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From:	General Secretariat of the Council
To:	Permanent Representatives Committee/Council
Subject:	Artificial intelligence in education and training: combining technological innovation with quality education for all *- Policy debate*

Following consultation of the Education Committee, the Presidency has prepared the attached background note, which is submitted as the basis for the policy debate to take place at the Education, Youth, Culture and Sport Council meeting on 13 May 2024.

ANNEX

Artificial intelligence in education and training: combining technological innovation with quality education for all

Presidency background note

The possibilities offered by increased computing power, data availability and advances in algorithms have made artificial intelligence (AI) the leading technological revolution of our time. By improving prediction, optimising operations and personalising digital solutions for individuals and organisations, the use of AI can provide a key competitive advantage to support socially beneficial outcomes in education and training. The arrival of generative AI models has triggered many questions and debates, impacting a variety of work environments, including media, education and training and research.

European developments and initiatives

In November 2019, during the Finnish Presidency, the Member States recognised AI's potential to provide more inclusive, stimulating and personalised education, as well as concerns in relation to ethical issues, data protection and challenges for the teaching profession[1]. They agreed that the objective should be to work towards the reliable and responsible integration of AI into education and training at European level.

[1] 13297/19.

In September 2020, the European Commission adopted the Digital Education Action Plan 2021-2027[2]. The action plan underlines the need to foster a high-performing digital education ecosystem and to enhance digital skills and competences for the digital transformation. It announces the development of the *Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators*[3] to provide a solid basis for teachers and school leaders in expanding their use of these technologies in a safe, considerate and ethical way. In November 2023, two recommendations were adopted by the Council on the key enabling factors for successful digital education and training[4] and on improving the provision of digital skills and competences in education and training[5]. They highlight in particular that it is crucial to support education and training institutions and non-formal learning institutions, as well as teachers, trainers and other education staff, in developing a better understanding of new and emerging technologies such as artificial intelligence and how they can be used in a confident and safe manner to enhance teaching and learning.

The draft Artificial Intelligence Act[6], which will shortly be adopted, aims to strike a balance between maintaining opportunities for technological innovation and development, while at the same time ensuring that fundamental rights are preserved.

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2 COM(2020) 624 final.

3 European Commission, Directorate-General for Education, Youth, Sport and Culture, 'Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators', Publications Office of the European Union, 2022.

4 Council Recommendation of 23 November 2023 on the key enabling factors for successful digital education and training, OJ C, C/2024/1115, 24.1.2024.

5 Council Recommendation of 23 November 2023 on improving the provision of digital skills and competences in education and training, OJ C, C/2024/1030, 23.1.2024.

6 Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts (COM(2021) 206 final).

Enhancing learners' and teachers' skills and competences

The issue of digital skills and competences for learners and teachers is of paramount importance. It concerns the skills and competences relating to AI and its application in learning, in a professional context and, more broadly, for people as European citizens. The *Digital Competence Framework for Citizens (DigComp) 2.2*[7] was updated in March 2022 to take account of AI-related skills such as how AI tools work, interactions between AI and the user, and the ability to make sense of these tools and to understand their limitations.

Lifelong learning and inclusion

AI can bring about a major change in lifelong learning approaches and practices. It offers opportunities to personalise learning, accompany learners at all times, determine appropriate learning paths, and provide varied, interactive and engaging learning environments: these possibilities hold enormous potential for supporting learning and combatting inequalities in this area. AI tools could help train and emancipate people who have only limited access to traditional education and training systems. However, if this innovation is driven exclusively by economic profitability, there is a real risk of widening the digital divide: the divide between learners who may or may not have access to high-performance but potentially expensive learning tools, and between those who may or may not have developed the skills and competences to master these tools. The EU and its Member States must ensure that this risk of discrimination and unequal access is limited.

[7] Vuorikari, R., Kluzer, S. and Punie, Y., DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes, Publications Office of the European Union, Luxembourg, 2022.

The role of teachers and trainers

AI also has the potential to support teachers and trainers in the implementation of efficient, learner-centred learning, by taking account of specific needs, promoting pedagogical differentiation and developing adaptive learning. The widespread use of AI in learning environments and in society will probably lead to a rethink of teaching practices, without undermining the role of the teacher. It is essential to support teachers and trainers as they come to terms with these new technologies, with a view to avoiding insecurity, particularly legal insecurity in the use of AI tools. AI should contribute to the well-being of teachers and trainers by facilitating their practices, rather than potentially devaluing the teaching profession.

Societal and ethical issues

Identifying deep fakes, media content manipulated by AI and output produced by generative AI models are new challenges. Raising learners' awareness of these issues is not just about propaganda or preserving democratic values. Digital disinformation or misinformation is also an obstacle to the development of skills such as analytical thinking, critical thinking, problem solving and independent learning.

In the light of the information presented, the Presidency invites Ministers to exchange views and share experiences on the following issues:

1. How can national education and training systems be prepared for the challenges brought about by AI, while making the most of the opportunities it has to offer? Is AI already impacting your national education and training systems?

2. What measures could be taken at European level, in consultation with the Member States, to make the most of AI in education and training, while ensuring quality education for all?