

# THE ROLE OF PROGRESS AND OPPORTUNITIES OF MODERN TECHNOLOGIES IN THE EDUCATIONAL PROCESS IN PEDAGOGICAL APPROACH

Niyozova Shaxnoza Farxod qizi

Pedagogika va ijtimoiy-gumanitar fanlar fakulteti

Boshlang'ich ta'lim yo'nalishi 4-bosqich 322-guruh talabasi.

Ilmiy Rahbar: Sh. Donayeva

---

## **Abstract:**

This article covers the role of modern pedagogical technologies in the educational process, their significance in the formation of students' knowledge and changes in the activities of teachers. It also analyzes issues of improving the effectiveness of education through interactive methods, digital platforms, STEAM and other technologies. The article reveals important aspects of application of modern technologies in practice on pedagogical approach.

**Keywords:** Education, pedagogical technologies, modern approach, interactive methods, digital learning, STEAM, educational effectiveness, innovation, student engagement.

## **Introduction**

In modern times, education has become an integral part of human life. Quality education system is recognized as the foundation of every country's development. In today's information age, pedagogical approaches have been renewed, and traditional teaching methods are being replaced by interactive methods based on modern technologies. Such technologies encourage students to be active, develop their independent thinking, and unlock their creative potential. In this regard, the role of modern pedagogical technologies in education is growing day by day. Modern pedagogical technologies are a set of methodological tools and strategies aimed at the formation of students' independent thinking, creativity, analysis, teamwork and modern competencies. In such approaches, the learner becomes not just a learner, but an active participant, a problem solver. The teacher, on the other hand, is not a source of knowledge, but a guide, an assistant.

Modern teacher is a person working in educational institutions possessing pedagogical and psychological knowledge, as well as special knowledge in various areas of science. A teacher is decent, fair and "an engineer of a child's heart." Psychologists have noted that the moral and negative characteristics of the child sometimes pass through the coach.

Pedagogy is a science about education. "Pedagogy" is a Greek word that means "-- child-leading." As a result of changing people's attitude to enlightenment and spiritual development,

pedagogy (the art of guiding the child) will take its place among the people. Thus, pedagogy, as a discipline for educating a person, occupies a special place among the system of world sciences.

Fundamental updates taking place in the field of education in our country require the development of the methodological support of the educational process in each educational institution. Modern information technologies in the coming years will become the main source of pedagogical innovations. The basis of modern education system is a high-quality, high-tech environment. Its creation and development is technically complex, but such an environment serves to improve the education system, the educational process, the introduction of information and communication technologies.

Pedagogical innovation is used to motivate students to learn effectively and to improve the learning process. This is reflected in the formation of the concept of renewal and creative thinking and creative approaches in modern pedagogy. The term "innovation" as a new economic category was introduced into science by Austrian (later American) scientist Josef Schumpeter in the first decade of the 20th century. Recognized as one of the modern educational technologies, the foundations of "innovative education" were first established as an independent concept in 1979. Innovation – Which means innovation, invention. V. Slastyonin believes that innovative activity consists of certain structural elements. They are: innovative approach, new thinking, creative activity, communication culture, technological approach to innovation. Innovation as an economic category reflects the most common characteristics, signs, connections, and attitudes of creating and implementing innovation. Innovative pedagogical approaches allow students to more effectively acquire knowledge.

When organizing the pedagogical process, it is necessary to take into account the individual characteristics of each student. There is a need to use modern innovative technologies to establish a pedagogical dialogue. One of these technologies is interactive lesson methods. From Latin, "inter" means reciprocal, "act" means communication. Interactive methods include a mental attack, a roundtable, a three-step interview, a tabletop pen, an academic discussion, a fish skelt, a bee gala, and more. The following types of interactive techniques include: freewriting, clustering, mental attack, B-B-B drawing, venn diagram, and so on.

In education, the STEAM approach sets the task of moving from the classroom system to the project-based system in secondary schools, transferring fundamental knowledge to functional knowledge, searching for new ways of solving problems at the intersection of integration through the process of active application of it in practice, and, if necessary, directing to discovery. The STEAM educational technology is aimed at developing children's competencies in scientific and technical areas. Later, this direction was expanded and additional letters were added to the term. In particular, adding "R"-robotics-robotics to it will be called STREM, or adding "A"-art-art to it will be called STEAM. STEAM is an educational approach that combines S-science, T-technology, E-engineering, A-art, M-mathematics. In the STEAM program, we need research, a good career, interest in science, practical research, creativity, good salary, communication, etc.

Digital Learning Resource (RTR) -- A computer-intensive product in teaching. The use of RTR creates fundamentally new opportunities for increasing the effectiveness of the educational process. RTR is a quick tool for visualization in reading, an operational tool for the development of students' practical skills, organizing and conducting surveys and monitoring of schoolchildren, as well as tracking and grading homework, working with diagrams, tables, graphs, characters, editing texts and correcting errors in students' creative work. The purpose of digital educational resources is to strengthen the intellectual capabilities of students in the information society as well as improve the quality of education at all stages of the education system.

### **Conclusion:**

In today's era of globalization and digital transformation, the combination of the education system with modern technologies creates unique opportunities for improving the quality of education and updating pedagogical approaches. Interactive methods, digital platforms, STEAM programs, and innovative approaches not only simplify students' learning process, but also serve to develop their creativity, critical thinking, and problem-solving skills. A modern teacher should be able to adapt to these changes, be constantly researching, and be able to use technologies effectively. In this regard, the rational use of digital learning opportunities and innovative pedagogical approaches are becoming one of the main criteria for today's education. Any progressive education system must adopt as its main goal an innovation-driven, technology-based approach that is based on humanity and spiritual values.

### **References**

1. J. Hasanboyev; Kh. A. Turakulov; I. Sh. Alqarov; N.O'. Usmanov. (Pedagogy) Tashkent-2016.
2. Sh. K. Shayakubov; R. Kh. Ayupov. (Interactive Teaching Methods) Tashkent-2012
3. Kh. M. Abdusattorova. Ministry of Family and Secondary Education of the Republic of Uzbekistan. (Innovation Strategy) Tashkent-2012.
4. D. Roziyeva; O`. Tolipov. (Pedagogical Technologies and Pedagogical Skills) Tashkent-2019.
5. K. B. Ergasheva. (Creative Pedagogy) Tashkent-2023.