What is the impact of AI on education?

Jun.-Prof. Maria Wirzberger is appointed member of the Commission Expert group on Artificial Intelligence and Data in education and training

On Monday, 21 June 2021, the European Commission notified successful applicants of the call for the Commission Expert group on Artificial Intelligence and Data in education and training. We’re pleased to announce that Maria Wirzberger, Junior Professor for Teaching and Learning with Intelligent Systems at the Institute of Educational Science and Faculty Member of the Cluster of Excellence SimTech at the University of Stuttgart is among the selected members.

The emergence of artificial intelligence (AI) and data use in education and training has triggered a discussion on its role and ethical implications. For example, AI-powered techniques can be used to record and assess details of students’ development, social relationships, behaviour, and
educational performance in order to improve learning processes based on these data. This can be achieved by finding repetitive patterns of failure or success and by detecting areas for improvement. These approaches have led to a discussion about ethics and privacy in the context of AI and education-related data, as well as risks related to fundamental rights such as the right to non-discrimination, including gender equality. “Algorithms function like boxes. They are based on standards that are set by people and can therefore also be afflicted with their stereotypes. These stereotypes are often unconscious and thus find their way into the development of technology without being reflected upon. We need to be aware of this,” Wirzberger says. She is also newly appointed spokesperson for the Interchange Forum for Reflecting on Intelligent Systems (IRIS) which aims at answering the question what the impact of intelligent systems on society is.

As the use of AI systems and thus the use of big data in education advances rapidly, there is a growing need to equip educators and students with a basic understanding of these technologies. This is essential to enable them to engage positively, but critically with questions about AI and data material in education and the ethics surrounding their implementation. To address these issues, the European Commission’s Directorate-General for Education, Youth, Sports and Culture (DG EAC) set up a group of experts on AI and data use in education and training together with the Commission’s Directorate-General for Communications Networks, Content and Technology (DG CNECT).

**What are the tasks of the expert group?**

The group’s primary task will be to assist DG EAC and DG CNECT with the preparation of practical guidelines for educators with concrete practices on the ethical implications of AI and data use in education and training. Members of the group will support cooperation and the exchange of information, expertise and best practices between the Commission and relevant stakeholders. The group will also help to raise awareness within education and training sectors about the opportunities and risks of the use of AI and education related data.

**Background**
With the Digital Education Action Plan, the European Commission presented its strategic view on addressing the impact of the COVID-19 crisis, as well as the long-term digital transformation of education and training systems. The first strategic priority of the Action Plan – ‘fostering the development of a high-performing digital education ecosystem’ – which seeks to promote understanding of emerging technologies and their application education foresees the creation of ethical guidelines on AI and data use in education and training. The guidelines will be accompanied by a training programme for researchers and students on the ethical aspects of AI. The Digital Education Action Plan is a key initiative under the Commission’s European Education Area initiative, which outlines its vision for the future of education and training in the EU until 2025 and beyond.

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