



## EFFECTIVENESS OF USING INNOVATIVE TECHNOLOGIES IN TEACHING MATHEMATICS IN PRIMARY GRADES

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**Abstract.** *This article talks about the effectiveness of using innovative technologies in the process of teaching mathematics in elementary grades. Examples of innovative technologies that can be used in the course of the lesson are presented. The issue of using didactic games in the process of teaching mathematics in elementary grades was analyzed. It is noted that the level of organization of lessons depends on the teacher's creativity. It is noted that didactic games provide an opportunity to individualize the work in the lesson, assign tasks to the strengths of each student, and develop his abilities to the maximum. It is said that through the game, students will consolidate the knowledge they have learned from the lesson and prepare to apply it to life.*

**Key words:** *Innovative technology, “Pair-to-couple communication” method, “Mathematical market” game.*

Currently, a lot of experience in traditional education has been accumulated, and research continues in the field of improving the traditional method of education, but its objective possibilities are limited. Reforms in the field of education, the rapidly developing requirements of Science and technology created a discrepancy in the need of society for the training of competitive highly qualified personnel, the formation of a harmonious generation by the method of Education. It should be solved by applying other approaches to education.



Experts note that a student who has mastered mathematics well will have a higher level of analytical and logical thinking. He forms in himself the skills not only in solving examples and issues, but also in various situations in life, to quickly make decisions, discuss and negotiate, to do things step by step. Also, thinking inherent in mathematicians leads him to the level of predicting the development of what is happening in the future, to what is happening around him.

Taking into account the immeasurable role of mathematics in our life, this subject has been included in school textbooks from the first grade, focusing on improving the education of mathematics on the basis of modern requirements, introducing the latest pedagogical and innovative methods, multimedia tools and information and communication technologies in its teaching [1-16].

The application of innovative technologies in practical training classes also requires great skill and knowledge from the teacher. Its goal is achieved if innovative technology is applied in its place. The teacher will be able to achieve high results during the lesson using innovative technologies, depending on the topic of the lesson.

**“Pair-by-pair communication” method** – To give students who sit side by side on a topic some assignment (or individual assignments) and invite them together to find a solution to the problem (issue) presented in the assignment, to hear and evaluate solutions.

In some cases, students may also face each other in turn with a question (issue). In this case, the question answer (issue solution) will have to be listened to (checked) and evaluated by the reader who asked the question (issue) [17-19].

Special care is necessary when choosing the topic of working in a pair. This topic should be mastered by many, otherwise work in pairs may not go away.

Samples from assignments:



a) Let each reader compose 3 examples for 1 minute on the topic “Dividing decimal places into numbers 10, 100, 1000, etc” and exchange them with his partner. Let him recall the answer to the examples after 3 minutes and check and evaluate the answers within 1 minute.

b) Let each reader compose 3 examples for 1 minute on the topic “Multiplying decimal places by numbers 10, 100, 1000, etc” and exchange them with his partner. Let him recall the answer to the examples after 3 minutes and check and evaluate the answers within 1 minute.

c) Let each reader compose 3 examples for 1 minute on the topic “Multiplying decimal places by numbers 0.1, 0.01, 0.001, etc” and exchange them with their partner. Let him recall the answer to the examples after 3 minutes and check and evaluate the answers within 1 minute [20-28].

d) Let each reader compose 3 examples for 1 minute on the topic “Dividing decimal places into numbers 0.1, 0.01, 0.001, etc” and exchange them with their partner. Let him recall the answer to the examples after 3 minutes and check and evaluate the answers within 1 minute.

**Game “Mathematical market”** – This exercise can usually be done in repetition classes at the end of some large section or chapter. After the completion of a chapter, the teacher prepares examples that relate to the materials studied in that chapter by writing them on cards. Each card will write 2-3 examples of different difficulty, and each example will be assigned a “price” depending on the degree of difficulty (for example 50 so‘m, 100 so‘m, 200 so‘m,...). The number of Cards is compiled according to the number of students in the class. Students are divided into groups of 4, with an average of 8-10 groups per class. This means that each card will need to be prepared from 8-10 pieces, corresponding to the number of groups. And the type of Cards will be enough if they are 4-5 different (32-40 cards in total). Each group receives one from the cards, that is, each group has 4 or 5 different cards, the “prices” must be indicated on the cards about each example (question).



<b>1-variant</b>	
1. Assignment	100s.
2. Assignment	150s.
3. Assignment	200s.

When a team is the first to complete missions in Option 1, it shows the teacher, and the teacher checks the solution and records the money that that group has worked on the board in a prepared table. The same option 1 will be excluded from each assignment from 25 so'm to the group that worked next. In this way, teams will try to solve as many and faster as possible and accumulate more money from assignments in each option. The fact that the tasks in the options are varied and at different prices will help make the training fun.

After a certain period of time (for example, after 30 minutes), the “market” is stopped, and the teacher calculates the money accumulated by the groups using a table. Groups can be numbered or they themselves can choose a name for the group. Whichever group earns the most money, the same group wins, and the remaining groups are also awarded places. The teacher can observe the work performed by the groups and demonstrate on the board the solution of the groups who completed the same task, whichever group had difficulty or could not complete a task. When not every group has been able to complete a task, the teacher himself can indicate ways to solve this task and find out if it is necessary to work on similar examples [1-28].

The teacher then evaluates the students based on the money earned by the groups. The group Students with the most money in the five-point system can be awarded 5 ball, the next 2 groups from 4 ball, the next 3 groups from 3 ball, etc.



Final table

	1-V	2-V	3-V	4-V	5-V	Total	Place	Ball
1-G	500	425						
2-G	425	350						
3-G	350	500						

In conclusion, today's student should be trained according to the requirements of the present. After all, boys and girls born in the time of new technologies are distinguished by a number of their common qualities. We will have the opportunity to educate a high intellectual generation only when it has developed in harmony with the Times. Based on the application of innovative technologies to the educational process, it is possible to increase the effectiveness of education and take a technological approach to the educational process. And the advantage of this method is that the entire activity prepares students for an independent life, teaching them to think independently.

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