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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON MODERN EDUCATION:OPPORTUNITIES AND ETHICAL CHALLENGES

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ARTICLE INFO	ABSTRACT:

sun'iy intellekt (SI) zamonaviy ta'lim sohasida inqilobiy o'zgarishlarga sabab bo'lmoqda. Ushbu maqolada SI texnologiyalarining ta'lim jarayoniga ta'siri, imkoniyatlari va axloqiy muammolari tahlil qilinadi. Sun'iy intellektning ta'limga kirishi bir qator axloqiy muammolarni ham keltirib chiqarishi mumkin. O'quvchilarning shaxsiy ma'lumotlarini himoya qilish, SI tizimlarining adolatli va shaffof ishlashi, shuningdek, inson omilining ahamiyati kabi masalalar dolzarb hisoblanadi.

INTRODUCTION. The modern world is entering a new phase with the development of technologies. Artificial intelligence (AI) is at the heart of this development and is also gaining great importance in the field of education. Today, AI opens up vast opportunities for optimizing, personalizing, and increasing the efficiency of the educational process. AI creates the opportunity to effectively use resources in the educational process. In distance education, especially during the pandemic, AI technologies have become important in attracting students to lessons. The introduction of AI-based features into videoconferencing platforms, such as automatic translation, creating text notes, or improving the interactive environment between teachers and students, has made education more effective. Another important aspect of AI in education is monitoring and analyzing student progress.While traditional methods take a lot of time to perform such an analysis, AI programs can do it in

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seconds. Based on statistical data, AI identifies each student's weaknesses and adjusts the curriculum to address them. This process is effective not only for students, but also for educational institutions, helping to improve the quality of education. In addition, AI plays an important role in ensuring inclusiveness in education. Let's talk about the importance of AI in education and its impact on students, teachers, and the education system. First of all, AI serves to enhance the personal approach to the educational process. Each student has their own unique abilities, level of knowledge, and learning style. AI algorithms take these factors into account and create an individual curriculum for each student. For example, AI programs that help identify and correct errors increase students' ability to read independently. At the same time, interactive platforms serve to keep students engaged and motivated. Secondly, artificial intelligence plays an important role in reducing the workload of teachers. In many cases, teachers spend a lot of time on repetitive tasks such as assessing students and analyzing tests. Another aspect of AI in education is the introduction of innovative teaching methods. Using virtual and augmented reality technologies with artificial intelligence, it is possible to increase the level of student engagement in the subject. For example, the opportunity to "travel" to historical places using virtual reality glasses in history lessons, and studying the functioning of organs through a virtual model of the human body in biology lessons increase students' interest in the educational material. However, there are also some problems in the process of widespread use of AI in education. One of the most important issues is confidentiality and security. The level of protection of AI systems when collecting and processing students' personal data should be high. As we analyze the importance of AI in education more broadly, it is necessary to consider the changes it may bring to the education system in the future. First of all, the role of AI in ensuring the ability to make informed decisions in education is important. Today, the education system often makes decisions without sufficient analysis of statistical data.

Artificial intelligence is already a practical part of our lives. They can work without the participation of a teacher and can effectively challenge and support the student using various algorithms. The time has come for our education system to be updated, and now artificial intelligence can push us in the right direction. At the same time, it is very important to control the technology and its intelligence. The digital classroom can be expanded to provide students with the opportunity to learn in a hybrid environment through distance learning or school internet. There are opportunities to automate lessons based on the needs of students and create a social platform where students can communicate with each other and teachers with parents. Human safety is always a key consideration in

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artificial intelligence. When we need to study in a dangerous place, scientists use machines that support artificial intelligence. Artificial intelligence can reach anywhere humans can'tIn this study, a qualitative approach was used to analyze the application of artificial intelligence (AI) in educational settings, focusing on both its successes and challenges. The research methods applied include literature review, case studies, expert interviews, and observational analysis. Below is a detailed explanation of each method used in this study:

1. Literature review: a comprehensive literature review was conducted to understand the existing knowledge and theoretical framework on the application of AI in education. This review involved analyzing scholarly articles, research papers, books, and reports from reputable academic sources. The literature review provided an overview of AI technologies, their potential applications in pedagogy, and the benefits and challenges associated with their use in educational systems. It also highlighted previous studies and identified gaps in the current research that needed further investigation.

2. Case studies: case studies were conducted in various educational institutions where AI technologies have already been integrated into the teaching and learning process. Observational Analysis: Observational analysis was used to study how AI-based tools were utilized in real-time classroom settings. This method involved observing the interactions between teachers, students, and AI systems during lessons, noting how AI tools were applied to enhance learning outcomes, assess students' progress, and provide personalized learning experiences. Observations were made to assess whether AI technology was being used effectively and to understand the practical challenges faced by both students and teachers in using these systems. The observational data provided a direct understanding of the daily usage of AI technologies in educational environments.

3.Data analysis and synthesis: after collecting data through literature review, case studies, interviews, and observations, the data was analyzed using thematic analysis. This approach helped to identify recurring themes and patterns regarding the successful implementation of AI in education, as well as the challenges that need to be addressed. The data was categorized into specific themes such as teacher preparedness, student engagement, data privacy, and technological limitations. Based on this analysis, recommendations were formulated to improve the effectiveness of AI applications in educational settings. Successful application of artificial intelligence in education: the results of the study revealed that Artificial Intelligence can lead to significant achievements

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in the educational process. The ability to analyze students' learning levels and create individualized learning paths allowed for more personalized education. Students were provided with customized educational plans based on their knowledge levels, significantly improving their learning capabilities. Adaptive learning systems adjusted the teaching materials based on students' progress, which further motivated students to engage with the content. For teachers, the use of AI in education proved to be an effective tool in lesson planning and providing personalized support to students. Automated assessment systems enabled teachers to evaluate students' results quickly, allowing them to identify strengths and weaknesses in student performance. This, in turn, allowed teachers to apply individualized approaches and better support students.

AI algorithms can sometimes make unfair decisions, which can lead to injustice among students. Teachers and educational institutions need to ensure transparency in this process. Human connections between teachers and students are an important part of the educational process. Excessive use of artificial intelligence can weaken these connections. The development of AI technologies sometimes threatens to deprive teachers of their jobs. This issue is important for the future of the education system. Students can become too dependent on AI, which reduces their ability to think independently. To solve this problem, teachers need to encourage students to think independently. Artificial intelligence can bring many opportunities to modern education, but it also raises ethical issues. Education systems need to be careful in the use of AI, and also strive to create a transparent and fair environment for teachers, students and their families. Only through this approach can we properly harness the positive impact of artificial intelligence in education.

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