

# THE APPLICATION OF INNOVATIVE TECHNOLOGIES AND PEDAGOGICAL TECHNOLOGIES IN MATHEMATICS LESSONS IN ELEMENTARY SCHOOLS

Muattar Kenjaboyeva  
Chirchik State Pedagogical University

## Abstract

The primary goal of primary education is to awaken a child's interest in learning, literacy, working with various information, knowledge of basic mathematical operations and their application in everyday life, logical and creative thinking, self-management, self-management in the team, mastering the rules of written and oral communication culture, and the formation of skills such as organizing educational activities.

**Keywords:** primary education, educational effectiveness, quality of education, mathematics, pedagogy, pedagogical technology.

## BOSHLANG`ICH SINFLARNING MATEMATIKA DARSLARIDA INNOVATSION TEXNOLOGIYALAR, PEDAGOGIK TEXNOLOGIYALARINI QO`LLASH

### Introduction

Today, the demand and attention to the use of innovative technologies, pedagogical and information technologies in the educational process is increasing day by day. Because in traditional education, students are taught to acquire only ready-made knowledge, while in education using modern technologies, students are taught to find information on the topic themselves, learn independently, analyze it, and use it correctly in their daily activities. Through this, the teacher creates conditions for the formation of the student as an individual. The task facing primary school teachers is to develop the necessary skills in the younger generation, to raise the quality and effectiveness of primary education to a new level, and to be able to apply modern teaching methods and tools in practice. Therefore, a modern elementary school teacher should work more on themselves and enrich their knowledge.

Based on my many years of experience, I always sought and tried to apply innovations in teaching the younger generation. I used various educational technologies in class to enhance students' creative thinking. I was able to develop their creativity and thinking skills by giving them logical questions and puzzles during the lesson. I have noticed that such puzzles and logical tasks awaken children's interest in mathematics.

Therefore, if we teach children to think creatively, solve logical problems and various life problems from the 1st grade on a sequential basis, gradually, from simple to complex, our students will grow up to be the student, the great people who are demanded by the time.



Following this, I will provide you with some of the logical problems and puzzles that have achieved effective results in my work and in the educational process.

$$\begin{array}{rcc}
 \boxed{5} & + & \boxed{\phantom{0}} = \boxed{9} \\
 + & + & + \\
 \boxed{\phantom{0}} & + & \boxed{6} = \boxed{\phantom{0}} \\
 \parallel & \parallel & \parallel \\
 \boxed{6} & \boxed{\phantom{0}} & \boxed{\phantom{0}}
 \end{array}$$

If you use puzzles and logical questions like this in lessons, students will not feel very interested and will not even feel a break. You will see that their interest in the lesson is increasing day by day

In addition, interesting didactic games not only teach students to think, search, and think, but also increase their interest in science. An example of this is the following games.

"Zinama-zina" game. This game can be organized from a simple to a complex side, starting from the 1st grade. The purpose of this game is to gradually reinforce the knowledge acquired by students on the topic. Application:

Step 1: To play this game, the teacher divides the students into small groups based on colors or numbers. For each subgroup, chiefs are assigned. The leaders take the game questions and give them to the group members one by one. If the group consists of 6 students, each student must answer 5 questions.

Step 2: Because the correct answers are written next to the questions, the group leaders have the opportunity to monitor the answers of the group members. Students can score up to a total of 5 points for each correct answer. After that, the teacher regroups the students based on their scores.

Step 3: Each group is given different assignments depending on their abilities. After completing these assignments, students conduct a question-and-answer session, and each group demonstrates their assignments using visual aids. Small groups that complete the task perfectly will be rewarded and the winners will be determined.

Numbers also play a role in educating students as spiritually mature individuals. After showing the number 1 and introducing it to the students, the question is asked, "What is one on earth?," and the answers are received from the students. Their attention is drawn to skills such as the unity of the Motherland, the mother's unity, childhood, the loneliness of the bright sun, and their preservation.

When introducing the number 2, it is said that the Turkic peoples often use this number to memorize the multiplication table.

The number 2 is considered as an even number, parents, earth-sky pairs, and attention to them. The hospitality of the Uzbek people is known to many nationalities, they invite one payola of tea after another payola of tea, so that they become a pair. At weddings, bread is always served



in pairs, but it is considered impossible to put whole grains on the table. In some cases, bread is considered odd and cannot be added in pairs.

Along with mathematical knowledge, the spiritual upbringing of students should be organically organized in a sequential manner.

The bridge between theory and practice in education is the method of visualization. The organization of the educational process (lessons) using this method, along with leaving deep impressions for the student, helps to create a database, understand important connections between objects, and store them in memory.

Memorizing the dates of the adoption of the state symbols of the Republic of Uzbekistan, their study, and the formation of a sense of respect can be linked to mathematics lessons.

The upper part of our coat of arms depicts an eight-pointed star as a symbol of the unity of the Republic. This crescent and star, located in eight corners, are sacred symbols of Muslims.

It is emphasized that the image of the 12 stars on the State Flag of the Republic of Uzbekistan should be understood as a symbol of our historical traditions, our ancient solar calendar, the ancient culture of the Uzbek people, their striving for perfection and happiness in their land.

When familiarizing with the Constitution of the Republic of Uzbekistan, exhibitions with figures are used.

Article 50 of the Constitution states: "Citizens are obliged to take care of the natural environment." From the exhibitions, especially kittens, elephants, birds, and flowers help to carry out such work.

Speaking about the Uzbek-South Korean joint venture in Asaka, which will produce cars thanks to independence in order to foster a sense of respect for our people's national, spiritual riches, historical heritage, ideas of independence and national traditions, and loyalty to the Motherland, it is with particular pleasure to announce that the Uzbek people now have their own car, thereby forming a sense of pride in the students. Many problems related to this topic are given in mathematics lessons, exhibitions are also created, and it can be related to this topic when using a machine made of numbers.

In every academic subject in elementary school, particularly in mathematics lessons, they often focus on topics aimed at preserving school and community property, and nature. At the same time, using instructive sentences, examples of hadiths, and exhibits made of numbers, students are given discussions about the preservation of the animal world, nature, and the actions necessary to increase it.

Through such methods, games, and puzzles, children develop quick thinking and research skills, and their interest in science increases.

In the 1st grade, visual lessons with more illustrated games make a good impression. If you organize lessons using such methods and games as much as possible, the students you educated and taught will reach the highest peaks.

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