

## DEVELOPING CREATIVITY IN THE MATHEMATICS TEACHING PROCESS: CONTENT AND ESSENCE

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**Abstract.** *This scientific article explores the theoretical and practical aspects of using applied and practical problems to shape and develop students' creative activities in the mathematics teaching process. Based on the works of scholars such as N.R. G'aybullaev, F.M. Qosimov, A.J. Xurramov, and U.J. Sodikov, it analyzes the role of creative tasks, problem-oriented approaches, and educational technologies in enhancing students' creative thinking abilities. The study identifies the lack of creative activities in general secondary education schools as a significant issue. It proposes innovative approaches aimed at developing the creativity of future primary school teachers, thereby providing opportunities to make the educational process more effective and meaningful.*

**Keywords:** *creativity, creative tasks, problem-oriented approach, creative activity.*

## РАЗВИТИЕ КРЕАТИВНОСТИ В ПРОЦЕССЕ ОБУЧЕНИЯ МАТЕМАТИКИ: СОДЕРЖАНИЕ И СУТЬ

**Аннотация.** *В данной научной статье рассматриваются теоретические и практические аспекты использования прикладных и практических задач для формирования и развития творческой деятельности учащихся в процессе обучения математике. На основе трудов таких ученых, как Н.Р. Гайбуллаев, Ф.М. Косимов, А.Ж. Хуррамов, У.Ж. Содиков, анализируется роль творческих заданий, проблемно-ориентированных подходов и образовательных технологий в повышении творческого мышления учащихся. В исследовании в качестве значимой проблемы обозначено отсутствие творческой деятельности в школах общего среднего образования. Предложены инновационные подходы, направленные на развитие креативности будущих учителей начальных классов, тем самым предоставляя возможности сделать образовательный процесс более эффективным и содержательным.*

**Ключевые слова:** *креативность, творческие задания, проблемно-ориентированный подход, творческая деятельность.*

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## INTRODUCTION

The development of students' creative activities is of great importance in mathematics education. Using applied and practical problems in the educational process helps not only to strengthen theoretical knowledge but also to enhance students' creative thinking abilities. Creative approaches encourage students to solve problems, facilitating their self-development, independent thinking, and the generation of new ideas. Research by scholars such as Y.M. Kolyagin, N.R. G'aybullaev, A.A. Normatov, N.O. Eshpo'latov, F.M. Qosimov, D.M. Maxmudova, U.J. Sodikov, and A.J. Xurramov is particularly significant in this field.

## MAIN PART

N.R. G'aybullaev's research highlights the theoretical foundations and methodologies for developing mathematical abilities. He emphasizes the importance of applying creative approaches in shaping students' mathematical capabilities. G'aybullaev also develops methodologies aimed at enhancing students' abilities through the promotion of logical thinking, creative approaches to problem-solving, and the assignment of creative tasks. His studies consider the use of software and technological tools aimed at developing mathematical abilities, making the educational process more effective and engaging.

F.M. Qosimov analyzes the challenges of using creative tasks in teaching mathematics in primary schools. He demonstrates the importance of using the term "tasks" instead of "problems," which further develops students' creative thinking abilities. Qosimov also provides a detailed analysis of the differences between creative tasks and educational tasks, presenting appropriate approaches for students. Creative tasks encourage students to participate in the problem-solving process, express their thoughts, and generate new ideas.

A.J. Xurramov's dissertation on improving the methodology of teaching mathematics focuses on the theoretical foundations, current state, and analysis of designing mathematics lessons in higher education institutions. He discusses the didactic conditions for designing mathematics lessons, the role of innovative models in teaching the subject, and the methodologies for creating and implementing lesson plans in the educational process[2].

U.J. Sodikov conducts research on developing students' creative abilities through problem-oriented approaches in mathematics teaching. His findings reveal the theoretical foundations and practical conditions for enhancing students' creative abilities through problem-oriented teaching

methods, the use of challenging situations in mathematical modeling, and the pedagogical system for teaching non-standard mathematical problems[1].

A key principle in developing students' creative activities is engaging them in creative tasks. Teachers can enhance the educational process by offering assignments designed to develop students' creative abilities. For example, encouraging students to work in groups, exchange ideas, and generate new concepts fosters their creative thinking. Additionally, accounting for students' individual approaches and providing tasks aligned with their interests further enhances their creative capabilities.

### **CONCLUSION**

To effectively organize creative activities, teachers must apply creative approaches in selecting activities during the educational process. It is essential to provide students with opportunities to express their creative ideas. For instance, creating platforms for students to present their ideas through projects, assignments, or innovative activities strengthens their creative abilities.

Although various aspects of using problems in mathematics teaching have been studied, the issues of shaping and developing creative activities and abilities in general secondary education schools have not been investigated as a specific research subject. Our research focuses on developing the creativity of future primary school teachers through innovative approaches. This serves to enhance creative thinking and practical skills in the educational process. Creating the necessary conditions for developing students' creative abilities, applying innovative approaches in teacher training, and conducting practical research are essential. By promoting creative activities, ensuring students can express their thoughts, and fostering independence in problem-solving, the educational process can be made more effective and meaningful.

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