

TECHNICAL MEANS OF TEACHING IN MODERN EDUCATION**Mahmudova Nargizaxon Asiljon qizi**

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ANNOTATION. This article explores the role and effectiveness of technical means of teaching in modern education. It focuses on how digital tools, multimedia resources, and educational technologies improve teaching quality and student engagement. The research applies an analytical and comparative approach to examine different types of technical tools used in classrooms. The findings show that the integration of technology enhances interactive learning, supports individualized instruction, and increases motivation among learners. The study also discusses challenges such as lack of access and teacher training. Overall, the article highlights the importance of technical means in shaping a more effective and innovative educational environment.

ANNOTATSIYA. Ushbu maqolada zamonaviy ta'limda texnik vositalarning o'рни va samaradorligi tahlil qilinadi. Unda raqamli vositalar, multimedia resurslar va ta'lim texnologiyalarining o'qitish sifatini oshirishdagi roli o'rganiladi. Tadqiqotda turli texnik vositalarni taqqoslash va tahlil qilish metodlari qo'llanilgan. Natijalar shuni ko'rsatadiki, texnologiyalardan foydalanish o'quvchilarning qiziqishini oshiradi, individual yondashuvni ta'minlaydi va interaktiv ta'limni rivojlantiradi. Shuningdek, maqolada texnologiyalardan foydalanishdagi muammolar ham ko'rib chiqiladi. Umuman olganda, texnik vositalar samarali va innovatsion ta'lim muhitini shakllantirishda muhim ahamiyatga ega.

KEY WORDS: technical means, educational technology, multimedia learning, digital tools, interactive teaching, e-learning, smart classroom, pedagogy, innovation, ICT in education

INTRODUCTION. In the 21st century, education has undergone significant transformation due to rapid technological development. Traditional teaching methods are no longer sufficient to meet the needs of modern learners, who are more exposed to digital environments. As a result, technical means of teaching have become an essential component of the educational process.

Technical means of teaching refer to various tools and technologies used to support and enhance instruction. These include computers, projectors, interactive whiteboards, audio-visual materials, and online platforms. Their primary goal is to improve the quality of education by making learning more engaging, accessible, and effective.

The importance of this topic lies in the increasing demand for innovative teaching approaches. Students today require interactive and personalized learning experiences. Therefore, integrating technical tools into teaching is not just an option but a necessity. This article aims to analyze the role of technical means in education and evaluate their effectiveness in improving teaching and learning outcomes.

METHODOLOGY. This research is based on a qualitative and comparative methodology. Different types of technical means of teaching were analyzed through academic literature, case studies, and educational reports. The study also includes observational analysis of classroom practices where technology is actively used.

The research applies the following methods:

Comparative analysis: to compare traditional teaching methods with technology-based instruction

Descriptive method: to explain various types of technical tools used in education

Analytical approach: to evaluate the advantages and limitations of these tools

In addition, the study examines both offline and online teaching environments to provide a comprehensive understanding of how technical means function in different contexts. Special attention is given to the role of multimedia, as it combines text, audio, and visuals to create a richer learning experience.

RESULTS AND DISCUSSION. The findings of this research demonstrate that technical means of teaching significantly improve the educational process. One of the main advantages is increased student engagement. Visual and interactive materials capture students' attention more effectively than traditional lectures.

For example, the use of presentations, videos, and simulations helps students understand complex concepts more easily. This is especially important in subjects such as science and language learning, where visualization plays a key role.

Another important result is the support for individualized learning. Digital platforms allow teachers to adapt materials according to students' needs and levels. Learners can study at their own pace, which increases comprehension and confidence.

Furthermore, technical tools promote active learning. Instead of being passive listeners, students become participants in the learning process. They can interact with content, complete online tasks, and collaborate with peers through digital platforms.

However, the study also identifies several challenges. One major issue is the lack of access to technology in some educational institutions. Not all schools have sufficient equipment or stable internet connections. This creates inequality in learning opportunities.

Another problem is the lack of teacher training. Many educators are not fully prepared to use modern technologies effectively. Without proper training, technical tools may not be used to their full potential.

Despite these challenges, the overall impact of technical means of teaching is positive. They contribute to a more dynamic and flexible educational environment. The integration of technology encourages creativity, critical thinking, and independent learning skills among students.

The discussion also highlights that technology should not replace teachers but support them. The teacher's role remains central in guiding, motivating, and facilitating the learning process. Technical tools are most effective when combined with strong pedagogical strategies.

CONCLUSION. In conclusion, technical means of teaching play a crucial role in modern education. They enhance the quality of instruction, increase student engagement, and support personalized learning. The integration of digital tools has transformed traditional classrooms into interactive learning environments.

While there are challenges such as limited resources and insufficient training, these issues can be addressed through proper planning and investment. Educational institutions should focus on providing access to technology and training teachers to use it effectively.

Ultimately, the future of education depends on the successful combination of technology and pedagogy. Technical means of teaching are not just tools but powerful resources that can shape a more effective and innovative educational system.

Adabiyotlar, References, Литературы:

1. Bates, T. Teaching in a Digital Age. Vancouver, 2019.
2. Mayer, R. Multimedia Learning. Cambridge University Press, 2009.
3. Clark, R., Mayer, R. E-learning and the Science of Instruction. Wiley, 2016.
4. Selwyn, N. Education and Technology. Bloomsbury, 2011.
5. Siemens, G. Connectivism: A Learning Theory. 2005.
6. Jonassen, D. Computers as Mindtools for Schools. Prentice Hall, 2000.
7. Prensky, M. Digital Natives, Digital Immigrants. 2001.
8. UNESCO. ICT in Education Report. Paris, 2018.
9. OECD. Education at a Glance. 2020.
10. Richards, J., Rodgers, T. Approaches and Methods in Language Teaching. Cambridge, 2014.
11. Harmer, J. How to Teach English. Longman, 2007.
12. Sharma, P., Barrett, B. Blended Learning. Macmillan, 2007.
13. Dudeney, G., Hockly, N. How to Teach English with Technology. Pearson, 2007.
14. Brown, H. D. Principles of Language Learning and Teaching. Pearson, 2007.
15. Khan, B. E-learning Framework. Educational Technology, 2005.