

FUTURE EDUCATION: PROSPECTS OF ARTIFICIAL INTELLIGENCE IN PEDAGOGICAL ACTIVITY

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Abstract. This article analyzes the role, opportunities and prospects of artificial intelligence technologies in pedagogical activity in the process of digitizing the education system.

The importance of artificial intelligence in improving the quality of education, organizing individual education, improving the assessment system, and effectively organizing the professional activities of teachers is highlighted. Also, the advantages and problems of using artificial intelligence are considered based on the experience of Uzbekistan and foreign countries.

Keywords: artificial intelligence, digital education, pedagogical activity, innovative technologies, individual education, distance learning, quality of education, digitization.

ОБРАЗОВАНИЕ БУДУЩЕГО: ПЕРСПЕКТИВЫ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В ПЕДАГОГИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ

Аннотация. В статье анализируется роль, возможности и перспективы технологий искусственного интеллекта в педагогической деятельности в процессе цифровизации системы образования. Подчеркивается важность искусственного интеллекта в повышении качества образования, организации индивидуального обучения, совершенствовании системы оценивания и эффективной организации профессиональной деятельности учителей. Также рассматриваются преимущества и проблемы использования искусственного интеллекта на основе опыта Узбекистана и зарубежных стран.

Ключевые слова: искусственный интеллект, цифровое образование, педагогическая деятельность, инновационные технологии, индивидуальное обучение, дистанционное обучение, качество образования, цифровизация.

KELAJAK TA'LIMI: PEDAGOGIK FAOLIYATDA SUN'IY INTELLEKT ISTIQBOLLARI

Annotatsiya. Ta'lim tizimini raqamlashtirish jarayonida sun'iy intellekt texnologiyalarining pedagogik faoliyatdagi o'rni, imkoniyatlari va istiqbollari tahlil qilinadi.

Sun'iy intellektning ta'lim sifatini oshirish, individual ta'limni tashkil etish, baholash tizimini takomillashtirish hamda o'qituvchilarning kasbiy faoliyatini samarali tashkil etishdagi ahamiyati yoritilgan. Shuningdek, O'zbekiston va xorijiy davlatlar tajribasi asosida sun'iy intellektdan foydalanishning afzalliklari va muammolari ko'rib chiqilgan.

Kalit so'zlar: sun'iy intellekt, raqamli ta'lim, pedagogik faoliyat, innovatsion texnologiyalar, individual ta'lim, masofaviy ta'lim, ta'lim sifati, raqamlashtirish.

Introduction

The 21st century, as the century of information technologies, has ushered in a new stage of human development. Digital technologies are deeply penetrating all spheres of life, including the

education system. In recent years, the development of artificial intelligence technologies has brought about fundamental changes in the field of education. In developed countries of the world, extensive work is being carried out to automate educational processes, identify individual capabilities of students, and organize personalized education through the use of artificial intelligence.

In the Republic of Uzbekistan, modernization of the education system, introduction of modern information and communication technologies, and creation of a digital educational environment are also priorities of state policy. In this regard, the issue of effective use of artificial intelligence capabilities in pedagogical activities is gaining urgent importance. Artificial intelligence is a set of technologies aimed at modeling human intellectual activities such as thinking, analysis, learning, and decision-making. Today, ChatGPT, Gemini, Copilot, adaptive learning platforms, and virtual assistants are becoming important elements of the educational process.

The role of artificial intelligence in pedagogical activities: Artificial intelligence is an innovative tool that serves to increase the effectiveness of pedagogical activities. It facilitates the daily activities of teachers and allows for a more qualitative organization of the educational process. With the help of artificial intelligence, the possibilities of preparing educational materials, creating tests and assignments, assessing knowledge, developing individual educational programs, monitoring the level of student mastery, and organizing distance learning are expanding. As a result, teachers will be able to focus more on creative and educational activities.

The importance of artificial intelligence in improving the quality of education:

Improving the quality of education is one of the main goals of modern pedagogy. Artificial intelligence technologies allow improving the quality of education in several areas. First, an individual educational trajectory is created by analyzing the level of knowledge and abilities of each student. This serves to develop a person-oriented model of education.

Secondly, automated assessment systems reduce the influence of the human factor and ensure the objectivity of assessment. Thirdly, virtual tutors and chatbots based on artificial intelligence provide students with the opportunity to get advice at any time. As a result, students' interest in learning increases and their learning performance improves.

The possibilities of artificial intelligence in teaching: Today, a teacher is not only a provider of knowledge, but also an organizer and guide of the educational process. Artificial intelligence helps teachers create lesson plans, prepare presentations, develop methodological recommendations, conduct scientific research, and analyze data. Artificial intelligence also serves as an important tool in the development of teachers' professional competencies and professional development processes.

Foreign experiences and modern approaches: Artificial intelligence-based educational platforms are widely used in countries such as the USA, Japan, South Korea, Singapore, and China. These countries use artificial intelligence technologies to determine the level of knowledge of students, adapt educational materials and predict educational outcomes. For example, in the Singaporean education system, adaptive learning platforms provide tasks that are appropriate for

each student's level of mastery. In the United States, AI-based Learning Analytics systems monitor the dynamics of student development. These experiments are experiments on the effectiveness of artificial intelligence in education demonstrates its enormous potential for improvement.

Advantages and problems of using artificial intelligence and its advantages: individualization of education, saving time and resources, improving the quality of education, objectivity of assessment, expanding the possibilities of distance learning. Also, the problems are the insufficient technical infrastructure, shortcomings in the digital competencies of teachers, issues related to data security, the risk of excessive dependence on artificial intelligence, and ethical and legal issues. Therefore, pedagogical control and the human factor should remain a priority in the use of artificial intelligence.

In conclusion, the development of artificial intelligence technologies is creating new opportunities in the education system. It is not only an important factor in increasing the efficiency of the educational process, but also in taking pedagogical activities to a new level. The future of education is closely related to artificial intelligence, and the rational use of its capabilities can significantly improve the quality of education. However, artificial intelligence cannot replace the teacher. It serves as a tool that supports, improves and increases the effectiveness of pedagogical activities. Because human relations, educational influence, empathy and spiritual values play an important role in the educational process.

In the future, one of the important tasks will be to prepare teachers to use artificial intelligence technologies, develop their digital competencies and form a modern educational environment. On this basis, the combination of artificial intelligence and pedagogical activities will serve to raise education to a new qualitative level.

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