THE ROLE AND CAPABILITIES OF ARTIFICIAL INTELLIGENCE IN IMPROVING THE PEDAGOGICAL PROCESS

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Abstract: *This article scientifically analyzes the role, importance and practical capabilities of artificial intelligence technologies in improving the pedagogical process. It highlights the new approaches that are emerging as a result of the penetration of artificial intelligence into the educational system, individualization of the teaching process, automated assessment and effectiveness in improving the quality of Education. The role of artificial intelligence tools in activating students ' cognitive activity, easing the teacher's methodological work, and digital management of the pedagogical process has also been analyzed. Methodological, ethical and organizational issues arising from the use of artificial intelligence were also considered by the author and proposals and recommendations for the integration of SI technologies into the educational process were developed.*

Keywords: *pedagogical process, artificial intelligence, digital education, innovative technologies, teaching efficiency, individualization, digital transformation.*

INTRODUCTION

At present, the educational system serves as one of the most important strategic areas of the development of society, the formation of human capital, the introduction of scientific and technical achievements into practice and the development of the intellectual potential of the individual. Therefore, the improvement of the pedagogical process on the basis of the capabilities of modern technologies, in particular artificial intelligence (AI), has become an urgent scientific and practical issue.

The pedagogical process is a holistic system of educational, educational and development activities, organized on the basis of targeted, systematic cooperation between the teacher and the student. Its effectiveness depends on the combination of educational content, methodological approaches, innovative technologies and management mechanisms. In the conditions of today's digital transformation, artificial intelligence technologies are deepening into all stages of the educational process - individualizing the educational process, automating the assessment system, providing ample opportunities for creating a learning environment adapted to the interests and abilities of students.

The effective use of artificial intelligence leads the pedagogical process to a new level of quality. This reinforces the teacher's role as a subject who manages, directs, and analyzes

the learning process, rather than merely conveying knowledge. As a result, the educational process is perfected as an individual-oriented, interactive, and consequentialist system.

MAIN PART

In modern society, the development of digital technologies is deepening into all aspects of human activity, in particular, the educational system. The role of information and communication technologies (ICT) in the process of modernizing the educational process, forming a culture of independent thinking, analytical approach, creative thinking and working with information in students is incomparable. Therefore, today the use of Information Technology in the organization of the pedagogical process is becoming an important issue in scientific and practical terms.

In today's conditions, when science and information and communication technologies are rapidly developing, the widespread use of modern information technology and artificial intelligence capabilities in the developed countries of the world in the field of state and Society Management, Economy, Industry, social protection, education, medicine, employment, rural agriculture, defense, security, tourism and other areas is becoming a simple process.

"Today's rapidly developing modern technologies have their positive and negative impact on society. Including, the Internet has opened up opportunities for people to share ideas, get information quickly and easily, disseminate useful malicious messages without any impediments, exceed geographical limits and close remote distances"[1, 5]. The rapid growth of informatization, the development of automation methods led to the creation of computers and the computerization of various spheres of life. At the moment, the information space, the means of communication are showing its serious impact on the life of modern society.

Today, the society has developed a stable Socio-political, Zionist, socio-cultural and socio-political life. Therefore, the process of assimilation is a process that combines technical and technological, social, economic and cultural life. "There are no naphthalene preparations and technologies in such a community, but there is a socio-economic community. Depending on the severity and intensity of the manifestation, extensive and intense manifestations are distinguished. It is possible that this may happen due to the heat. As its reliability increases, it begins to develop intensively"[2, 77].

As you know, in order to expand the use of artificial intelligence technologies, improve the system of digital data collection, storage and processing, a number of works are currently being carried out in our country to train qualified personnel in this field, support research projects in this direction. In short, artificial intelligence is a system or technology capable of imitating human behavior when performing certain tasks, gradually perfecting

using the information obtained. In general, artificial intelligence is not a format or a function, but a process that includes data collection and analysis.

"Today, artificial intelligence is rapidly taking its place in the field of education. Artificial intelligence plays a major role in creating information systems capable of learning, analyzing, transforming, and interpreting data. These systems assist in tasks such as recognizing information during the learning process, searching for data for specific purposes, analyzing information, and presenting results. Compared to natural and human abilities, artificial intelligence brings several advantages to the field of education"[3].

The Role and Potential of Artificial Intelligence in Education

Artificial intelligence (AI) technologies are being effectively applied in various areas of the educational process, including the following directions:

1. Personalized Learning. AI systems provide customized educational content based on students' knowledge levels, interests, and learning pace. For example, adaptive learning systems generate tailored assignments and materials for each learner, ensuring an individualized approach.

2. Automation of Assessment and Analysis. Artificial intelligence automatically analyzes test results and generates digital reports on student performance. This not only saves teachers' time but also ensures objectivity and fairness in the evaluation process.

3. Virtual Teachers and Chatbots. AI-powered virtual assistants respond to students' questions, explain assignments, and function as teaching aides. For instance, platforms such as ChatGPT, Duolingo, and Coursera effectively integrate artificial intelligence to enhance the learning experience.

4. Management and Monitoring of the Learning Process. AI technologies analyze students' activities, identify shortcomings in the educational process, and provide recommendations for improvement. This enables continuous monitoring and enhancement of educational quality.

5. Development of Creative and Analytical Thinking. Artificial intelligence fosters analytical, logical, and creative thinking among students by offering interactive tasks, projects, and simulations that encourage problem-solving and innovation.

Advantages of Using Artificial Intelligence.

The use of AI technologies in the pedagogical process provides the following advantages:

- enhances the quality of education and strengthens individualized approaches;
- enables accurate analysis of students' learning performance;
- facilitates the methodological work of teachers;
- makes the learning process more interactive and motivational;
- ensures fairness and transparency in educational assessment;
- creates opportunities for the effective use of educational resources.

In addition, artificial intelligence increases the efficiency of distance and hybrid learning systems and contributes to the development of students' independent learning skills.

However, there are also problems with the introduction of artificial intelligence into education. One of the most fundamental problems is maintaining a balance between the human factor and technology. No matter how advanced the current technology is, it cannot

completely replace the teacher. Because in the pedagogical process, not only knowledge is considered important, but also factors such as upbringing, communication, motivation. Also relevant is the issue of confidentiality and security of information in the use of AI technologies. Ensuring the safety of personal data of students is one of the important aspects that should be paid attention to in the implementation of SI technologies.

CONCLUSION

The role of artificial intelligence technologies in improving the pedagogical process is growing. It is instrumental in improving the effectiveness of the educational process, the implementation of personality-oriented teaching, the development of the creative potential of students and the easing of the management activities of the teacher. The correct integration of artificial intelligence technologies into the educational process requires not only a technical update, but also a change in pedagogical thinking. Therefore, future education is formed on the basis of the harmonization of human thinking and artificial intelligence.

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