

**THE ROLE AND DISADVANTAGES OF ARTIFICIAL INTELLIGENCE IN
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Abstract: *This article aims to present how artificial intelligence can be used in the development of education, highlighting the benefits and risks associated with its use, as well as the shortcomings in the use of artificial intelligence in educational processes in Uzbekistan. This article discusses the concept of artificial intelligence and its various types, advantages, and disadvantages of artificial intelligence used in education. Artificial intelligence in educational processes in Uzbekistan.*

Keywords: *artificial intelligence, education, training, thinking, technology, flaw, machine, chatGPT.*

1. The concept of artificial intelligence and its different types

Artificial intelligence (AI) is a computing technology or set of technologies such as artificial neural networks, algorithms, and learning systems that aim to mimic human mental abilities, such as: reasoning, environmental perception, and decision-making - creating opportunities, the technology is designed with the goal of machines being able to solve a range of problems that encompass everything from the great complexity of government and industrial management to the everyday tasks of modern men and women. To do this, AI uses sophisticated learning technology, which allows it to learn from large data sets and act on its own. The overall goal of AI is to create machines that can perform at the same level of cognitive capacity as humans, or even surpass it [1].

In the words of computer scientist John McCarthy, who coined the term, artificial intelligence is "the science and engineering of producing intelligent systems" [2]. This is the technology used to make machines behave like humans when performing manual tasks, making decisions, understanding data, and even creating content (the latest innovation). Machines are fed data and programmed to learn from it, recognizing



information and patterns in layers. Artificial intelligence has given rise to several types. Among them, the following can be noted [2]:

[1]Generative AI: Generates new data and patterns (such as images, text, and music) similar to the training dataset. Examples: ChatGPT and DALL-E. ChatGPT is a chat bot and virtual assistant developed by OpenAI and released on November 30, 2022. It uses large language models, format, style, level of detail, and desired language to allow users to refine and guide the conversation, while DALL•E, DALLE 2, and DALLE 3 are text-to-image models developed by OpenAI using deep learning methodologies to "create digital images from natural language descriptions known as."

Discriminative AI: classifies data into predefined categories based on specific characteristics. It is capable of detecting objects, recognizing patterns, collecting, analyzing, and presenting data. Examples: facial recognition, adaptive learning platform, and school data platform.

Reactive AI: deals only with current data and does not retain memory of previous data. He makes decisions based on predetermined rules and is unable to learn or adapt to new situations.

Knowledge-based AI: Uses a database of human knowledge to make decisions and solve problems using logical rules. Example: medical diagnostic system.

Machine Learning AI: can learn from data and continuously improve. Your learning can be supervised, unsupervised, or reinforced. Example: spam email identification system.

Deep learning AI: a subfield of machine learning that uses deep artificial neural networks to learn complex data representations. Examples: image and speech recognition, machine translation, and text processing.

Natural Language Processing (NLP) AI: computers and human language focused on interaction. Examples: chatbots, virtual assistants, machine translation, and sentiment analysis.

Autonomous AI: Human intervention capable of autonomous operation and decision-making. Examples: autonomous cars and robots.



[2]Artificial intelligence (AI), especially generative AI, is rapidly gaining popularity and transforming several areas of society, including education. What are the benefits and risks of Artificial Intelligence in education? 2 Artificial intelligence can help teachers prepare questions, plan lessons, and assess student performance, while for students, AI makes research and knowledge acquisition easier. This does not mean replacing the role of the teacher. On the contrary: developing the ability to properly manage this technology will be another task for the teacher in the context of digital culture. Today, the role of the teacher is not simply that of a transmitter of information, but rather a facilitator and advocate in the learning process. Similarly, the role of school in preparing students is much more complex than imparting technical knowledge. It is necessary to develop logical thinking, empathy, ethics and a critical sense, artificial intelligence can lead to improvement of the educational process, but it also creates risks and difficulties for educational institutions.

2. Advantages and disadvantages of using artificial intelligence in education The advantages of artificial intelligence in education are many:

- 1) research tools for new students;
- 2) the student can learn anytime and anywhere;
- 3) personalized learning;
- 4) contact with other cultures and languages;
- 5) automation assessment; and,
- 6) data-driven school management [2].

[5]New research tools for students Generative AI has made the research process easier for students. Why would it take a long visit to the library and then spend a few minutes reading on some Internet site? Now ChatGPT can be solved in a few seconds after asking, the difference between this and other tools that came before it like Google, it delivers everything in great detail. This is a work and study tool. Student learning anytime, anywhere Another change that AI has brought to education, as well as other digital technologies, is the ability to learn anywhere and anytime. While information is not synonymous with knowledge, it is certainly an important part of this process. With these tools at hand, it is much easier to learn from a variety of topics, interests, and



historical facts to the prevailing opinions of a philosophical school. Personalized Learning Artificial intelligence helps personalize learning. [3] Adaptive learning platforms, for example, collect user data to tailor content to pace and skill level, creating a unique learning journey. Of course, personalizing learning is one of the main benefits, allowing students to learn at their own pace and according to their own personal information.

Contact with other cultures and languages

Another benefit offered by artificial intelligence in education is the facilitated communication with other cultures and languages. New machine-based translation systems are capable of achieving more accurate results, allowing access to foreign literature and real-time communication with students and professionals from other countries.

[4] Automate assessment

The school evaluation process will also benefit from artificial intelligence. At the university, platforms collect student learning data through online classes, readings, and tests. The system not only eliminates manual grading of assessments, but also produces automatic feedback for students and results reports for teachers and school managers. Artificial intelligence can be used to reduce training costs by automating assessment processes. This includes automatic marking of tests and analysis of written work, reducing the workload of teachers and increasing the efficiency of the assessment process.

Data-driven school management Artificial intelligence in education supports data-driven school management. This is because educational platforms collect, analyze, and present various data about students through intuitive dashboards, such as:

Level of participation on the platform (number of activities completed, pages read or video class time watched, for example);

Going to school;

Qualification level for the training component;

Socio-emotional and behavioral profile;

Fields of knowledge with the highest and lowest performance.



Clarify this information to help the school in pedagogical monitoring and combat dropout rates. Analyzing student performance and behavior data can help identify students who are at risk of dropping out or who are experiencing specific difficulties, allowing the institution to provide personalized support and more effective interventions.

3. The risks of using artificial intelligence in education

The risks of artificial intelligence in education include the following [2]:

- 1) conscious use of non-critical and technologies;
- 2) facilitating plagiarism;
- 3) spreading misinformation and fake news;
- 4) deepening educational inequality;
- 5) excessive dependence on technology;

Conclusion: As can be seen from the above, artificial intelligence will bring incomparable benefits to educational institutions, their leaders, teachers at all levels, and students will gain new knowledge and skills in using it. Overall, artificial intelligence has the potential to revolutionize education by making it more personalized, effective, and engaging, but careful implementation and oversight are essential.

USED LITERATURE

1. **Artificial Intelligence: A Guide to Intelligent Systems"** — Michael Negnevitsky
- 2 **Fernando Alcoforado's article on the topic of education with artificial intelligence and the deficiencies of its application in Brazil**
3. **Special subject teaching methodology** Ismailova Zukhra Karabayevna, Maksudov Polat Maksudovich, Ergashev Oybek Karimovich
- 4 Higher education. Normative - a collection of legal and methodological documents. Tashkent, "Independence", 2013.
- 5 Tojiboeva D., Yuldoshev A. Methods of teaching specialized subjects. Textbook. – Tashkent, "Alokachi", 2009.