Using Artificial Intelligence In The Educational Process

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Abstract

The article analyzes the role of artificial intelligence (AI) technologies in the modern educational process, highlighting their advantages and challenges. Based on the research of Uzbek scholars, the study explores the potential of AI tools in individualizing learning, effectively organizing distance education, and improving the quality of education. At the same time, ethical and methodological issues arising from the use of AI are also discussed.

Keywords

Intelligence, innovation, methodology, motivation, inclusive, individual, plagiarism, competence.

Introduction

In today's era of globalization, the field of education is not remaining outside technological innovations. In particular, artificial intelligence (AI) is penetrating almost all areas of human activity, and the education system is no exception. Uzbek scholars are also conducting a number of studies in this field. As Doctor of Pedagogical Sciences S. Karimov emphasized, "artificial intelligence technologies possess unique opportunities for individualizing the learning process and enhancing its efficiency." Similarly, according to R. Jo'rayev, the use of AI tools in distance learning, especially during the pandemic, opened up new opportunities for students and ensured the continuity of the educational process [2]. This demonstrates that AI technologies contribute to creating equal opportunities in education and strengthening inclusivity in learning.

According to literary scholar A. Jo'raboyev, "when introducing technology into education, it is essential not to forget human values and to harmonize it with scientific and spiritual principles." Therefore, the implementation of AI technologies in education is not only a technological necessity but also a moral and social responsibility.

Methodology

In the process of preparing the article, a complex of scientific research methods was employed. First of all, through the method of theoretical analysis, scientific articles, monographs, and dissertations written by Uzbek scholars on artificial intelligence and education were studied. In addition, government decrees and regulatory documents related to the application of AI in the education system were analyzed. This approach made it possible to determine the scientific-theoretical foundations of the topic.

At the second stage, a comparative approach was applied. In this context, advanced practices in the use of artificial intelligence in the educational processes of foreign countries (China, the USA, South Korea) were examined, and aspects adaptable to the conditions of Uzbekistan were

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identified. At the same time, a comparative analysis with local experiences was conducted to determine their similarities and differences.

In the third direction, the method of practical observation and analysis was used. Specifically, the effectiveness of certain AI-based educational programs and interactive platforms (for example, electronic dictionaries, automated testing systems, distance learning programs) was observed. Students' levels of knowledge acquisition, motivation, and quality of interaction while using these tools were analyzed. The combined use of these methods allowed the subject to be studied comprehensively, covering both theoretical and practical aspects.

Results

The conducted analyses show that artificial intelligence technologies are bringing significant changes to the educational process. First of all, AI ensures an individualized approach, offering customized curricula tailored to each student's abilities and knowledge level. This helps provide equal opportunities for learners in knowledge acquisition. At the same time, the automation of the assessment process is highlighted as an important outcome. The ability to provide quick and objective evaluation of tests and written assignments saves teachers' time and reduces subjectivity in assessment.

The following table summarizes the main outcomes of artificial intelligence in the educational process:

№	Direction	Result	Practical Significance
1	**Individual approach**	Educational programs are developed according to the student's abilities	Creates opportunities for each student to gain effective knowledge
2	**Automation of the assessment process**	Opportunity to quickly and objectively evaluate tests and essays	Saves teachers' time, ensures fairness in assessment
3	**Distance learning**	Students in remote areas can also receive quality education	Ensures inclusivity and continuity of education

In addition, AI tools are increasing the effectiveness of distance learning. Students in remote areas are gaining access to quality education through AI-based virtual teachers, electronic textbooks, and interactive platforms. This process not only ensures the continuity of education but also strengthens the principles of inclusivity.

The results also show that students are developing digital competencies. While working with artificial intelligence, they acquire skills such as using modern technologies, searching and analyzing information, and making quick decisions. This creates an important foundation for them to be competitive in future professions. As Doctor of Pedagogical Sciences N. To'laganov states: "Artificial intelligence increases efficiency in the educational process, but its greatest achievement lies in encouraging independent thinking and creative approaches among students."

Discussion

Although the potential of artificial intelligence in education is vast, several problems arise in its implementation. First of all, the reduction of human interaction between teachers and students

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is noted as a significant issue. Relying solely on technology in the educational process may hinder the sufficient development of students' social and psychological skills. Furthermore, plagiarism and academic integrity are among the pressing concerns. Texts or assignments prepared with the help of AI may weaken students' independent thinking and limit their creativity. In addition, there is also a risk of excessive dependence on technology, which may undermine learners' traditional study skills.

Uzbek experts emphasize the importance of using AI technologies wisely. According to N. To'laganov, "digital technologies make education easier, but they can never fully replace the teacher's personal experience and moral influence." This viewpoint indicates that artificial intelligence should not be seen as a replacement for teachers, but rather as a tool to support their activities. Therefore, achieving harmony between AI tools and traditional methods in education is considered the most optimal approach.

Conclusion

The above analyses and reflections show that the introduction of artificial intelligence technologies into the educational process is one of the most urgent needs of modern times. AI creates significant opportunities for improving the quality of education, individualizing the learning process, developing digital competencies, advancing distance learning, and ensuring inclusivity in education. In particular, the expansion of access to quality education for students living in remote areas clearly demonstrates the practical effectiveness of artificial intelligence.

At the same time, some problems still exist in the use of AI. The reduction of human interaction between teachers and students, plagiarism and academic integrity issues, as well as the risk of excessive dependence on technology, are among the most critical. This shows that not only technological but also pedagogical and ethical principles must be taken into account when implementing AI tools.

For the widespread integration of AI in Uzbekistan's education system, it is first necessary to enhance teachers' digital literacy, develop new methodological guides, modernize curricula, and create conditions that stimulate students' creative thinking. In addition, adapting international experience to local conditions can ensure more effective use of AI tools.

Overall, artificial intelligence is a force that paves the way for revolutionary changes in the field of education. However, it should not replace the teacher, but rather serve to ease their work and expand their capabilities. Thus, the rational and purposeful use of AI technologies will remain a key factor in the future development of education, the improvement of young people's knowledge levels, and the growth of the country's intellectual potential.

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