

USING TECHNOLOGIES IN TEACHING CREATIVITY TO PRIMARY CLASS STUDENTS

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Abstract:

Formation of creativity in elementary school students is important for increasing their success in the educational process and developing innovative thinking skills in the future.

By introducing modern technologies into the educational process, the effectiveness of teaching creative skills increases significantly. This topic aims to enrich the educational process with the help of technological tools (for example, interactive programs, virtual laboratories and creative applications) that arouse children’s interest and stimulate creative thinking. This approach not only facilitates the learning process of students, but also develops their self-confidence and innovative approach skills.

Keywords: Primary education, development of creativity, modern technologies, interactive education, virtual laboratories, creative programs, digital educational resources, innovative thinking, educational process, children’s creativity.

Introduction

In the modern world, creativity is not only essential for the fields of art and culture but also one of the key factors for achieving success in any area. In particular, developing creative thinking in primary school plays a crucial role in children's intellectual and personal growth. Modern technologies serve as an important tool in effectively implementing this process. With the help of technology, students not only enhance their knowledge but also develop independent thinking and innovative approach skills.

Interactive learning tools, creative software, and virtual environments provide children with new opportunities to express their thoughts. Especially for primary school students, game-based learning, animations, and multimedia resources can make the learning process more engaging and effective. Therefore, the topic of developing creative activities for primary school students with the help of technology is one of the most relevant issues today.

This article discusses the importance of modern technologies in teaching creativity, as well as effective methods and tools aimed at developing students' abilities.



DISCUSSION AND RESULTS

The educational process, as a collaborative activity between teachers and students, lays the foundation for an individual's intellectual, moral, and educational development. In this process, the teacher imparts their knowledge and experience to students, helping them develop skills to apply the acquired information in practice. Meanwhile, students engage in learning by receiving, processing, and applying information through various methods. Cooperation between teachers and students during lessons, as well as independent work and extracurricular activities, contributes to achieving educational and developmental goals.

The primary goal of education is shaped according to the needs of society. Therefore, educational objectives must be consistent and well-balanced. According to scholarly sources, the aims of education include developing knowledge, skills, and competencies; fostering creative and logical thinking; enhancing communicative literacy; instilling national values and Eastern moral principles; and enriching individuals spiritually. [1]

In the educational process, objectives include developing students' independent thinking abilities, improving oral and written literacy, and enhancing communication skills. Educational goals also focus on fostering moral and ethical values. In language teaching, students are introduced to the cultural heritage of the nation.

One of the great sages once said, **"If you care about the future, educate your children well."**

The educational reforms being implemented in our country are not short-term results but long-term and sustainable developments. At the core of these reforms lies the wise policy of the President, aimed at making future generations strong, knowledgeable, and happy.

The use of advanced pedagogical and information technologies in the educational process enhances the effectiveness of lessons. Modern technologies not only teach students to independently search for and acquire knowledge but also develop their ability to analyze and draw conclusions. In this process, the teacher plays the role of a facilitator and guide, creating favorable conditions for students' development, formation, and learning.

Currently, interactive methods such as **"Brainstorming," "Mind Mapping," "Networks," "Cinquain," "K-W-L (Know, Want to Know, Learned)," "6x6x6," "Debate," "Role-playing," "P-M-I (Plus, Minus, Interesting)," "Small Group Work," "Snowball," and "Zigzag"** are widely used in education. These methods contribute to the development of students' creativity and independent thinking skills. [2]

Using game-based tasks during lessons for review or reinforcement yields effective results. The type of these tasks is selected based on the lesson topic, the class's knowledge level, creative abilities, and degree of independent thinking.

The primary goal of education is to develop students' ability to think independently, understand their own and others' opinions, and express themselves fluently in both oral and written forms. This, in turn, helps nurture independent thinkers with strong communication skills, literacy, and creativity. Studying the nation's cultural values and rich historical heritage also contributes to their formation as well-rounded individuals.

Developing creative thinking skills in primary school students is essential for their personal and intellectual growth. Discussions show that modern technologies enable an effective organization of this process. For example, through interactive games and programs, students not only reinforce their knowledge but also learn to generate new ideas while completing creative tasks.



Virtual laboratories further enhance their scientific curiosity, helping them apply knowledge to real-life situations through practical activities.

The subject of "**Technology**" is one of the essential disciplines that shape students' practical labor skills and play a significant role in their lives. Like many other subjects, it holds a special place in ensuring the well-rounded development of the younger generation and in properly organizing the educational process. Regardless of the profession they choose or the field they engage in, students will apply the knowledge and skills acquired from the technology subject in their daily lives.

Today, the **Technology** subject serves as a key resource in helping young people choose a profession, develop their creative abilities, and grow into well-rounded individuals. These lessons enhance students' creativity and innovation skills, foster their thinking abilities, and shape their capacity to apply acquired knowledge and skills in practice. Technology classes are engaging and enjoyable for students, as they can see the results of their efforts and take pride in their work. This process also contributes to the development of positive qualities in students.[3] Additionally, technology lessons expand students' knowledge, increase their respect for labor, and enhance their interest in choosing a profession. Achieving these outcomes requires the teacher to effectively organize lessons and thoroughly prepare for each class.

As Shavkat Mirziyoyev emphasized in one of his speeches: "**Our country has fallen behind in high-tech industries. To modernize all sectors and keep pace with the world, we have established the Ministry of Innovative Development. We consider it our duty to create all necessary conditions for the youth, who are our future. In return, we expect great achievements from them.**" These words carry profound meaning and once again highlight the necessity of focusing on the **Technology** subject. [4]

In an era of rapidly advancing technology and innovation, it is crucial to strengthen the focus on the **Technology** subject. Every form of creativity begins in childhood, and its further development depends on the proper organization of the education system.

Today, the **Technology** subject serves as a key resource in helping young people choose a profession, develop as well-rounded individuals, and enhance their creative abilities. This can be seen in the impact of the subject on students' psychology. Through technology lessons and organized excursions, students gain knowledge in fields such as woodworking, design, tailoring, and culinary arts, while also becoming familiar with various professions. This process provides them with the opportunity to master one of these trades in the future and become skilled professionals in their chosen field. Additionally, it helps them learn to approach any profession with creativity. [5]

Creativity is the human ability to create new material and spiritual values. In this process, a person's thinking, memory, imagination, attention, and will actively participate, revealing their knowledge, experience, and talent. **Creative activity** manifests through curiosity, inspiration, and aspiration, leading individuals to seek and discover new, previously unconsidered solutions. To develop creativity, it is effective to use methods that encourage scientific inquiry, such as discussions, dialogues, imagination exercises, problem-solving tasks, and small-scale discoveries.

The choice of technologies to achieve the set goal between the teacher and students is at the teacher's discretion. The primary task of both parties is to reach the desired outcome. In this



process, the selection of appropriate technologies depends on students' knowledge levels, group characteristics, and classroom conditions. Achieving success requires the use of various materials, diagrams, posters, and modern pedagogical technologies. Additionally, it is crucial to plan lessons in advance, considering the specifics of the subject as well as students' needs and capabilities.

To enhance lesson effectiveness, the teacher should develop a **technological map** of the lesson. A **lesson's technological map** plays a crucial role in organizing the process efficiently and ensuring successful outcomes. This approach allows for the creation of a **creative and productive learning environment** through collaboration between the teacher and students.

In today's educational process, completing creativity-based tasks, identifying and analyzing problems, and making independent decisions help develop students' creative skills. Additionally, the process of making **visual learning aids** during lessons encourages students to engage in creative activities.

For example, in a **primary school technology lesson**, if the topic "**Mushroom**" is selected, the teacher first provides a detailed explanation of the subject. Then, through discussions and Q&A sessions, students expand their knowledge and understanding of the topic. After planning several hands-on activities related to the theme, students begin the crafting process. It is through such **practical exercises** that their **creative abilities** flourish.

The **technology subject** primarily consists of **practical activities**, where theoretical knowledge is reinforced through real-life experiences. During these hands-on sessions, students engage in **creative thinking** and learn to apply **new ideas and methods**.

This process helps students develop **self-confidence, respect for others' opinions, and teamwork skills**. Practical lessons effectively fulfill **educational, moral, developmental, and career-oriented objectives**. Additionally, students can be guided to work **individually, in small groups, or collaboratively as a team**, depending on the lesson's goals and structure.[6]

In technology lessons, students should be taught the **fundamentals of artistic design** during the process of making items. The following elements should be considered in this process:

- Harmony of color and shape;
- Consistency of material shape and unity;
- Functionality of the shape;
- Compatibility of different shapes in composition.

The process of creating an item consists of three stages:[7]

Planning the item: At this stage, students develop mathematical literacy and resource management skills.

Crafting the item: Practical tasks are carried out according to specific rules and guidelines. In this phase, students apply knowledge gained from other subjects, increasing their interest in the process.

Assembly and finishing: At this stage, parts of the item are assembled and decorated in accordance with technical and aesthetic requirements.



It is crucial to provide students with the opportunity to design and create their own items. Initially, they can be given models to replicate, which helps them develop fundamental skills. At the same time, this process encourages them to generate new ideas and create items based on their own designs and imagination. This fosters their **creative thinking abilities**. [8]

Once their creative skills have developed, students can be assigned independent design tasks. This process not only helps them implement existing ideas but also motivates them to create **new and original designs**.

Creative applications and graphic design programs are effective tools for developing children's skills in **art and design**. These tools allow students to transform their imagination into tangible forms. Additionally, integrating modern technologies into the learning process turns students into **active learners**, significantly increasing their engagement in lessons. [9]

However, there are certain challenges in successfully implementing technology in education. These include **a lack of technological resources**, the **need to enhance teachers' technological skills**, and the **adaptation of curricula to new technologies**. Moreover, it is essential to maintain a balance so that students' excessive interest in technology does not negatively impact their **real-world creative activities**.

Based on the discussion, the following conclusions were identified: [10]

1. **Enhancing Creativity** – The use of technology significantly improves students' **creative thinking**, their ability to **generate new ideas**, and bring them to life.
2. **Effectiveness of Interactive Tools** – Multimedia resources, **game-based learning**, and virtual laboratories make the learning process **more engaging and effective**.
3. **Potential of Technological Tools** – Creative software and graphic applications allow children to **experiment with their creativity in practice**.
4. **Need for Methodological Support** – To successfully implement technology, it is essential to **train teachers** and develop **adapted educational resources**.
5. **Maintaining Balance** – While increasing the role of technology in **creative processes**, it is also important to focus on **real-world creative activities**.

Thus, **modern technologies serve as an effective tool for fostering creativity among primary school students**. However, to make this process even more efficient, a **comprehensive approach** and **methodological support** are essential.

Conclusion

Developing **creative thinking** in primary school students is one of the key objectives of the educational process. Modern technologies provide vast opportunities to make this process more **effective** and **engaging**. Through **interactive games, virtual laboratories, and creative applications**, students not only acquire **new knowledge** but also develop the ability to **apply their imagination in real life**.

Discussions indicate that integrating technology into **creativity development** increases students' **interest in lessons**, encourages **active participation**, and enables them to **independently absorb new knowledge**. Moreover, technology makes the learning process more **practical and relevant**, laying a strong foundation for students' **future success**.

However, it is crucial to **maintain balance** when using technology, provide teachers with **professional development programs**, and adapt curricula to **modern tools**. Successful



integration of technology into **creative activities** requires **collaboration** among teachers, students, and educational institutions.

Thus, incorporating **technology into primary education** is a significant step toward **enhancing students' creativity**, organizing an **effective learning process**, and preparing future generations for an **innovative society**.

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