

A STRATEGY FOR INTRODUCING DIGITAL TECHNOLOGIES AND MODERN METHODS INTO THE EDUCATIONAL PROCESS

Ismatullaeva Raykhona Otabek qizi
Bukhara engineering technological institute
Student of 710-21 MAR (Marketing) group

Abstract. This article is devoted to the use of strategies and modern methods of introducing digital technologies and modern methods into the educational process in the educational system. Examples of the use of modern educational technologies in the teaching of information technologies are considered. Also, modern methods that help to improve the qualifications of teachers have been thoroughly studied.

Keywords: modern pedagogical technologies, mass open education technology, interactive textbook systems, online educational platforms.

Introduction.

Educational training is a purposeful pedagogical process of organizing and stimulating active educational and cognitive activities aimed at developing students' scientific knowledge, skills and abilities, creativity, outlook, moral views and beliefs. [1].

Based on this definition, information technology education should be considered as organizing the process of preparing and transferring information to the student using modern methods of new teaching. Given that learning in a broad sense is a controlled process, teaching using new information technologies provides ample opportunities for teachers and students to express information-related opinions.

If we talk about the traditional education system, modern teaching methods are very rare in the institutions corresponding to it, but as for private schools, training centers and other similar organizations, new methods are increasingly used in their activities. is appearing more. Why are these methods considered more effective than traditional methods?

With the advent of the computer, pedagogical methods change, that is, the educational process is considered not as a "pumping" of knowledge (a linear construction of teacher-student interaction), but as a process of managing the student's knowledge.

Analysis and results

Information technology education allows to create a certain educational environment that gives the student the opportunity to study a certain phenomenon or process comprehensively, using information resources, electronic learning tools and telecommunication opportunities. This leads to a change in the content of educational activities, it became more independent and creative, and helped to implement an individual approach to education. A sharp leap in computer equipment and software has made it possible to introduce technologies such as multimedia technologies and Internet technologies into the educational process, and their proper use serves to develop the human personality and abilities in all aspects.

Modern methods of teaching information technologies correspond to today's new technologies. These methods help teachers and students to acquire the necessary knowledge and skills. The following modern methods are important in the teaching process:



Interactive textbook systems: These textbooks enable students to easily understand information through multimedia, animations, and interactive activities. These types of tutorials are available on many platforms, such as Khan Academy, Coursera, and Udemy.

Virtual Reality (VR) and Augmented Reality (AR): VR and AR technologies allow students to participate in the process of "developing" information. These technologies enable students to put theoretical knowledge into practice through whatever subject they study.

Online Learning Platforms: Online learning platforms allow students to learn a wide range of subjects. These platforms provide access to educational materials, textbooks, interactive programs, and support materials.

Flipped classroom model: In this model, the lessons are filled with learning materials by the teacher via video streamer, and the students read the textbook and engage in tests and questions or activities that require their own self-correction. they get it.

Machine Learning and AI applications: Machine learning and artificial intelligence (AI) technologies help in personalizing the learning process and guiding students according to their needs and abilities.

Economic Mathematical Models: Economic mathematical models help students solve problems, analyze data, and make decisions.

Distribution of educational video lessons: On YouTube and other online platforms, teachers distribute lessons using their skills and instruction.

Mobile Apps: Mobile apps are also useful for keeping students interested and improving their knowledge. These apps assume student participation in classes and close customized closed-ended questions.

Social media: It is important to use social media in teaching information technology to students. Through this, students can learn, share information, master their goals and exchange ideas with each other.

These modern methods provide students with practice-based, simple, understandable and motivating teaching methods. These methods help students learn information easily and put their theoretical skills into practice.

In addition, there are various pedagogical technologies in the teaching of information technologies. The use of various educational innovations in the educational process has become an integral part of education and training. In practice, in order to fulfill the requirements of the state educational standard, a modern teacher must acquire modern educational technologies.

Society today requires a person to be able to quickly adapt to new conditions, to show flexibility and creativity, to find optimal solutions to complex problems, to establish effective communication with different people. Therefore, a modern graduate should have skills, knowledge and skills that will allow him to feel confident in his independent life. The current stage of the innovative development of the educational system is the introduction and effective application of the state educational standard for basic general education.

With the determination of new educational results, the question of innovative organization of educational activities arises. The ability to choose and use modern educational technologies and evaluation technologies that match the set goals largely determines the effectiveness of the teacher's educational activities [5].

Let's look at different points of view about the concept of "educational technology". "Pedagogical technology is a systematic method of acquiring knowledge, taking into account the entire process of technical and human resources in their interaction aimed at optimizing



educational forms" [9]. Pedagogical technology is a model of joint pedagogical activity that is thought out in every detail, taking into account favorable conditions for students and teachers in the organization and conduct of the educational process [4].

Dynamic assessment technology in information technology education.

Dynamic assessment technology is based on self-assessment of the student. Technology can be effectively used in the additional education segment. Thus, when using technology in classes, there is a conflict between the final state certification and recording of educational results. In our opinion, dynamic assessment can also be used to record the results of high school students' participation in project activities.

The purposeful and rational use of educational technologies by the teacher, the formation and development of a system of universal educational activities, the development of motivational, operational and cognitive resources, the development of ICT competence and preparation for the State exam, as well as the preparation of young people for life and continuous education provides preparation.

To achieve the result, new pedagogical tools are required. This cannot be done using old pedagogical methods, that is, teachers should not only change the elements of the pedagogical system, but also revise the entire system of their activities, learn to design lessons and extracurricular activities in a standard logic. need " [2].

Introducing digital technologies and modern methods into the educational process can be transformative for both teachers and students. Here's a comprehensive strategy to facilitate this integration:

Assess Current Infrastructure and Needs. Evaluate Current Technology:

Conduct an audit of existing hardware, software, and internet connectivity.

Identify gaps and areas needing upgrades.

Understand Educational Needs:

Gather input from educators, students, and parents.

Determine the specific educational goals and challenges that digital technologies can address.

Develop a Clear Vision and Objectives. Define the Vision:

Articulate a clear vision for integrating technology into the educational process.

Set Measurable Objectives:

Establish specific, measurable, achievable, relevant, and time-bound (SMART) goals.

Secure Funding and Resources. Budget Planning:

Create a detailed budget covering the costs of hardware, software, training, and maintenance.

Seek Funding Opportunities:

Explore grants, partnerships with tech companies, and government funding.

Invest in Professional Development. Teacher Training:

Provide ongoing training for teachers to effectively use new technologies.

Offer workshops, online courses, and peer mentoring programs. Technical Support:

Ensure that technical support is readily available to troubleshoot issues and assist with technology integration.

Integrate Technology into the Curriculum.

Curriculum Development:

Collaborate with educators to integrate digital tools into lesson plans.

Ensure alignment with educational standards and learning outcomes.

Interactive and Engaging Tools:

Utilize tools like interactive whiteboards, educational apps, and online collaboration platforms.



Foster a Digital Culture. Promote Digital Literacy:

Teach students digital literacy skills, including online safety, critical thinking, and responsible use of technology. Encourage Innovation:

Create an environment where experimentation with new technologies is encouraged and supported.

Implement and Evaluate. Pilot Programs:

Start with pilot programs to test new technologies and methods on a small scale.

Gather feedback and make adjustments before wider implementation.

Regular Assessment:

Continuously evaluate the impact of technology on student engagement and learning outcomes.

Use data to refine strategies and practices.

Engage the Community. Communicate with Stakeholders:

Keep parents, students, and the broader community informed about the integration process and its benefits. Build Partnerships:

Partner with local businesses and organizations to support technology initiatives and provide real-world learning opportunities.

Ensure Equity and Accessibility. Address the Digital Divide:

Provide access to devices and internet for all students, especially those from underserved communities.

Inclusive Design:

Ensure that digital tools are accessible to students with disabilities and diverse learning needs.

Stay Updated with Trends. Continuous Learning:

Stay informed about emerging educational technologies and pedagogical trends.

Adapt and Innovate:

Be open to adopting new tools and methods as they evolve to ensure the educational process remains current and effective.

Conclusion. The study of information technologies helps to form universal educational activities among students. In this regard, the content of education is selected on the basis of distinguishing the competences necessary for each person. Based on this, the problems that the student should learn to solve are determined, and the educational materials are combined around these problems. Accordingly, the role of the teacher is changing, and he turns from the "interpreter" of information to the organizer of student activities; It is one of the important means of optimizing the educational process in modern conditions.

Choosing effective pedagogical technologies allows any teacher, including computer science teachers, to improve their skills, be creative, competitive, self-educate and strive for development. In this way, the problem of increasing and optimizing the educational process is solved, i.e. it is possible to achieve high-quality pedagogical results with minimal time and effort.

By following this strategy, educational institutions can effectively integrate digital technologies and modern methods into their processes, fostering a dynamic and engaging learning environment that prepares students for the future.

References:

1. Pedagogika: Buyuk zamonaviy ensiklopediya / Tuzuvchi E.S. Rapatsevich - Mn.: "Zamonaviy so'z", 2005. – 382-bet).
2. Bepalko V. P. Pedagogik texnologiyaning tarkibiy qismlari. M.: Pedagogika, 1989.



3. Bosova L.L. BINOM tomonidan nashr etilgan “Bilimlar laboratoriyasi” internet gazetasi [Elektron resurs]. 9-son. Sentyabr 2012. URL: <http://gazeta.lbz.ru/2012/9/9nomer.pdf>
4. Volkov I.P. Maktabda iste'dodlar ko'pmi? M.: Znanie, 1989.
5. Monaxov V. M. O'quv jarayonini loyihalash va qurishning texnologik asoslari. Volgograd: o'zgartirish, 1995.
6. Selevko G.K. Zamonaviy ta'lim texnologiyalari. M.: Xalq ta'limi, 1998.
7. Suxov P. Yu., Suxova M. V., Sologub I. P. O'rganishni o'rganish. L.: Lenizdat, 1990.
8. Pedagogik amaliyotda “Texnologiya” va “Logiya” (T. G. Galaktionova ma'ruzasi materiallari asosida) [Elektron resurs]. URL: http://contest.schoolnano.ru/progmaterial/technology_intro/ (kirish sanasi: 02/10/2016).
9. <https://ru.wikipedia.org/wiki/UNESCO>
10. [View of STRATEGIES FOR INTRODUCING DIGITAL TECHNOLOGIES AND MODERN METHODS INTO THE EDUCATIONAL PROCESS IN UZBEKISTAN. \(farspublishers.org\)](https://farspublishers.org)
11. <https://farspublishers.org/index.php/ijessh/article/view/1713>