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# THE ROLE OF DIGITALIZATION IN EDUCATION

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#### Abstract:

The article analyzes the role of digitization in education based on the experience of the authors, paying attention to the problems of applying digital technologies to the educational process.

Keywords: information, digitization of education, education, lesson, technology.

## RAQAMLASHTIRISHNING TA'LIMDAGI O'RNI

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#### Annotatsiya

Maqolada raqamlashtirishning ta'limdagi o'rni mavzusi mualliflar tajribasi asosida tahlil qilingan bo'lib, o'quv jarayoniga raqamli texnologiyalarning tatbiq qilish muammolariga e'tibor berilgan.

Kalit so'zlar: ma'lumot, ta'limni raqamlashtirish, ta'lim-tarbiya, dars, texnologiya.

#### Annotatsiya

В статье анализируется роль цифровизации в образовании на основе опыта авторов, уделяя внимание проблемам применения цифровых технологий в образовательном процессе.

**Ключевые слова:** информация, цифровизация образования, образование, урок, технологии.



#### Introduction

Today, digital technologies such as data fusion systems and artificial intelligence are used to monitor and diagnose problems in agriculture, health and the environment, or to perform everyday tasks such as avoiding traffic jams or paying bills.

Digitization of education is determined by the fact that changes in the economic environment affect not only education, but also related fields. Accordingly, the digital transformation, under the influence of the digital economy, is gradually changing towards the formation of qualified specialists in a short period of time, accelerating the learning environment.

Education is not just a concept, but the result and fruit of the work of mutual cooperation (collaboration) for school and higher education systems. Enriching the ideology of young people, doing what they like, participating, creative thinking, and creating an environment of learning in unity (kommunikatsya) is the demand of our time.

With the digital transformation of education, new models of the educational process are formed, and teaching in mass open online courses allows students to choose their own educational paths. Why is technology important in education? Technology enables the use of a wide range of non-formal learning opportunities. However, the extent to which technology is changing education remains to be seen. The changes associated with the use of digital technologies are gradual, uneven and more or less significant depending on the conditions.

Modern technologies in education make it possible to obtain knowledge at a distance, more fully and with less time and money. New methods of interaction between the teacher and the student will appear.

Smart use of digital resources opens new perspectives for the availability, continuity and quality of education in the digital transformation of higher education. Digital transformation in education is about changing the way we teach our students. This can mean anything from introducing new technology into the classroom to changing the way students are assessed and monitored. It can be seen that the innovative development of higher education is inextricably linked to the development of the digital transformation process.

The main problem of education in Uzbekistan is to increase its quality and increase the role of digital transformation in the process of modernization of society. Therefore, digital transformation in our country should be a decisive condition for the effective development of society, improving the quality of education.

In the context of the digital transformation of education in the 21st century, educational institutions must use the latest technological developments and electronic learning tools. The result is virtual lessons in an interactive classroom environment, presentation of live history in 3D format, improved collaboration (collaboration) - easy access to interactive digital whiteboards, video conferences, online meetings and lectures.

Digital technologies help teachers to personalize and make teaching more inclusive. will play. Modern technologies allow children to become active participants in the educational process, and teachers to create new approaches, methods, and models of teaching and learning. For



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example, the teacher can conduct an online survey at any stage of the lecture to determine the level of mastery of the studied material [1].

Improving the experience of educators - with the help of appropriate technologies and tools, teacher-student and student-student interactions can be maintained in an optimally adapted environment. The flexibility of the processes of the educational system, as well as their acceleration, depends to a large extent on the ability to be armed with information and communication tools and to be able to use them.

Digitization of education is the use of applications, programs and other digital educational tools in schools, universities and distance courses. For example, it is used when students complete tasks using a platform on the Internet, and not in a notebook, and in the organization of teaching with the help of digital technologies. The use of digital tools in practice shows both the possibilities and realistic goals of digital transformation of schools. Accordingly, the main condition of use is the availability of digital media.

Digital transformation in education is the process by which the educational process uses digital technologies to integrate into all areas of its activity, dramatically changing the potential of its services for students.

In our opinion, digital transformation in education helps to solve the following problems[2]:

• Among the advantages, forecasting the flow of students, improving the student's interaction with the teacher;

- Improvement of document exchange;
- Increasing the culture of information use;
- Effective protection of information;
- Reduction of assessment errors;
- Reduction of documents in the activity of the tutor, etc.

Among the main types of digital technologies, the following can be distinguished: mobile education, cloud technology, online courses, games and web quests. Now, mobile learning technology is becoming the most demanded in the field of education.

Digitization of entrance and assessment exams, including lifelong digital skills, will make it more transparent and easier for teachers to assess, and enable students to take exams online.

In our opinion, in the conditions of digital transformation and in determining the strategic plan for the management of the educational system, attention should be paid to the following parameters:

- development of the information system of the educational system;
- creation of an information system of the activities of organizational units;
- creation of information system integration of spiritual and cultural activities;
- Development of the KPI system the main indicators of activity the system of motivating professors and teachers;

• acceleration of integration of all systems into a single information system of educational institution management, etc.



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Digital technologies help teachers to personalize and make education more inclusive, teachers can use digital technologies to create personalized learning programs based on the knowledge level and needs of students, thereby maximizing the potential of each of them.

Schools and universities have a lot to gain from the Digital Learning Environment project: a website, e-journals, an electronic document circulation system, etc. One of the mandatory elements is the emergence of an online education system.

Among the main types of digital technologies, the following can be distinguished: mobile education, cloud technology, online courses, games and web quests. Now mobile learning technology is most in demand in the field of education.

- The following educational technologies are relevant today:
- Modern educational technologies
- Problem-based educational technology
- Multi-level training
- Research method of teaching
- Lecture and seminar credit system technology
- Technology of using game methods in teaching
- Collaborative technology learning
- Information and communication technologies.

Thus, digitalization affects the development and implementation of information systems, as they integrate with each other, which reduces the time of data processing and increases the accuracy of information. In addition, digital technologies allow the collection and analysis of large amounts of data.

In a word, the digital transformation of education, the use of digital technologies in the training of specialists, and the proper organization of independent learning have become an urgent problem of the present time. It is worth noting that the most favorable and optimal conditions have been created for the successful solution of this problem.

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