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Advantages and Challenges of AI in Education for Teachers

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Artificial intelligence stands out from other technologies and discoveries of the 19th-20th centuries, such as the electric power network, the steam engine, the decoding of the human genome, the invention of computers and the Internet, because it does not depend solely on the critically expensive physical infrastructure that allows it to be mastered. Many of its benefits can be provided through the already existing equipment that we all carry in our pockets. Researchers note that artificial intelligence (AI) will play a key role in the implementation of personalized learning — customizing learning, content and pace to the specific needs of each student. AI provides the opportunity to take data from a variety of sources, validate that data, and analyze it using tools such as predictive analytics and machine learning. Thus, the promising potential of AI in the field of education technologies can be unlocked and its usage can play the role of a catalyst for the transformation of education for all stakeholders - from individual students to ministries of education. Through the analysis of data from all available sources and the generation of recommendations for creating individual learning paths, AI allows educators to significantly reduce time costs to study and compare data (this task becomes almost impossible if the data is constantly changing). Data and analytics can also increase the effectiveness of teamwork at school. Subject teachers, department heads, methodological services, social services and school management can coordinate their efforts to jointly create and implement individual support programs based on a common set of indicators. Teachers and school leaders need to evaluate not only key 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, school leaders cannot analyze all these heterogeneous factors in relation to each student or draw the conclusions necessary for timely support. Educational organizations have always faced the challenge of ensuring that the curricula of schools and colleges are up to date and allow students to properly prepare for life in the world that they will face after graduation.The knowledge base in many subject areas, including natural sciences and technology, is constantly changing and expanding, which makes it difficult to ensure the adequacy and relevance of the content of training courses. The ability to use big data sets, analyze that data and draw conclusions, and communicate those findings through dashboards and visualizations tailored to the needs and responsibilities of those in charge of curriculum development can enhance the relevance and accuracy of the available information and the level of readiness of those who is doing this important work. According to researchers, artificial intelligence will also play an important role in solving another serious task faced by specialists in the field of education technologies: the implementation of personalized knowledge assessment [1,2]. Nevertheless, there are a number of limitations related, in particular, to the level of development of the digital educational environment which currently prevent the active integration of AI into the educational process. For example, before using artificial intelligence (AI) or predictive analytics to create individual educational paths, it is necessary to improve the ways of collecting, storing and making data available, which should, of course, be in digital format [2].Thus, the use of AI technology in the

learning process (analysis of big data, digital footprints, predictive analytics, machine learning) can play the role of a catalyst for the digital transformation of education, organizing a digital educational environment and in implementing the idea of personalized learning, adapting its content and pace to individual characteristics and the needs of each student, providing the necessary tutor support or methodological assistance [1,3].This research has been supported by the Interdisciplinary Scientific and Educational School of Moscow University «Preservation of the World Cultural and Historical Heritage».

References

1) Авраменко А.П. Искусственный интеллект в преподавании иностранных языков. М.,КДУ, 2022. 166 с.
2) Искусственный интеллект в образовании: Изменение темпов обучения. Аналитическая записка ИИТО ЮНЕСКО / Стивен Даггэн; ред. С.Ю. Князева; пер. с англ.: А.В. Паршакова. М., Институт ЮНЕСКО по информационным технологиям в образовании, 2020.
3) Фадеева В.А. Цифровая образовательная среда в контексте подготовки будущих учителей иностранного языка // Коммуникативные коды в межкультурном пространстве как средство формирования общегуманитарных компетенций человека нового поколения. Материалы II Междисциплинарной научно-практической конференции 31 мая 2022 г.: сб. науч. трудов / науч. ред. Г.Г. Молчанова. М., КДУ, Университетская книга. 2022. С. 88–95.