucial to functioning effectively as an AI professional.

5.5. The EESC asks the EC and MSs to ensure that everyone, especially decision- and policy-makers, has the relevant information on the challenges and opportunities entailed in the use of AI, as well as the moral, ethical and legal aspects thereof.

Brussels, 25 October 2023.

The President
of the European Economic and Social Committee
Oliver RÖPKE

⁽¹⁹⁾ *AI Skills Needs Analysis: An insight into the AI roles and skills needed for Europe, 2023.*