ISSN Online: 2771-8948

Website: www.ajird.journalspark.org Volume 37, February - 2025

THE ROLE AND IMPORTANCE OF DIGITAL TECHNOLOGY IN EDUCATION SOX

Egamov Sultonjon Malikovich Tashkent Medical Academy, Assistant of the Department of Biomedical Engineering, Informatics and Biophysics, Tashkent, Uzbekistan

Arzikulov Fazliddin

Tashkent Medical Academy, Assistant of the Department of Biomedical Engineering, Informatics and Biophysics, Tashkent, Uzbekistan

Isroilov Ulug'bek

Tashkent Medical Academy, Assistant of the Department of Biomedical Engineering, Informatics and Biophysics, Tashkent, Uzbekistan

Abstract:

This article cites the necessary information about the tasks of students in the educational process that should be used in order to develop digital technology. The article describes digital technology, virtual reality, the use of digital technology in education, the advantages of digital technology in educational system Vosti.

Keywords: Education, digital technology, digital technology in education, ICT, higher education system, modern education, Internet system, virtual reality.

Introduction

Today, digital knowledge and modern information technology are one of the important conditions for achieving progress. Digital technologies not only improve the management of the state and society and provide great facilities to people in the social sphere. In addition, digital technologies provide the basis for positive economic growth: they increase the quality of products and services.

Education and education in the zamnovai world has become one of the pressing issues. It is no secret that it is quality education that plays an important role in saving the current world from various problems. Therefore, many countries of the world are making very large investments in the field of Education. In our country, significant work has been carried out in this regard.

But despite the fact that in our educational system there are still a number of problems waiting for their solution that cannot be said about modern quality education without overcoming them. In particular, in the current period, when the speed of obtaining and using information has increased rapidly, it is impossible to improve the quality of education and educate spiritually active youth without involving digital technologies in the

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org Volume 37, February - 2025

educational system. We have already taken the field of education in the form of a lecture in the traditional way. These were in turn achieved through large-scale literature and a variety of teaching aids, lecture texts. But this form of teaching did not justify itself so much. Students also worked with different volumes of literature to complete tasks. To date, the digitization of the educational process has already begun.

The current state of the educational system is characterized by the increasing role of non-traditional educational technologies. The acquisition of knowledge by students with their help has become much faster than traditional technologies, and the effect began to be felt immediately. These technologies change the nature of the development, acquisition and dissemination of knowledge, deepen and expand the content of the subjects being mastered, update it more often, apply more effective teaching methods will help significantly increase the chances of obtaining education.

The methods of education are becoming easier for learners if they are educated through digital technology. In this case, the role of educational system Vosti is performed by multimedias, codescopes, computers, laptops, internet-connected TVs, telephone lines, smart boards, projectors. Tutoring educators with such tools provides an improvement in the quality of Education. It is known to us that the use of digital technologies in online classes will work well.

Digital technologies - one of the most promising on the example of augmented reality-is the technology of augmented reality, which allows you to add objects from the virtual world to the real world. Let's imagine, walking down the street, you will see more information about what is around you and about people. Examples of augmented reality already exist and are being actively used. In some oysters gardens, you can already see signs that indicate links between an object in the physical world and a virtual world. Games with stuffed realism elements are actively spreading, stores selling clothes have virtual windows and equipment rooms, stuffed realism is already being tested on cars. At the same time, there are also issues that need to be solved on the way to the active use of completed reality technologies.

Currently, digital technologies occupy an important place in all spheres of our life, in particular in the educational system. Their effective application is helping to develop the teaching process in New and innovative forms. Speaking about the role and importance of digital technology in education, a number of positive changes can be seen.

The main advantages of incorporating digital technologies into the educational system

Simplifying teaching and learning:

Digital technologies simplify the educational process. For example, online courses, video courses, virtual laboratories and interactive platforms increase the effectiveness of teaching. Students can learn without restrictions on their time and place, creating more freedom and flexibility than traditional teaching methods.

Wide access to resources:

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org Volume 37, February - 2025

Through the widespread availability of the internet and various online platforms, teachers and students are given free access to the resources they need to gain quality knowledge. Online educational platforms such as Google Scholar, Coursera, Khan Academy provide not only academic knowledge, but also materials necessary for self-development in various fields.

Individual approach:

The implementation of an individual approach to each student can be difficult for teachers, but with the help of digital technologies, this process becomes much easier. With the help of artificial intelligence and algorithms, the pace and methods of learning of students are analyzed and personalized study plans are drawn up. This, in turn, helps students to study effectively.

Applying new methodologies:

Digital technologies allow teachers to apply new pedagogical techniques in addition to traditional ones. For example, teaching students using innovative approaches such as blended learning (mixed learning) or flipped classroom (mirrored classroom) that encourage them to work cooperatively makes the educational process interesting and effective.

Digital technology and innovation in education Online education and distance learning:

The spread of online education and distance learning allows not only to overcome geographical limitations, but also to effectively manage time. During the pandemic, this method became the most important form of teaching. Students were able to receive education from anywhere and at the time, which helped to make the educational process more global and flexible.

Virtual and augmented reality:

Virtual reality (VR) and augmented reality (AR) technologies are creating new opportunities in education. For example, through VR, students can view historical sites, science labs, or other interactive environments with their own eyes. This method allows teachers to explain complex subjects in a more understandable and interesting way.

Artificial intelligence and training:

Artificial intelligence (AI) is playing a major role in effectively helping teachers and students in the education system. AI is used to prepare personalized tests and exercises based on the levels of student mastery, analyzing student success and providing additional support in hard-to-reach areas. This, in turn, increases the effectiveness of Education. Difficulties in introducing digital technologies in education

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org
Volume 37, February - 2025

However, there are also some difficulties in fully integrating digital technologies into the educational system. First of all, all students and teachers should be provided with the necessary technologies and internet access. Another problem is that teachers do not have enough qualifications to master and effectively use new technologies. Also, digital technologies cannot completely change education on their own, it is also important for teachers to be prepared for advanced techniques for their effective functioning.

Conclusion

Digital technologies are important in raising the education system to a new level. Technologies such as online education, distance learning, virtual and augmented reality, artificial intelligence provide an opportunity to make the educational process more interactive, efficient and interesting. However, in order to fully implement them, it is necessary to expand access to technologies, improve the skills of teachers and eliminate digital differences. At the same time, the role and role of digital technologies in education will further increase in the future.

References

- 1. Raxmatov, A., Boʻriboyev, B., Boʻriboyev, A., Otabekov, A., & Egamov, S. (2020). HUDUDLARDA BOLALAR SPORINING RIVOJLANISHINI MATEMATIK MODELLASH MAMAMLALARI HAQIDA. Arxiv Nauchnyx Publikatsiy JSPI.
- 2. Akbar, K., & Sulton, E. (2021). Cloud Technology. Galaxy International Interdisciplinary Research Journal, 9(12), 458-460.
- 3. Malikovich, E. S. (2024). IMPROVING THE METHODOLOGY OF TEACHING THE BASICS OF PROGRAMMING IN A VISUALIZED ENVIRONMENT. IMRAS, 7(1), 168-173.
- 4. Egamov, S. (2020). EPRA International Journal of Research and Development (IJRD). Архив Научных Публикаций JSPI.
- 5. Malikovich, S. E. (2022, December). 3O'LCHAMLI MODELLAR YARATISH VA ULARNI O'QITISH METODIKASI. In Proceedings of International Educators Conference (Vol. 1, No. 3, pp. 46-50).
- 6. XALIKOV, A., EGAMOV, S., & NORMATOV, J. (2022). The concept of graphic information and its essence.
- 7. Халиков, А., Эгамов, С., & Норматов, Ж. (2022). Informatika fanida virtual ta'lim texnologiyalari. Общество и инновации, 3(4/S), 109-113.
- 8. Turapov, U. U., Isroilov, U. B., Raxmatov, A., Egamov, S. M., & Isabekov, B. I. (2024). Splay-Method of Model Acquisition Assessment. International Journal of Trend in Scientific Research and Development, 5(1), 934-936.
- 9. Elmurotova, D., Arzikulov, F., Egamov, S., & Isroilov, U. Organization of direct memory access. IRSJ, ISSN (E), 2980-4612.
- 10. Джуманов, Ж. Х., Юсупов, Р. А., Ахралов, Ш. С., Эгамбердиев, Х. С., & Исроилов, У. Б. (2019). Сув хўжалик фаолияти ўзгарган шароитларда ер ости сувлари

ISSN Online: 2771-8948

Website: www.ajird.journalspark.org
Volume 37, February - 2025

ҳаракатини математик моделлаш (Зарафшон воҳасининг Дамхўжа сув олиш иншоати мисолида)/Муҳаммад Ал-Хоразмий Авлодлари илмий-амалий ва ахборот-таҳлилий журнали. Муҳаммад ал-Хоразмий авлодлари. Илмий-амалий ва ахборот-таҳлилий журнал, 4(10), 132-136.

- 11. Жумабоев, С., & Исроилов, У. (2020). СОЗДАНИЯ СРЕДСТВ ЭЛЕКТРОННОГО ОБУЧЕНИЯ В ВЫСШИМ ПЕДАГОГИЧЕСКОМ ОБРОЗОВАНИЕ. Архив Научных Публикаций JSPI.
- 12. Isroilov, U. (2020). Пространственный анализ в задачах мониторинга уровней грунтовых вод Ферганской долины. Архив Научных Публикаций JSPI.
- 13. Turapov, U. U., Isroilov, U. B., Guliev, A. A., & Muldanov, F. R. Non-Invasive Glucometer of Automatic Measurement of the Glucose Level in Blood.
- 14. Джуманов, Ж. Х., Холматов, Н. О., Исроилов, У. Б., & Муллажонов, Б. А. Стельмах АГ Вопросы хроностратиграфии и стратиграфического расчленения четвертичных отложений.