

## The Role of Didactic Tools in Enhancing the Efficiency of Educational Quality

**Hasanova Gulnoz Kasimovna**

Associate Professor, Department of Preschool and Primary Education, Bukhara State Pedagogical Institute  
gulnoz7676@gmail.com

**Abstract:** This article discusses the importance and role of didactic tools in improving the quality and effectiveness of education, particularly during a time of rapid innovation in our country. It explores how didactic resources contribute to the development of knowledge, skills, and competencies among young individuals—heirs of our future. The article also emphasizes the necessity of refining assessment systems in line with international standards and best practices, as well as learning from global experience in education.

**Keywords:** modern pedagogy, information technologies, educational and didactic tools, quality of education, multimedia, media tools, electronic resources.



This is an open-access article under the [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license

### Introduction

In today's fast-evolving world marked by rapid scientific and technological advancement, the integration of information technologies and effective utilization of didactic tools in education have become pivotal. The goal is to ensure high-quality learning processes by leveraging modern pedagogical methods and resources. Presently, one of the most pressing challenges in pedagogy is to enhance the quality of education through the efficient use of modern instructional materials, including multimedia and digital resources.

### Main body

The current level of educational development demands specific approaches to organizing students' learning activities. These include interactive communication between teachers and students, encouragement of students' cognitive and motivational engagement, fostering personal qualities and abilities, and creating conditions conducive to student autonomy—all of which contribute to improving educational quality.

According to researchers such as N.A. Muslimov, R. Safarova, and Sh. Qurbanov, improving the quality of education requires accounting for various levels of thinking and knowledge assimilation.

Scholars such as Sh. Qurbanov, A. Musurmanova, M.M. Vahobov, N.K. Akhmedova, R.B. Yarmatov, Sh.N. Taylakova, O.R. Jamoldinova, B.Kh. Khodjaev, and B.Sh. Shermuhamedov have explored issues related to teaching quality and its management. Pedagogical aspects have also been studied by I.G. Antonova, O.Yu. Aparina, and V.N. Afanaseva.

Educational quality can be defined as the degree of satisfaction of various stakeholders in the educational process, or the level to which educational goals and objectives are achieved. The category of quality reflects a specific stage of a person's understanding of objective reality. At the initial stage, the object appears to the subject through some of its features or characteristics. In direct sensory perception, quality manifests as a combination of many attributes.

Achieving the desired level of educational quality is possible through a defined socio-pedagogical system, which consists of state educational standards, normative models of future specialists, criteria and indicators for evaluating education quality, and monitoring mechanisms.

Uzbekistan's ongoing educational reforms emphasize participation in international assessment programs such as PISA, PIRLS, TIMSS, and TALIS, with the aim of learning from countries that consistently rank high in global education indexes. These programs allow analysis of students' knowledge levels, the effectiveness of teaching methods, and the relevance of curricula to modern standards. Findings from such assessments play a significant role in shaping educational reforms.

In primary education, for instance, there is a growing need to optimize teaching methods in mathematics and enrich pedagogical approaches with innovative solutions. Guided by President Sh.M. Mirziyoyev's principles of "improving educational quality" and "introducing innovative technologies" [1], Uzbekistan is prioritizing the professional development of primary school teachers, wider adoption of modern pedagogical sciences, and the development of a competency-based education system. Results from international programs are also contributing to aligning the national education process with global standards and enhancing students' mathematical competence.

The use of electronic textbooks and manuals in distance learning requires high functionality. Each subject-specific electronic manual must include at least three main components: educational content, exercises, and assessment materials.

Modern didactic tools derived from recent scientific and technological advancements—such as audio, video, telecommunication, and digital technologies—are gaining importance in education. For future educators, familiarization with the didactic potential of these tools and learning to apply them in practice is critical for their future professional effectiveness.

Didactic tools may include familiar and widely used items, even those not originally designed for educational purposes. For instance, television is primarily a means of entertainment and mass communication, but it is increasingly used in education, particularly in distance learning, where it serves as an effective didactic tool. This has undoubtedly contributed to improvements in educational quality.

Effective use of didactic tools in the learning process enhances educational outcomes and classroom preparedness. When integrating a variety of didactic tools—especially audiovisual aids—into teaching, it is advisable to follow a structured approach:

- Prepare didactic tools in alignment with the lesson;
- Prepare students to perceive and understand the information presented;
- Provide a brief explanation by the teacher to frame the content;
- Reinforce the information from didactic tools in students' memory;
- Assign homework to consolidate the presented material.

Before using technical tools such as audio and video devices in class, they should be tested multiple times and in consultation with specialists to ensure proper functioning. When introducing didactic materials, teachers should explain the relevance of the content within the broader curriculum, ensuring students understand the purpose of the tools being used.

When guiding students in working with didactic tools, teachers must:

- Ensure the information is seamlessly integrated with the lesson objectives;
- Prevent misunderstanding or misinterpretation of the material;
- Use tools to deepen students' knowledge and enhance their skills and competencies;
- Present educational content effectively through didactic means.

Modern virtual exhibitions, which are software-based instructional resources, typically involve collaboration between a content expert and a software developer. A common challenge is the mismatch in expertise—while the content author may lack technical knowledge, the developer may not be well-versed in the subject matter. Virtual exhibitions are generally categorized into three types:

1. **Interactive Presentations** – Though not fully functional computer laboratories due to limited interactivity, these can perform functions on command and often serve as supplementary material in electronic textbooks.
2. **Basic Models** – The most common type, often used to simulate experiments. A collection of such models can form a virtual laboratory. Their popularity stems from ease of development, with each simple process modeled using a few mathematical expressions.
3. **Universal Laboratories** – These enable experimentation with various phenomena and require experienced development teams. Such labs are often created in conjunction with scientific or industrial modeling systems.

Pedagogical technology ensures that the educational process is built and implemented to guarantee the achievement of clearly defined goals. Teaching technology includes:

- Precise formulation of educational objectives with measurable criteria;
- Design of a process aimed at achieving these objectives;
- A focus on outcomes, ensuring successful learning achievements;
- Timely assessment and feedback for adjustments during the learning process;
- Final evaluation of learning outcomes.

In improving education quality, it is essential to use didactic principles such as consciousness and activity, visibility, regularity, sequence, and reinforcement, which guide students toward successful learning.

## Conclusion

The educational reforms underway in Uzbekistan serve as a foundation for improving the nation's future. Therefore, increasing the moral and ethical content of education, instilling in students a commitment to national traditions, high moral standards, and independence, and building critical thinking and resistance to harmful ideologies are of great importance.

It is necessary to strengthen the infrastructure of educational institutions through the construction, renovation, and modernization of buildings, laboratories, sports facilities, and other resources. Providing institutions with modern ICT tools and expanding access for students, teachers, and young researchers to global educational resources, electronic catalogs, and databases is essential.

As President Sh.M. Mirziyoyev aptly stated: "Where there is education and knowledge, there is quality. Without education, without quality, there is no progress." This highlights the central role of education in national development and the continued need to improve its quality through innovative and comprehensive means.

#### FOYDALANILGAN ADABIYOTLAR:

1. Хасанова, Г. (2021). Олий таълим муассасалари педагогларининг Креатив кобилиятларини ривожлантиришнинг мазмуни. *Academic research in educational sciences*, 2(1), 778-782.
2. Хасанова, Г. К. (2020). Classification of Educational Activities and Assessment Classifications: Improvement of Pedagogical Problems. *International Journal of Advanced Science and Technology*, 29(11s), 1958-1961.
3. Хасанова, Г. К. (2019). Педагогические особенности формирования творческой активности учащихся в начальном образовании. *Научный журнал*, (6 (40)), 86-87.
4. Хасанова, Г. К. (2019). Педагогические особенности формирования творческой активности учащихся в начальном образовании. *Научный журнал*, (6 (40)), 86-87.
5. Qosimovna, H. G. (2021). The concept of the development of the giftedness of Preschool Children of Creative Self-Realization. *Middle European Scientific Bulletin*, 10(1).
6. Хасанова, Г. К. (2021). Педагогические основы развития социальной деятельности студентов вузов. *Вестник науки и образования*, (17-3 (120)), 68-71.
7. Хасанова, Г. Х., & Рахматова, Г. Ш. (2019). Некоторые вопросы обеспечения взаимосвязи методов и средств обучения в развитии образовательного процесса. *Academy*, (10 (49)), 41-43.
8. Хасанова, Г. К. (2019). Цель использования электронных образовательных ресурсов в системе обучения и образования. *Научный журнал*, (6 (40)), 84-85.
9. Safarova, R., & Khasanova, G. (2024). RETRACTED: Organizing an environment for cooperation of students in the educational process (for ensuring the development of the new Uzbekistan society). In *E3S Web of Conferences* (Vol. 538, p. 05044). EDP Sciences.
10. Хасанова, Г. К. (2021). Дилфуза Шавкатовна Мирзаева ПОДВИЖНАЯ ТВОРЧЕСКАЯ ИГРА КАК ОДИН ИЗ МЕТОДОВ АРТПЕДАГОГИКИ. *Scientific progress*, 7.
11. Умуров, З. Л., & Хасанова, Г. К. (2022). ПЕДАГОГИЧЕСКИЕ ОСНОВЫ РАЗВИТИЯ СОЦИАЛЬНОЙ АКТИВНОСТИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ. *Вестник науки и образования*, (2-2 (122)), 43-45.
12. Хасанова, Г. К., & Махмудова, Х. У. К. (2020). Критерии, аспекты и уровни применения педагогических технологий. *Academy*, (5 (56)), 29-31.
13. Qosimovna, H. G. (2023). Boshlang'ich Sinflarda Raqamli O'yinlarga Asoslangan Ta'limni Tashkil Etishning Ahamiyatli Tomonlari. *Miasto Przyszłości*, 42, 334-336.
14. Хасанова, Г. К., & Мирзаева, Д. Ш. (2021). ПОДВИЖНАЯ ТВОРЧЕСКАЯ ИГРА КАК ОДИН ИЗ МЕТОДОВ АРТ-ПЕДАГОГИКИ. *Scientific progress*, 2(7), 1067-1071.
15. Хасанова, Г. К. (2019). Проблемы И Перспективы Становления Информационной Грамотности Детей Дошкольного Возраста В Узбекистане. *ББК 71.0 И74 Редакционная коллегия Ответственный редактор*, 50.
16. Хасанова, Г. К., & Мирзаева, Д. Ш. (2019). Условия успешного воспитания и обучения детей. In *Наука и инновации-современные концепции* (pp. 86-90).

17. Хасанова, Г. К. (2017). Интеграция предметов в современной школе как педагогическое явление. *Педагогическое образование и наука*, (2), 127-129.
18. Hasanova, G. Q. (2024). MAKTABGACHA YOSHIDAGI BOLALAR O ‘YININING PSIXOLOGIK XUSUSIYATLARI. *Inter education & global study*, (7), 220-227.
19. Kosimovna, X. G. (2023). PEDAGOGICAL STRATEGY AND TALENT DEVELOPMENT TACTICS EDUCATIONAL SPACE FOR SCHOOL CHILDREN. *Frontline Social Sciences and History Journal*, 3(11), 20-25.
20. Hasanova, G. (2023). BO’LAJAK O ‘QITUVCHILARNING KASBIY KOMPETENTLIGINI SHAKLLANTIRISHDA INTERAKTIV O’QITISH TIZIMINING O’RNI. *Science and innovation*, 2(Special Issue 9), 441-445.
21. Хаитова, Н. И., Хасанова, Г. К., & Мухаммедова, М. Ш. (2016). ТВОРЧЕСКАЯ ДЕЯТЕЛЬНОСТЬ УЧАЩИХСЯ КАК СРЕДСТВО РАЗВИТИЯ КРЕАТИВНОГО МЫШЛЕНИЯ. *Научная дискуссия: вопросы педагогики и психологии*, (3-1), 148-153.
22. Умуров, З. Л., & Хасанова, Г. К. ВЕСТНИК НАУКИ И ОБРАЗОВАНИЯ. *ВЕСТНИК НАУКИ И ОБРАЗОВАНИЯ Учредители: Олимп*, 43-45.