VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services



Website: https://theusajournals. com/index.php/ajast

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.



THE ROLE OF DIGITAL TECHNOLOGIES IN PREPARING STUDENTS FOR PEDAGOGICAL ACTIVITY

Submission Date: October 26, 2024, Accepted Date: October 30, 2024,

Published Date: November 06, 2024

Crossref doi: https://doi.org/10.37547/ajast/Volume04Issue11-04

Sohibov Dilshod Beknazarovich Bukhara State Pedagogical Institute Base Doctoral Student, Uzbekistan

ABSTRACT

This article provides brief information about digital technology, the use of digital technology in education, the role of digital technology in education, the results of its use, the tools of the digital technology education system, and the advantages of digital technology.

KEYWORDS

Digital technology, digital technology in education, artificial intelligence, software, information technology.

INTRODUCTION

Decree of the president of the Republic of Uzbekistan dated February 17, 2021 PQ-4996 on measures to create conditions for the rapid introduction of artificial intelligence technologies in accordance with the strategy of "digital Uzbekistan—2030" and in order to rapidly introduce artificial intelligence technologies and widely use them in our country, ensure the possibility of using digital data and their high quality, and create favorable conditions. The following were established on the organization of scientific research aimed at the comprehensive implementation of the Strategy "2030" and the introduction of artificial intelligence technologies in the system of economic networks, social sphere, and public administration:

Fundamental and applied scientific research in the field of artificial intelligence, formation of a scientific ecosystem for the development of digital technologies;

VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services

- Development of innovative products for automation of management and production processes on the basis of artificial intelligence technologies, as well as their models, algorithms, and software;
- To establish cooperation with leading foreign innovative and scientific institutions for the development of artificial intelligence technologies and to implement joint projects;
- In addition to building the foundations of industry and society, the plan calls for educational reform as foundation of the future and reconstruction of the R & D system.

The development of science and technology in the field of education in the world community shows the relevance of the widespread introduction and more effective use of the means of modern Information Communication Technologies of teaching in an informed society. It is important that the social and economic reforms carried out in the educational system are aimed at training highly qualified, competitive qualified personnel, improving the methodology of training using innovative programs in the teaching of Informatics and Information Technology.

In a time when the globalization process is rapidly entering our lives in our country, great attention is paid to the training of mature specialists—personnel who rely on their knowledge, strength, and capabilities and

see the interests of society and the state in harmony with their interests, further deepening democratic changes and implementing the concept of the foundations of civil society as an independent, creative thinker. One of the important tasks of today is the development of skills for the use of Information Technology for young people, the promotion of reading among them, and the organization of effective use of computer technology and the internet. In this sense, there is a need to further improve scientific research on the development of computer literacy among students, the development of the culture of the use of Information Technology, the coverage of such concepts as interest and responsibility for the programming languages of their students in the process of teaching Informatics and Information Technology.

The current state of the educational system is characterized by the increasing role of non-traditional educational technologies. The acquisition knowledge by the educator with their help is much faster than traditional technologies. These technologies change the nature of the development, acquisition, and dissemination of knowledge, make it possible to deepen and expand the content of the studied subjects, quickly update it, apply more effective teaching methods, and also significantly expand the possibility of education for everyone.

American Journal Of Applied Science And Technology

(ISSN - 2771-2745)

VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services

To the question of what digital technology itself is, we answer as follows:

-being one modern form of business. It is served by a large set of data in digital form and the process of their processing as the main factor of production and management. And the use of the results obtained in practice allows you to achieve much greater efficiency compared to traditional forms of economic management. As an example, automatic production processes of various types, 3D technology, and cloud technologies. It is possible to cite the provision of remote medical services, the cultivation and delivery of products using smart technologies, the storage of goods of various types, and the processes of their sale. [2]

Digital technology is a promising direction in the field of formation of information skills, which increases the intensity of the rapid search for the most diverse information in the process of application and the application of computer technology in the educational process of students. The benefits of digital technology in education include:

- 1) opening up wide opportunities for learning through the application of distance learning;
- 2) to help the teacher automate or simplify the performance of a number of tasks;

3) provides access to the necessary information from anywhere and develops important skills in working with resources.

Speaking about the system of working with "Informatics and digital technologies" it is necessary to be able to properly orient the student youth towards special attention. This problem puts a serious and attentive responsibility on the part of today's educators. Today, the requirements for educators who are responsible for training the younger generation as mature personnel are extremely high and are aimed at the formation of qualitatively new, intellectually, spiritually competent, professional and highly potential individuals.

To achieve such goals and a high result, it is considered important, first of all, to seriously focus on the activities of educational institutions and to effectively organize a system for working with Informatics and digital technologies. At a time when the system of working with digital technologies is rapidly taking shape, it is necessary to involve student youth in this.

Today, the main requirement of an informed society is, first of all, information preparation: the creation of conditions for work that will be associated with its "processing" storage, and delivery to members of society.

One of the active organizers of the society in this area is undoubtedly readers. Therefore, the correct

VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services

organization of the student's system of working with digital technologies is considered appropriate.

As a result of the application of "Informatics and digital technologies" theoretical knowledge and practical skills are formed.

Competence of work with "Informatic and digital technologies"—development of Science, Information, its types, characteristics, and units of measurement; informatization of society and education; arithmetic foundations of Computer Information Processing, representation, digital economy, digital technologies, cloud technologies, e-commerce, blockchain technology, virtual presence, and infographic concepts, as well as being able to track the necessary information from media sources, sorting, processing, and storage; being able to use them effectively to ensure safety; the ability to have a media culture implies formation. That is, students are obliged to be able to apply information in the appropriate fields of Science in the same way as they receive it.

The implementation of these goals raises the organization of Education based on a competency approach. Improving student competence is a prerequisite and necessary to build on this approach.

The achievement of lesson effectiveness is largely determined by the competence and professionalism of the teacher.

The competency approach is becoming the conceptual basis of education in the world. At this time, competence is not only the ability to acquire knowledge but also the ability to adapt it to practice.

Students can achieve the effectiveness of an unconventional form of education as a result of the organization of a system for working with digital technologies.

- the main idea and content on the topic under study are shown by the teacher; the filling of the content of the material is carried out together with the learners;
- due to creative "awakenings" in educators, random turns and deviations occur;
- creative in receiving information in those who receive education in didactic materials aimed at shaping the approach are included;
- to the breadth of creative imagination in educators depending on the volume of knowledge is not limited;
- among the "educator-educator" relations, a wide Place is given to the relationship of the educator;

Problem education is given a wide place.

Learning methods are becoming much more accessible to students when they are taught using digital technology. In this case, multimedia, computers, laptops, smart TVs, smart phones, smart whiteboards, and projectors perform the role of the voters of the

VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services

educational system. The organization of classes with the above tools for teachers ensures a further improvement in the quality of Education. It is known to us that the use of digital technologies in online classes will work well. For example, we can assume that online lessons given through television are a form of digital education.

Hence, in digital education:

- have the opportunity to receive education on any land and at any time;
- a culture of obtaining and using information from the internet is formed;
- takes the education sector to a new level;
- dramatically reduces time and spending;
- those like not getting lost in the digital world and having advantages in finding a good job.

CONCLUSION

In conclusion, it can be said that the introduction of digital technologies into the field of education plays a huge role in the renewal of the country's educational system. It serves to organize modern education and increase the effectiveness of Education. It serves as a very important factor for students to acquire independent knowledge as well as for international knowledge exchanges.

REFERENCES

- Decree No. PF-6079, "On approval of the Digital Uzbekistan - 2030" strategy and measures for its effective implementation: https://lex.uz/ru/docs/-5030957
- 2. Law of the Republic of Uzbekistan "On Education." Tashkent city, September 23, 2020, ORQ-637.
- 3. Zaripov N. Webfreelance activities in the teaching of informatics and information technologies // tsentr nauchnyx publikatsiy (bukhdu. en). - 2021. -T. 3. - no. 3.
- 4. N.D. Mirzakhmedova. (2022) APPLICATION OF DIGITAL TECHNOLOGIES IN THE FIELD OF EDUCATION. Oriental Renaissance: Innovative, educational, natural, and social sciences Scientific Journal Impact Factor SJIF 2022: 5.947 Advanced Sciences Index Factor (538-545)
- N.N. Zaripov, D.B. Sohibov, A.R. Zorayev, and K. U. Shadmanova. Electronic textbook "Informatics and digital technologies."
- 6. D.B. Sohibov, "The main essence of teaching based the competence approach for future informatics and information technology teachers" (2024/5/15). Science, education, and innovations: theory, practice, results (p. 357–359)
- 7. Sh.A. Abdurakhmanova & Kh. Jorayev. (2022). **MODERN WEB TECHNOLOGIES USED PROFESSIONAL** EDUCATION. Conference Zone,178-179. Retrieved from ttp://conferencezone.org/index.php/cz/article/vie w/248

VOLUME 04 ISSUE 11 Pages: 22-27

OCLC - 1121105677











Publisher: Oscar Publishing Services

- 8. Shakhnoza Abduhakimovna Abdurakhmanova. (2022). INDIVIDUALIZATION OF PROFESSIONAL EDUCATION PROCESS ON THE BASIS OF DIGITAL TECHNOLOGIES. World Bulletin of Social Sciences, 8, 65-67. Retrieved from https://scholarexpress.net/index.php/wbss/article/ view/721
- 9. Сохибов, Д. (2023). КВАДРАТИЧНОМ СТОХАСТИЧЕСКОМ C ОПЕРАТОРЕ НЕПОДВИЖНОЙ точкой. Innovations in Technology and Science Education, 2(10), 747-752.
- **10.** Мамуров, Б. Ж., Ш<mark>арипова, М. Ш., &</mark> Сохибов, Д. Б. (2021). О НЕПОДВИЖНЫХ ТОЧКАХ ОДНОГО КВАДРАТИЧНОГО СТОХАСТИЧЕСКОГО ОПЕРАТОР<mark>А В S. Пробле</mark>мы науки, (4 (63)), 13-16.
- **11.** Мамуров, Б. Ж., & Сохибов, Д. Б. (2021). О ТИПАХ **НЕПОДВИЖНЫХ** ТОЧЕК одного СТОХАСТИЧЕСКОГО КВАДРАТИЧНОГО ОПЕРАТОРА. Наука, техника и образование, (2-2 (77)), 10-14.

