



Advantages Of Using Artificial Intelligence In Education

Abdualimov Okhunjon

Senior lecturer, Department of Information Technologies and Systems,
Jizzakh State Pedagogical University, Uzbekistan

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Abstract: This article discusses the positive and negative consequences of using artificial intelligence in education, as well as the emergence, development, and capabilities of artificial intelligence systems in education, as well as improving the quality of education through their use in the educational process.

Keywords: Artificial intelligence, ethical principles, personalization, educational needs, tutoring, adaptive learning, assessment.

Introduction: Artificial intelligence is the process of creating intelligent machines from large amounts of data. Systems learn from past learning and experience and perform tasks similar to humans. This increases the speed, accuracy, and efficiency of human actions. AI uses complex algorithms and methods to create machines that can make independent decisions. Machine learning and deep learning are the basis of artificial intelligence. In order to expand the use of artificial intelligence technologies, improve the system for collecting, storing, and processing digital data, a number of works are currently being carried out in our country to train qualified personnel in this field and support scientific projects in this area. We are all pleased that the reforms that have begun in the education system in our country are encouraging students and teachers to work on themselves, to research, and to engage in scientific and creative activities. The use of AI in education is effective in improving learning, supporting teachers, and encouraging more effective individualized learning. To have a meaningful conversation about AI in education, we need to focus on processes that reduce the human element in the pedagogical work of teachers who teach our first children. One of the leading authors on the benefits of AI in education, Matthew Lynch (My Vision

for the Future of AI in Education), argues that “the use of AI in education is valuable in some ways, but we need to be extremely vigilant in monitoring its development and its overall role in our world” [1], carefully examining the potential obstacles and benefits. Thus, on the one hand, programming in AI “stems from the moral attitude of its developer. In recent years, our country has been implementing comprehensive reforms in all areas. In particular, recognizing the great importance and potential of artificial intelligence (AI) technologies, special attention is paid to their development. In the era of technological progress, artificial intelligence is becoming a key factor influencing the development of various spheres of life. It should be recognized that these technologies have the potential to bring enormous benefits, from increasing productivity and efficiency to achievements in science and innovation. In turn, the introduction of artificial intelligence into science requires an increase in the number of qualified personnel. After all, it is precisely specialists who are masters of their profession that will be the main factor in the penetration of artificial intelligence into all areas. To this end, it is necessary to create a convenient and acceptable ecosystem for the development of innovative business models, products and service methods based on artificial intelligence technologies, to prioritize them. Efforts have been made to quickly implement and put into practice in various sectors and industries. The reason is that artificial intelligence technologies are one of the fastest developing promising areas of digital technologies. By using artificial intelligence, which is part of digital technologies, it can be effectively used not only in education, but also in all aspects of life. The introduction of artificial intelligence technology provides advantages in ensuring transparency, preventing fraud, analyzing data, and working with large volumes of data. In the field of education, it creates great convenience in creating a virtual learning environment and distance learning.

METHOD

Time is moving forward rapidly. 20 years ago, a person walking down the street with a push-button phone that sounded like a bell attracted everyone's attention, but today, thanks to these phones, which have now become smartphones, we can watch movies, do the shopping, follow our children's school life, read, communicate and do many other things.

In simple terms, artificial intelligence (AI) is the ability of computer systems to perform creative and intellectual activities that were previously inherent in humans. It combines such complex new areas of science as neural networks, machine learning, natural

language processing, cognitive computing, and computer vision. AI has completely changed the way we live with innovative technologies. AI has entered human life like a storm and has made incredible changes, influencing every sphere of society. Today, AI is intensively taking its place in the field of education. AI plays a major role in creating information systems that have the ability to learn, analyze, transform, and visualize data. These systems help in the learning process by performing tasks such as data recognition, data retrieval for specific purposes, data analysis, and displaying results. Compared to natural and human capabilities, artificial intelligence brings several benefits to the field of education. Artificial intelligence has had a significant impact on saving the learner's time and successful development in education. The capabilities of artificial intelligence are wide-ranging, it can answer questions of interest to you, draw pictures based on a given command or create presentations on various topics, and even write various abstracts and articles. Its learning algorithms are adapted based on the individual characteristics of students and learning methods, which increases the abilities of each student in their own educational path.

Artificial intelligence creates many conveniences in the process of education not only for students, but also for teachers. For example, in order to create an intensive educational program and organize the lesson according to it more interesting and meaningful, the teacher can study topics of interest to students and increase the ability to find, analyze and explain information about them. With the help of artificial intelligence, various methods can be used, various fields can be studied, such as genetics, robotics, visual learning, natural language learning, etc. It should be remembered that the success and constructive use of artificial intelligence depends on careful management and foresight to optimize, as well as prevent misuse of the toolkit.

DISCUSSION AND RESULTS

Deep learning, a recent development in machine learning, involves learning from large amounts of data with layered neural networks. Here, large amounts of data are fed into algorithms to learn or perform complex tasks. Currently, AI applications are quite sophisticated and are evolving from voice assistants to stock market prediction algorithms, natural language processing, and image recognition programs. One of the important requirements for organizing modern education with AI is to achieve high results in a short time without excessive mental and physical effort. AI can automate key activities in education, such as assessment. Currently, academics can change assessments to fill in the blanks with multiple-choice tests of almost all types, and automatic assessment of student writing may not

be far behind. AI-based applications can provide useful feedback to students and teachers. AI can not only help academics and students create courses tailored to their needs, but it can also provide feedback to everyone on the success of the course as a whole. These types of AI systems can help students support themselves and professors find areas where they can improve their teaching. There will always be work for teachers in education, but what that role is and what it means is likely to change as new technologies in the form of intelligent computing systems change. As we have already mentioned, AI could take over tasks such as assessment, help students improve their learning, and even replace real tutoring. According to estimates from the World Economic Forum, a large number of companies could adopt technologies such as machine learning, thus giving governments and education a strong incentive to focus on accelerating education and skills development, with a focus on each STEM (science, technology, engineering) subject. and mathematics) and non-cognitive soft skills, so as to fully meet the need at hand. A recent study by Microsoft suggests that by 2030, students may have to master two aspects of this new world when they graduate:

- ✓ Knowing how to use changing technologies like artificial intelligence to your advantage
- ✓ Understand how to work with people in a team to effectively resolve issues.

Preparing students for the future of AI starts early. Most young people are unfamiliar with digital technologies when they reach college age, so it is crucial to teach them the skills they will need to thrive in digital work. Integrate AI into their education, and the long-term strength will be ready to face the unknown challenges of tomorrow. China and the United States are leading the way in AI research and education. In addition to hosting world-renowned higher education and research institutions, these countries have also fully regulated innovation support mechanisms and provided large amounts of financial support to institutions. As a result, China and the United States are attracting a large number of knowledgeable professionals from around the world. Many scholars are engaged in many discussions about the future of AI. The fact is that while some are concerned that machines could invade people's privacy and even become weapons, other scientists are positive about this. They argue that self-driving machines in the artificial intelligence system can calculate the option that will bring the most benefit and the least harm with the least risk and the least loss. In our country, great strides have been made in the development of science, and life itself shows that great

results can be achieved in socio-economic spheres through the use of digital technologies in every field.

Conclusion.

- ❖ continues to transform education today in the following ways:
- ❖ In the process of globalization and scientific and technological progress, the importance of artificial intelligence in the education system is increasing;
- ❖ Through testing and assessment systems, new measurements and criteria can be created for students and learners using artificial intelligence;
- ❖ opportunities for more effective and widespread use of differentiated and individualized education have been created;
- ❖ Feedback, which plays a very important role in education, can be automated to suit the needs of students with artificial intelligence.

If for the past few years, not being able to use a computer was considered illiteracy, now the time has come to use this in conjunction with Artificial Intelligence technologies. World education is making great strides based on those technologies, and the introduction of these tools is in our hands. After all, artificial intelligence is the basis of technological development and progress. It should not be forgotten that every technology being created should always serve humanity, improve its standard of living, and advance humanity.

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