

Kapiton Alla Myroslavivna  
doctor of pedagogical sciences, associate professor,  
professor of the department of computer and information technologies and systems  
National University «Yuri Kondratyuk Poltava Polytechnic»

## **THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON SOLVING THE PROBLEM OF PERSONALIZED LEARNING**

Artificial intelligence (AI) plays a key role in implementing the idea of personalized learning - adapting learning, its content and pace to the specific needs of each student. AI has the potential to improve our understanding of the learning process. AI systems can collect vast amounts of data about their learners (namely: their learning methods, pace, knowledge gaps, etc.). Using this data, they will be able to identify teaching methods that work most effectively and those that leave students confused. As these systems collect data about students, we collect data about the learning process, which allows us to build more sophisticated and accurate systems. Stanford research shows that incorporating technology into problem-solving learning processes can exacerbate some of the existing problems. When students with insufficient knowledge are given simple tasks and more talented students are given more difficult problems, the skill and knowledge gap widens[1, 2].

It is important to note that AI technology will never replace a human teacher. We need to realize how much AI can improve education and maintain a balance between the involvement of AI technology and human staff in the learning process. Artificial intelligence provides the ability to receive data from various sources, validate this data and analyze it using tools such as predictive analytics and machine learning, thus the promising potential of artificial intelligence in the field of educational technology can be unlocked and its use can play a role as a catalyst for the transformation of education for all stakeholders, from individual students to ministries of education. Artificial intelligence can be a tutor. AI can also analyze a variety of tests, identify problem areas, and create customized lessons to fill knowledge gaps [2].

AI's ability to make connections between disparate data sources will help students identify areas where they need real-time interaction or extra help. As a result, AI makes it possible to develop an individual educational trajectory for each student, taking into account his strengths and weaknesses, abilities and tasks. Predictive analytics and machine learning also have significant potential for developing the social and emotional skills needed in learning, as they allow educators to personalize the learning process based on the analysis of both qualitative and quantitative data to help students master these skills. In addition, technology enables learning anytime, anywhere, thereby democratizing education and helping students who are able to attend educational institutions to maximize their abilities.

The effective use of artificial intelligence, data and analytics, and machine learning can enable educators to make the learning process more engaging through the use of immersive technologies. The emergence of these exciting new technologies increases the importance of the role of the teacher - technology enhances his capabilities, but cannot replace him. The potential of AI is designed to increase the effectiveness of teachers and create ideal conditions for learning and development of students. By analyzing data from all available sources and generating recommendations for creating individual educational trajectories, AI allows educators to significantly reduce the time spent on studying and collating data (this task becomes practically impossible if the data is constantly changing, and the number of terms of success and different sources that must be taken into account, so large). Data and analytics can also improve the effectiveness of teamwork in learning. Teachers and heads of units, methodical services, social security services and the management of the institution can coordinate their efforts to jointly create and implement individual support programs taking into account a common set of indicators.

Heads of educational institutions are responsible for making decisions that can affect every student and teacher. And if earlier it was believed that it was enough for the school management to monitor academic performance, now it is accepted that preparing a student for life outside the educational institution requires the development of various skills and abilities, and all of them should be an integral part of the training

program. Teachers and school administrators must assess not only basic factors such as behavior and attendance, but also classroom performance, persistence, optimism, self-confidence, critical thinking, and a number of other factors that determine future success. Without AI, educational leaders cannot analyze all of these disparate factors for each learner or draw the conclusions needed to provide timely support. Managing an institution (its human and financial resources, infrastructure and digital environment, compliance with tax and legal requirements, etc.) is often accompanied by solving a multitude of other logistical and administrative tasks.

For many managers, the situation is complicated by the fact that these tasks must be solved urgently. Sudden, unforeseen expenses for maintenance and repair of the building; solving the problem of lack of premises, teachers or administrative staff; growth and decline in the number of students - all this can negatively affect the effectiveness of the educational institution's management and create additional financial restrictions. The most important development in the evolution of AI has been the transition from what is called "local" computing, in which users access a computer or a network of computers in a local environment, to "cloud" computing, with access to computing resources over the Internet, which provides virtually unlimited performance that can be scaled according to user needs. Such computing resources include tools and applications such as data stores, servers, databases, networks, and software. As long as an electronic device has access to the Internet, it has access to data and software to process it.

## REFERENCES

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