

Volume 01. Issue 01. 2024

#### APPLICATION OF DIGITAL TECHNOLOGIES IN THE FIELD OF **EDUCATION**

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Annotation. The article illustrates about digital technology, cloud technologies, use of digital technologies in education, tools of digital technology education system, advantages of digital technology, Internet of Things, augmented reality, virtual reality. Moreover, you can get information about these what digital technologies can be used in the educational process, and solutions to the problems encountered during their use.

**Keywords:** digital technology, digital technology in education, cloud technology, Internet of Things, augmented reality; virtual reality, 3D technology.

Introduction. Nowadays, digital technologies are rapidly developing and require keeping up with the times in every field. The use of digital technologies in the educational system is of great importance in improving the quality of education and educating socially active young people in the present era, when the speed of obtaining and using information is very high. Previously, we conducted educational programs in the traditional way, that is, in the form of lecturing through large books and manuals. This, in turn, did not ensure that the quality of education was so high. Currently, the process of digitalization of education has started to improve the quality of education. Moreover, great importance is paid attention to the introduction of innovative projects into the educational process using 3D models.

Relevance of the topic. The current state of the education system is characterized by the increasing role of non-traditional educational technologies. Learning by the learner with their help is much faster than traditional technologies. These technologies make it possible to develop knowledge, acquire new knowledge, deepen and expand the content of studied subjects, quickly update it, use more effectively teaching methods, and significantly expand the opportunity for education for everyone.

Material and research methods. We will answer the question of what is digital technology as follows: it is a modern form of economic management, in which a large set of data in digital form and the process of processing them serve as the main factor of production and management. Using the obtained results in practice makes



Volume 01. Issue 01. 2024

it possible to achieve greater efficiency compared to traditional forms of management. Examples include various automatic production processes, 3D technology, cloud technologies, provision of remote medical services, production and delivery of products using smart technologies, and processes for storing and selling various goods. In this article, we will focus instead on digitization in the education system. [5] Applying education ideas and concepts to education sites, through good educational policies, to complete education tasks is important for developing personal potential. Centered on students, educational objective is to cultivate multiple talents for the future society. In such a rapidly changing era, limited knowledge is not enough to cope with challenge in future societies. In other words, the knowledge possessed presently could not solve the problems faced in the future. [6] The knowledge possessed now could not solve problems faced in the future. "Creativity" is an essential ability for people at present and in the future as well as the key success factor in nurture and school teaching. [3]

Discussion and results. Educating learners through digital technologies methods are becoming easier. In this case, the role of the mediators of the educational system is multimedia, computer, laptop, televisions connected to the Internet, telephone lines, smart board, projectors will do it. Teaching teachers with such tools ensures the improvement of the quality of education. We all know that the use of digital technologies in online classes has a good effect. For example, we can consider online classes given on television as a type of digital education.

So, in digital education:

- has the opportunity to study wherever and whenever he wants;
- the culture of receiving and using information from the Internet is formed;
- raises the education system to a new level;
- dramatically reduces time and money consumption;
- has advantages in not getting lost in the "digital world" and finding a good job like to be. [1]

The opening of Wi-Fi zones and IT parks in our country is important for the development of the digital education system serves. It will be possible to increase the ability of educators to work with digital technologies and organize various open courses via the Internet. This, in turn, helps educators to work harder on themselves and increase the quality of education due to competition.

In addition to above information, when digital technologies and the introduction of artificial intelligence technology are used to detect tax evasion, prevent fraud, analyze data and automate repetitive processes, and increase transparency, large volumes of data, as well as, big data provides an opportunity to store and process a



Volume 01. Issue 01. 2024

large amount of data received by tax authorities, to better predict revenues and to improve the exchange of documents between taxpayers and tax authorities. [1]

Adoption of digital technologies is different in human history is happening faster than innovation: in just two decades, digital technologies have managed to cover almost 50% of the population of developing countries and change societies with their help. For example, to use artificial intelligence in the health sector based on advanced technologies to save human life and diagnose diseases and serves to increase life expectancy. Virtual in education, the educational environment and the provision of distance education allowed students to participate in programs that they would not otherwise have the opportunity to participate. In addition, via the use of block chain-based systems, the use of public services will be convenient, the institutions that provide them will be more accountable, and the processes will be less bureaucratic due to the use of artificial intelligence. Big data can also lead to more flexible and accurate policies and programs. [6]

Below we will touch on some digital technologies: cloud technologies, computer as an online service to the Internet user, are information processing technologies that provide resources. [3]

Digital technologies - Internet of Things (IoT). One of the main information-based technologies is the Internet of Things. It is common for many household appliances to be connected to the electrical network, but gradually more and more objects of the physical world are connected to the Internet, which allows collecting information and even controlling these objects remotely. [4]

In fact, the Internet includes various parameters of the object and the outside world a virtual copy of the physical object appears that allows you to control the object via the Internet. If we show as an example of the Internet of Things, a device such as a projector in a movie theater sends a signal to the technical support service about a detected fault and a list of parts that need to be replaced as part of unscheduled maintenance.

Digital technologies - augmented reality (AR). The most promising is augmented reality technology, which allows adding objects from the virtual world to the real world. Imagine walking down the street and seeing more information about things and people around you. Examples of augmented reality, already exist and are actively used, in some amusement parks you can already see signs that show the connections between objects in the physical world and the virtual world. Games with elements of augmented reality are actively spreading, clothing stores have virtual windows and fitting rooms, augmented reality is already being tested in cars and also in other fields. At the same time, there are issues that need to be resolved in order to



Volume 01. Issue 01. 2024

use actively augmented reality technologies. For example, the accuracy of geolocation tools is still insufficient, or the computer vision technologies for connecting objects of the physical world with their virtual counterparts are imperfect. However, it is safe to say that in the near future this technology may be associated with breakthroughs. [4]

Conclusion and suggestion. Digital technologies - virtual reality (Virtual reality, VR). The emergence of technical devices that allow a person to be in virtual reality has made this technology in demand in the entertainment industry. Additional to this, helmets and suits of virtual reality, specialized rooms allow you to enter an unknown world, where all your actions are programmed to respond from the virtual world.

In education, virtual reality is changing the way students and pupils learn. Using virtual reality in classrooms can help students and pupils better absorb in knowledge and learn by visualizing difficult concepts.

In conclusion, it may be not only the introduction of digital technologies in various fields and subjects, but also in the education system, plays a big role in the modernization of the country's education system. This serves to organize modern education and increase the effectiveness of education.

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