



## METHODS OF WORKING WITH LEARNING QUESTIONS IN DEVELOPING CREATIVE ACTIVITY OF 4TH GRADE STUDENTS IN MATHEMATICS LESSONS

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### **Abstract:**

Primary education is an important stage in the development of students' intellectual and creative abilities. Mathematics lessons in particular play a special role in this process. This article discusses effective methods of working with educational questions to develop creative thinking skills in 4th grade students.

**Keywords:** Creative activity, method, knowledge, skill, competence, problem, creative idea, creative thinking, creative ability

### **Introduction**

Primary education is the foundation that determines the future of society. As President Shavkat Mirziyoyev marked: "The development of education is our main task. With the modern education system, it is possible to form a comprehensively developed and competitive generation." One of the requirements of modern education is the development of students' creative activity, especially in 4th grade mathematics lessons. Proper organization and effective use of teaching questions in the process will allow students to deepen their understanding of the topic, develop independent thinking skills and develop creative skills.

The primary grade is the most important stage in the formation of basic knowledge and skills of students. In this period, it is especially important to develop their thinking, stimulate creativity and develop problem-solving skills. And the use of creative questions in math lessons is an integral part of this process. This article discusses the significance, types, and ways of using teaching questions that develop creative thinking in elementary school mathematics lessons.



## REVIEW AND METHODOLOGY OF LITERATURE

Creative activity is the ability of students to think about new things, find substandard approaches and solve non-standard problems. The development of this ability in the primary grades not only increases students' mathematical literacy, but also strengthens their skills for independent thinking, logical analysis and creative decision-making.

### Importance of Working with Learning Questions

In mathematics lessons, teaching questions are one of the tools that help students deepen their understanding of a topic, activate their thinking processes and form a creative approach to problems. By properly organizing the questions, the following goals can be achieved:

- Increasing students' interest in the topic;
- Development of independent thinking skills in them;
- Formation of logical and analytical thinking skills;
- To develop a culture of group and teamwork.

### Methods of working with teaching questions

**1. Step by Step Complexity** Pupils can be initially asked simple and understandable questions and then further guide them towards deeper exploration of the topic. For example:

- A simple question: "How do we find the face of a rectangle?"
- A more complicated question is: "If the length of one side of a rectangle increases by 3 times, how will its face change?"

**2. Creative approach to issues** Giving students non-standard questions activates their creative thinking. For example:

- Traditional matter: "Two friends carry loads of 5 and 7 kilograms. How much is their total load?"
- The creative question is: "If the loads are placed on two scales of different weights, how can the loads be placed so that the weight of the load on each scale is equal?"

**3. Interesting and comparative questions** It is important to ask interesting questions and examples to grab the attention of students and reinforce mathematical concepts. For example:

- "Why are all triangles clearly defined by their three sides?"
- 'Which shape lives in many forms': circle or square? Why?"

**4. Group discussion and role-playing games** Students' creative thinking skills are enhanced through group work and role-playing throughout the lesson. For example, groups are tasked with discussing interesting mathematical questions and finding solutions.

**5. The reverse question method** asks students to construct a question based on its solution, not the problem. This method develops in them a deeper understanding of the topic and creativity. For example:

- Solution: "The face of the rectangle is 24 cm<sup>2</sup>".
- Question: "If the width of the rectangle is 4 cm, find the length of its neck."

**6. Math Stories and Problems** Students can be encouraged to think creatively by presenting them with a math story or problem situations. For example:

- "One day, a farmer in a village wants to measure his area correctly, but he doesn't have a measuring instrument. How can he do that?"
- It is necessary to break a pint of wheat into equal parts using two scales. But the scales are unconventional – one weighs only 5 kg, the other - up to 3 kg. How can wheat be evenly divided?"
- "There are three lights in one room, and another room has three buttons. To find out which lamp the buttons turn on, you are given access to the room where the lights are located only once. How do you know that?"
- "When a traveler walks through the forest, he sees three paths: one leads to the right, one leads to the left and one leads to the right. There is a sign on every road, but only one of them shows the right way. How do you find the right way?"

## **Conclusion**

For the development of the creative activity of primary school students, it is important to effectively organize and creatively use teaching questions in mathematics lessons. Ways for teachers to organize lessons in a fun, interactive and meaningful way allows students to develop not only mathematical knowledge



but also creative thinking skills at a high level. Thus, students will grow up to be confident, creative and mature individuals to solve the complex problems of the future.

Learning questions that develop creative thinking in primary grade mathematics lessons not only strengthen mathematical knowledge, but also develop students' creativity, analytical and logical thinking skills. When teachers choose and apply these questions effectively, the learning process will become more interesting and effective.

## References

1. Jumayev M.E., Tadjiyeva Z.G'. The Methodology of Teaching Mathematics in Elementary Grades. (Textbook for OOO'Y.) Toshkent. "Science and technology",2005y
2. Rokhataliyeva, A. N. (2022). Teaching of mathematics on the basis of advanced international experiences. Web of Scientist: International Scientific Research Journal, 3(7), 50-55.
3. Rokhatalievna, A. N., & Kadiraliyevich, A. A. (2022). Didactic foundations of improving the creative activity of future mathematics teachers by means of information and communication technologies. Emergent: Journal of Educational Discoveries and Lifelong Learning, 3(7), 1-5.
4. Roxataliyevna, A. N., & G'ulomovna, Y. S. (2021). Teaching Children Problem-Solving in Preschool. Middle European Scientific Bulletin, 9.
5. Educational and methodical manual on the module "Fundamentals of pedagogical competence and creativity.:– Tashkent 2015,40 page
6. Абдуллаева, Н. Р. Математикани ўқитишида ўқувчиларни креатив фаолиятини ривожлантиришнинг дидактик тамойиллари. "JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH" VOLUME 1, ISSUE 6, 119.
7. Shoqosim o'g'li, A. U., Rahimovna, T. O. R., Mamasiddiqovna, A. N., Mamasoliyevich, T. R., & Roxataliyevna, A. N. (2022). Technologies For Improving The Quality Of Educational Results Of Schoolchildren By Developing A Personalized Model Of Teaching Mathematics Through Interactive Stories. Journal of Positive School Psychology, 6(11), 1354-1365.