

## USE OF DIGITAL TECHNOLOGY AND ARTIFICIAL INTELLIGENCE IN EDUCATION

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**Annotation.** This article provides information on the use of digital technology and artificial intelligence in education, problems encountered in their use and solutions to them.

**Keywords:** Digital technologies, artificial intelligence (AI), education, teacher, student, assessment, inclusive education.

**Introduction.** Digital technology and artificial intelligence (AI) currently play very important roles in the field. Digital technology is actually a set of technologies that include computers, the Internet, applications, mathematical methods and other technical means. These technologies allow us to replace the transmission, storage and retrieval of information through these technical means. Digital technologies allow for faster, more efficient and more comparable communication and interaction between global organizations, corporations, educators, and community organizations.

Artificial intelligence has become a system in which computer programs turn to autonomous decision-making, without requiring the logic and creativity of people, based on their own ideas and goals. Artificial intelligence technologies can have powerful features, for example, they allow for the transfer of advanced skills in processing, learning, and implementing the latest information, even if it is mutual.

**Relevance of the topic.** Digital technology and artificial intelligence cover a wide range of technological processes that are interconnected in this area, including those that process information, those that learn, and those that are related to raising society to a higher level. With the development of digital technologies and the growth of artificial intelligence technologies, we can solve a number of problems. In this regard, it provides great opportunities for some shy students in education to be used in many areas, such as more effective teaching, developing interactions with teachers, and strengthening security systems.

Digital technology and artificial intelligence are becoming increasingly important for developers, programmers, and professionals working in other fields, as they show the opportunities that are developing worldwide and allow students to develop social and industry-related attitudes.

In general, digital technologies and artificial intelligence are divided into several types and have been introduced and installed in professional fields such as protecting physical technologies from national competition, speech interpretation in medicine and science, automation, correction, marketing and advertising, security, etc., and are becoming a major part of culture, economy, and modernity around the world in areas such as installation, etc.

Materials and research methods. The use of digital technologies and artificial intelligence (AI) tools in education is one of the most important and transformative topics. For example, individualized learning: Digital technologies and AI tools allow students to learn individually. This allows students to set their own learning pace, receive personalized programs based on their knowledge and needs, and manage their own meeting and study time. This helps to attract attention and strengthen self-reliance by allowing others to do so. In addition, it develops regular assessment and critical presentation. Digital technologies and AI tools increase the regular assessment of students and automate their work, learning processes, and grading. This allows teachers and students to evaluate objects, receive critical comments, and receive personalized advice. This includes convenience for educators and students who want to monitor lessons and learning processes. It also has the property of making learning interesting and playful for children. Digital technologies and SI tools make learning interesting for children, allowing them to participate in the reading and learning processes. Interactive animations, games, virtual educational games and other interactive technologies attract children's attention, increase their interest and their level of assimilation. [2, p. 1331-1342]

Quick and easy access to information. Digital technologies and SI tools provide students with quick and easy access to information they already know. The use of the Internet, online databases, interactive applications and virtual assistants allows for quick and easy access to thousands of resources and sleep. This develops students' independent learning and their connection with information from various departments.

Creative modernity and innovation. Digital technologies and SI tools develop students' creativity, innovation and discussion skills. They support students' imaginations through areas such as creating 3D models, participating in projects, writing codes and robotics. They also help in the processes of using multiple choices, solving tasks and directing creative approaches. In order to ensure additional changes in the use of digital technologies and artificial intelligence tools in addition to the previously mentioned main educational benefits, their effective integration, programming, reproducible scientific research methods for teachers and students and other factors should be well coordinated. Also, temporary, rapid, monitoring new devices and technologies, tasks and support for teachers, legal payment contracts and cultural leisure, information and technology issues in the field of football, performance determination, working days are widely Uzbekized. Therefore, it is necessary to fully utilize new technologies and use these technologies in the delivery of learning in practice based on success.

Research results and analysis. The main goal of using digital technologies and artificial intelligence tools in education is to develop a more complete, effective and inclusive learning environment, to help students develop themselves and provide information. It is important to use such technologies and innovative ideas for the following purposes:

1. Student-centered learning: Digital technologies and artificial intelligence tools help students learn on their own, create lessons, and support their students. Virtual

classes, online programs, interactive games, and other tools allow students to improve their knowledge, develop their skills, and express their ideas.

2. Individual learning: Digital technologies and artificial intelligence tools allow students to provide the most optimal learning method according to their time, ideas, and abilities. Students can set their own learning pace, receive advice on their goals and levels, meet the individual modern needs of students, and make better use of their students' skills and additional educational opportunities.

3. Discussion creation and work unity: Digital technologies and artificial intelligence tools allow students to create discussion and work unity processes among students. Ideological learning tools, online platforms, provide opportunities to build relationships to increase collaboration with others. This is important in developing students' discussion, sharing, creation and compromise skills.

4. Complex information delivery: Digital technologies and artificial intelligence tools help in delivering complex information to students easily and quickly. This allows them to acquire information in forms that are suitable for students' understanding through interactive arts, multimedia experiences, online libraries and skill development tips.

5. Assessment and analysis of the learning process: Digital technologies and artificial intelligence tools allow for assessment and analysis of the learning process. This allows students to collect, evaluate and identify areas for improvement, close surveys to maintain attention and further improve the learning process.

The goals of digital technologies and artificial intelligence tools are to develop more complete education, to approach students in an adapted educational environment, to increase the individual style of education and to evaluate the learning process. Understanding their importance and using them quickly, effectively and appropriately gives a great signal and potential to improve the quality of education in our educational institutions.

First of all, there are many people who look at the problems of using digital technologies and artificial intelligence tools in education. Before coming to terms with these problems, it is very important to analyze them and take steps to find solutions to them.

Below, I will try to highlight digital technologies and artificial intelligence tools in education with examples of problems and solutions to them:

1. Teaching methods: Digital technologies and artificial intelligence tools can have a great impact on changing and updating teaching methods. Digital learning increases interactivity for students, encourages self-directed learning, and provides easy access to learning materials. However, there are additional challenges and indicators, such as creating these approaches, learning new tools, and providing teachers with the necessary technological training.

2. Security: Digital technology and AI tools can have security issues. Protecting education systems and data, protecting personal information, and maintaining confidentiality are important aspects of these tools, and great efforts are needed to ensure security.

3. Learner location and inclusion: Digital learning tools and AI can help students integrate in times when they have limited contact with people. For example, online learning platforms and video chat tools can expand the possibilities of distance learning and not impose restrictions on the location of students. However, there are also additional requirements and challenges for inclusive education (for example, collaboration with others, access, and the availability of expanded learning materials).

4. Technological readiness and expertise: To teach, use, and enable the use of digital technology and artificial intelligence tools, teachers, students, and other researchers need to have technological readiness and expertise. These individuals should have the opportunity to understand how the tools work, identify their positive and negative characteristics, and develop and test learning programs.

5. Resources can pose challenges in the use of digital technology and artificial intelligence tools in education systems. Factors such as increased engagement in education, financial inclusion issues, community networks, systems, and seamless investment in education worldwide can lead to the development of tools and the eventual benefits.[3, pp. 12-18]

The problems may be limited to the examples given above, but these problems allow for efforts to support and find solutions:

- Increase research on topics related to increasing the knowledge of professional teachers and the population in the field of education, providing them with skills and experience in artificial intelligence and digital technologies.
- Conversely, pay attention to the development of a deeper understanding of personal and corporate opportunities in the field of education and the development of advanced methods for their implementation in the field of education.
- Take the first step in developing the legal environment and regulating the problems.
- Further increase the level of preparedness of education systems by increasing access to IT and strengthening the technical committee.
- Develop, expand and acquire continuous knowledge and experience in teaching students digital technology and artificial intelligence tools. These are the strict conditions for professional development.

The problem and the solution are to integrate the experience and knowledge of digital technology in the overall development of society.

Conclusion. In general, digital technology and artificial intelligence will ultimately find direct solutions, and the process of working on these problems will be of great importance for motivation and cooperation. We must not forget that if efforts are made to expand the use of digital technologies and artificial intelligence in education to support organizations, teachers and students in creating an effective inclusive education system, we can achieve significant development not only of the education system for gifted children, but also of the inclusive education system.

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