

## PRIORITY DIRECTIONS OF EFFICIENCY OF USE OF DIGITAL TECHNOLOGIES IN THE EDUCATIONAL SYSTEM

Zulayho Abdullayevna Marasulova

Senior Teacher of the Interfaculty Department of Mathematics and Informatics Doctor of Philosophy in Pedagogical Sciences (PhD)

Kokand State Pedagogical Institute

Makhfuza Khabibovna Zakhidova

Teacher of the Interfaculty Department of Mathematics and Informatics Kokand State Pedagogical Institute

### ANNOTATION

This article identifies priorities for the development of the educational process based on the use of digital technologies in the education system of the country, the analysis of their capabilities. It also offers suggestions on how to not only play an important role in education and how to implement it, but also through the study, systematization and generalization of existing practices in drawing scientifically sound conclusions about the introduction of digital technologies in education.

**Keywords:** digital technologies, information and communication technologies, digital school, digitization, modern education, digital knowledge, Internet system, distance learning.

Today, digital technology is actively used in all areas of life. The economy, banking, service sector, as well as the educational process are also contributing to the rapid development. In the minds of all citizens living in the country, including pensioners from young children, they are forming the idea that all problems in society can be solved through digital technology. In addition, the issue of robotics of manufacturing and management processes, such as in the banking sector, competition between robots and workers, is also being raised.

Issues related to the unconditional benefits of the use of numbers and the unspeakable benefits of introduced technologies and the legal aspects of competition between employees of robots and organizations are increasingly being taken into account. In that regard, as our country's President, Shavkat Mirziyoyev, pointed out: "To achieve development, we need and must acquire digital knowledge and modern information technology. This gives us the opportunity to go down the shortest path of upswing. (Matthew 24:14; 28:19, 20) Today, information technology is deeply entering all sectors of the world. Of course, we know very well that shaping a digital economy requires the necessary infrastructure, a lot of resources and labour resources. [1:-B5].

Digital technology is a modern form of farming. It serves as a major digital data set and processing process as the main factor in production and management. And the use of obtained results in practice allows for much greater efficiency than traditional forms of farming. For example, you can cite a variety of automatic manufacturing processes, 3D technology, cloud technology, remote medical services, product cultivation and delivery using intelligent technologies, storage and sale of a variety of goods. [2:-B43].

The transition to digital technologists can be described as follows:

- When it comes to the transition to digital technologies, we understand how to build a completely new type of society and economy, based on computers and knowledge;
- Mobile social networks, cloud technology that implement data processing as key components of the transition to digital technology. sensor networks, the Internet of objects, and artificial intelligence technologies can be illustrated;
- Together, the aforementioned technologies allow you to create "smart" objects and processes (*smart state, smart home. Smart city, health care, transportation and entrepreneurship*).

Digital technologies are reflected in the following systemic changes:

Implementation of virtualization processes in education, production and management:

- The internet of items and the emergence of distance learning;
- blockchain technologies and a variety of processes referred to in it;
- the marketing process and the possibility of doing business independently;
- the emergence of a new banking and monetary system and the activities of banks;
- implementation of the ICO (Initial Coin Offering) process, which allows you to attract large investments;
- the emergence of new staff and new jobs;
- the emergence of a new corporate culture;
- implementation of new management and control methods;
- the composition of large databases (big data);
- implementation of artificial intelligence and intellectual management systems;
- the emergence of cryptocurrencies as an independent monetary union;
- the emergence of other huge opportunities.

Nowadays, there is no general understanding of digital technology worldwide, but there are many definitions of it. For example, *digital technologies are* business activities that allow you to seriously improve the efficiency of storing, selling and delivering a variety of manufacturing, technologies, equipment, goods and services based on the use of process analysis results and large-scale data processing, and is considered the main manufacturing factor of digital data. As we have said before, digital technology is a technology that will be available under hybrid world conditions. This definition is also true and reflects the skill. But it does not explain the pending changes, and, respectively, its use in practice is somewhat complicated.

The word "digitalization" is actually a new term that involves the involvement of IT solutions in the process of innovative management and operation, as a result of which the use of information technology in all systems, from Internet items to electronic government.

The digital technology application industries are huge streams of information and have made the learning process available to anyone who has such a cage that everyone can find on the Internet. Digital medical technology actually saves a lot of human lives. Today's scientific research has enabled the implementation of high-tech devices in which the diagnosis, analysis and treatment of many diseases is carried out. In clinics, research provides a wide range of opportunities for the development of the newest drugs. Improving the methodological foundations of pharmacology and other fields reduces the mortality rate and improves the quality of life. Today, widespread virtual communication allows you to make a diagnosis of the

disease remotely in a short time. Production of prosthetics can be carried out on modern 3D printers, which also opens up great opportunities. (Matthew 24:14; 28:19, 20) Jehovah's Witnesses would be pleased to discuss these answers with you. Digital technology is capable of automating and optimizing almost all technological processes in the industry. The use of information technology in the management of various divisions of enterprises allows you to improve the organization of production. Producing more products in a short time, production companies can sell their products in almost all countries. Industrial enterprises have various levels of information and digital technology in the field of information management and transmission. However, digital technology has been proven to be the main focus of industrial production and enterprise development. Automation of production processes of any firm allows you to store financial records based on the actual data of specific statistics. The application of optimal management methods diversify manufacturing processes and allows for the development of reasonable solutions. Today, business building models are changing significantly. Each large company can significantly expand its business space by applying the capabilities of the global Internet. Almost immediate access to various geographical objects on the planet allows business affairs to be managed with maximum impact. Information systems have entered all walks of life. The development of digital technology opens up many opportunities. Advances in all sectors of science and industry continue at a very rapid pace, not surprising or surprising. Digital technology allows you to perform different tasks in as short a time as possible.

Digital School is a specialized educational institution that uses digital equipment, software intelligently and efficiently in teaching and thus improves the competence of each student. Digital schools are not treated as typical and even new events, as information technology is actively used in schools. Schools focused on digital learning technologies are fundamentally different from technical and informational equipment, teacher readiness to work under new conditions, and level of education environment management. Methodically, the "digital school" is based on new educational standards, which adopt a multi-stage competent approach. Digital technologies today:

- a means of effective delivery of information and knowledge to students;
- a means of creating educational materials;
- effective teaching method;
- this is a means of creating a new educational environment: development and technological.

Modern digital technologies:

- Technology of joint experimental research by the teacher and the student.
- "Virtual reality" technology.
- "Panoramic images" technology.
- "3D modellashtrish" texnologiyasi.
- Technology of "educational robots".
- ITI technology (using small information tools).
- The content of multimedia education.
- Interactive electron kontent.

Educational standards direct us to reorganization of the learning process. This has to do with the experimental activities of teachers and students. Why? In fact, students need to master not

only specific practical skills, but also general teaching skills: to master the natural science knowledge method, you need to organize the learning process. The technology of joint research of teachers and students, of course, implements a problem-search approach to training and ensures the implementation of certain scientific knowledge: facts – model – result – experimental facts.

Initially, the teacher organizes observations and puts on demonstration experiences, together with students, receives facts that draw conclusions about a particular event. Based on the facts obtained, teachers and students try to explain the observed events and identify patterns (hypotheses advanced), determine the results, identify the causes. After that, students and teachers will think about what test experiences can be put into, what their ideas and goals will be, and how to implement them. Students conduct their opinions in independent laboratory experience, the results (new facts) are comparable to theoretical forecasts and draw conclusions. This technology provides the following options:

- 1) Introducing students to the process of knowledge;
- 2) Armed with elements of general approach knowledge, this important further education and life;
- 3) Provides students with participation in various educational activities and practical and mental, thereby providing a wide range of knowledge activities, their psychological development and independence.

The main way to train robots is to organize educational conditions in which the student performs and solves his or her duties and the teacher accompanies the student's activities. Using robots, classes make it possible to organize the learning process based on a system-operating approach, which today requires new educational standards.

As a summary, it can be said that today's audiences differ greatly from those of a decade ago, and classrooms are equipped with computers, smart files and other types of teaching technologies. As elsewhere in the world, seven-screen generations of digital generations - television, computers, tablets, tablets, fablets, smartphones and smart devices - are emerging in the country. As a result of having such a dense digital environment and constant interaction with it, the thinking and information processing processes of today's students are fundamentally different from previous thinking and information processes. By using innovative teaching technologies and didactic models based on modern information and communication technologies, it is necessary to adapt the education system to the digital generation.

#### AVAILABLE PUBLICATIONS

1. Address to the Supreme Court on January 24, 2020 by President of the Republic of Uzbekistan Shavkat Mirziyoyev. <https://uza.uz/oz/politics/zbekiston-respublikasi-prezidenti-shavkat-mirziyeevning-oliy-2501-2020>.
2. Sharonin Yu.V. Sifrovie texnologii v visshem i professionalnom obrazovanii: ot lichnostno orientirovannoy Smart-didaktiki k blokcheynu v selevoy podgotovke spetsialistov // *Sovremennye problemy nauki i obrazovaniya*. – 2019. – No 1.
3. Abdullayev, M., Saidahrar, G., & Ayupov, R. (2020). Digital economy - current areas of staff training. *Archive nauchnix issledovaniy*, 1(23). Izvlecheno grass <https://journal.tsue.uz/index.php/archive/article/view/2702>.

4. Norboeva N. Erkinovna, Khashimova D. Pakhritdinovna. The role of the digital economy in the development of information and communication technologies // *ACADEMICIA: An International Multidisciplinary Research Journal* 10 (3), 25.
5. Abdinazarov, X. X., Madumarov, M. J., & Haydarov, S. M. (2019). Zooplankton of Sarikamish Lake (Uzbekistan). *Open Access Library Journal*, 6(3), 1-8.
6. Walli, M. H., Al-Jubouri, Z., Madumarov, M. M., Margaryta, M., & Aldibe, A. A. A. (2022). Genetic and environment diversity to improve wheat (*Triticum* spp.) productivity: A review. *Research on Crops*, 23(2), 295-306.
7. Kuchboev, A. E., Najmidinov, E. K., Mukhamediev, M. A., Karimova, R. R., & Yildiz, K. (2021). Morphological and ecological features of some nematodes of the genus *Rhabdochona* in marinka obtained from Fergana Valley, Uzbekistan. *Journal of Parasitic Diseases*, 45(4), 1084-1089.
8. Kuchboev, M. J. M. A. E., Abdunazarov, H. K., & Olimlonovich, A. O. (2021). Development of the Parasite Nematode *Echinuria Uncinata* (Nematoda: Acuariidae) in the Intermediate Host in Uzbekistan. *Annals of the Romanian Society for Cell Biology*, 25(6), 3118-3124.
9. Madumarov, M. Zh. (2021). MORPHOLOGICAL AND ECOLOGICAL FEATURES OF THE PARASITIC NEMATODE *ECHINURIA UNCINATA* IN *DAPHNIA*. In *The Current State of Aquatic Bioresources* (pp. 159-163).
10. Abdinazarov, K. K., Madumarov, M. J., & Khaidarov, S. M. (2020). ZOOPLANKTON OF FISHING FISHERY OF FERGANA REGION. *Scientific Bulletin of Namangan State University*, 2(1), 93-98.
11. Madumarov, M. J., Kuchboev, A. E., Abdunazarov, H. K., & Amirov, O. O. ARTICLE INFO ABSTRACT.
12. Abdurakhmonov, E. B., Rakhmatkarieva, F. G., Ergashev, O. K., & Ochilov, G. M. (2020). Energetic Characteristics Of The Process Of Adsorption Of Benzene In Zeolites NaX And NaY. *International Journal of Future Generation Communication and Networking*, 13(4), 246-252.
13. Ochilov, G. M. (2011). Wastewater treatment from non-ferrous metal ions using developed coal adsorbents. Diss. to the soicle. uch. step. Ph.D. 2011. 26 p. Diss. na soisk. uch. step. k. kh, (2011), 26.
14. Ochilov, G. M., Agzamkhodjaev, A. A., & Khamraev, S. S. (2009). On the issue of purification of non-ferrous and wastewater using local coals and the composition of adsorbents based on them. Tashkent, 1, 62-64.
15. Khuzhaev, V. U., Ochilov, G. M., & Kushnazarova, Sh. K. (2020). Classification and determination of fat content of meat products with the method of gas liquid chromatography. *Universum: Technical Sciences*, (12-2 (81)), 108-115.
16. Eshmetov, I. D., Ochilov, G. M., Shi-xian, V. V., Zokirova, D. Zh., Gumarov, R. Kh., & Agzamkhodjaev, A. A. (2011). Wastewater treatment of the oil refining industry with adsorbents based on Angren coals. In *Materials of The International Scientific and Technical Conference. « New composite materials: based on local and secondary raw materials*". Tashkent (p. 77).
17. Eshmetov I. D., Ochilov G. M., Shi-syan V. V., Zokirova D. Zh., Gumarov R. Kh., Agzamkhodjaev A. A. Purification of wastewater of the oil refining industry with adsorbents

- on the basis of Angren coals // Materialy Mezhd. scientific and technical. Conf. "New Composite Materials: Based on Local and Secondary Raw Materials". Tashkent, 2011. P 77.
18. Zhumaeva, D. Zh., Ochilov, G. M., Aymirzaeva, L. G., & Agzamkhodjaev, A. A. (2015). Adsorbents for wastewater clarification. *Chemical Industry*, 92(1), 41-44.
  19. Yuldashov, J. B., Khoshimov, Sh. M., Ochilov, G. M., Abdikamalova, A. B., & Eshmetov, I. D. (2022). STUDY OF THE EFFECT OF COAL ACTIVATION CONDITIONS ON BENZENE VAPOR ADSORPTION. *Universum: Technical Sciences*, (2-6 (95)), 38-42.
  20. Хамзахўжаев, А. А., Валиев, Н. В., & Очилов, Ф. М. (2021). МЕЛАМИННИНГ САНОАТДА ҚЎЛЛАНИЛИШИГА ОИД АЙРИМ МАСАЛАЛАР ТЎҒРИСИДА. *Журнал естественных наук*, 3(5).
  21. KUSHNAZAROVA, S., HUZHAEV, V., & OCHILOV, G. (2021). STUDY OF THE HEAVY METAL CONTENT OF DAIRY PRODUCTS PRODUCED IN UZBEKISTAN. *ПРИДНЕПРОВСКИЙ НАУЧНЫЙ ВЕСТНИК Учредители: Частное предприятие Издательство "Наука и образование"*, 12(4), 16-21.
  22. Ochilov, G., & Nishanov, M. F. (2021). STUDY OF PHYSICOCHEMICAL PROPERTIES OF ADSORBENTS OBTAINED FROM FRUIT SEEDS.
  23. Uktamov, D., & Golibjon, O. (2020). Extraction Of Complex Salts Of Microelement (Cu, Zn) And Microelemental Secondary Raw Materials. *Solid State Technology*, 63(6), 11851-11862.
  24. Karimovich, E. O., Ugli, A. E. A., & Mamayunusovich, O. G. (2020). Preparation of prophylactic and therapeutic dietary preserves on the basis of caper fruits. *European Journal of Molecular and Clinical Medicine*, 7(3), 1541-1547.
  25. Yuldashev, Zh. B., Boymatov, I. M., Mamataliev, N. N., Ochilov, A. M. Ў., & Tleubaev, S. O. (2020). HYDROPHILIC PROPERTIES OF CARBONMINERAL SORBENTS BASED ON NAVBAHORA ALKALINE BENTONITE. *Science and Education*, 1(7), 63-67.
  26. Ochilov, G., Tursunova, G., Qarabaeva, R., & Ibrohimov, A. (2019). Obtaining of adsorbents from fruit seeds and studying their physicochemical properties. *Scientific journal of the Fergana State University*, 2(2), 27-30.
  27. KHAMRAKULOV, I. M., & OCHILOV, G. M. (2017). THE EFFECT OF HEAT TREATMENT AND OXIDATION OF COAL ON ITS SORPTION CAPACITY. In *Youth and XXI Century-2017* (pp. 39-41).
  28. YULDASHEV, U. M., TOZHIBOEV, D. R. U., YIGITALIEVA, M. A. K., OCHILOV, G. M., & KUKANBOEV, I. I. (2015). INNOVATIVE TEACHING TECHNOLOGIES IMPLEMENTED IN THE PRACTICE OF CHEMISTRY TEACHERS. In *Youth and XXI Century-2015* (pp. 50-55).
  29. OCHILOV, G. M., KUKANBOEV, I. I., KHUDOIBERDIEV, ZH. KH., ESHMETOV, I. D., & AGZAMKHODJAEV, A. A. (2015). ION EXCHANGE ON ANGREN COAL AND ITS FEATURES. In *Youth and XXI Century-2015* (pp. 34-36).
  30. Ochilov, G. M., Salikhanova, D. S., Gumarov, R. Kh., Agzamkhodjaev, A. A., & Khalmatov, M. M. (2009). Use of coals and composite adsorbents for wastewater treatment of the Kauldy mine". *Mining Journal*, (S1), 103-103.