Editorial: Education in the Age of Artificial Intelligence

The progress of civilisation is the ground for enormous changes in the life of every human being. The development of information technology, telecommunications or multimedia is a huge step in the history of all civilisation. This evolution from the industrial era, where we were dealing with an industrial society, is moving us to an information society based on artificial intelligence (AI). Information is becoming the basis not only for the smooth functioning of all types of institutions – but also, and perhaps above all, for the educational process. The implementation of artificial intelligence in the education system is a topic that generates both enthusiasm and concern. On the one hand, the possibilities it offers in the context of education seem almost limitless, promising, among other things, the personalisation of teaching, the optimisation of teaching processes and support in the diagnosis and development of students’ skills. On the other hand, there are questions about data security, ethics and the potential replacement of teachers by machines.

Undoubtedly, artificial intelligence can contribute to significant progress in personalising the educational process. Thanks to its ability to analyse large data sets, it is able to tailor teaching materials to the individual needs and learning pace of each student. AI also offers the potential to support teachers by automating time-consuming tasks, allowing teachers to focus on more valuable aspects of teaching, such as developing students’ creativity and critical thinking skills.

However, the implementation of artificial intelligence in education also comes with major challenges. Privacy and data security issues are particularly important, as AI systems require access to large amounts of sensitive information to function effectively. In addition, there is a risk of over-reliance on technology at the expense of face-to-face human relationships, which are crucial for the emotional and social development of children and young people. It is important that technology supports teachers, rather than seeking to replace them, so that it strikes a balance between innovation and the humanistic dimension of education. The integration of AI in the education system offers significant potential for personalising learning and optimising educational processes. However, in order to realise this potential, conscious and thoughtful steps must be taken to both maximise the benefits and minimise the risks.
The articles included in this volume are part of a wide-ranging scholarly debate on this topic. On behalf of the entire Editorial Board, we invite our Readers to familiarise themselves with the contents of this issue of *Horizons of Education*.

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