Using new methods in teaching mathematics

Davletova Dilnoza Nadir qizi

The creative school's mathematics teacher's name is Ogahi

Annotation: The article is devoted to innovative methods of teaching mathematics in secondary schools. The concept of innovation is defined both as an innovation and as the introduction of this innovation into the educational process.

Keywords: behavior, school, society, pedagogy, innovation, load, lesson.

Currently, the development of society requires innovative behavior from teachers, that is, active and systematic creativity in teaching activities. In these conditions, the teacher needs to navigate a wide range of innovative technologies. The increase in mental load in mathematics lessons makes us think about how to maintain students' interest in the material being studied and their activity throughout the lesson. In this regard, a search is underway for new effective teaching methods that would activate the thoughts of schoolchildren and stimulate them to independently acquire knowledge.

The development of innovation in pedagogy is associated with a mass social and pedagogical movement, in connection with this, the need for new knowledge has intensified, for understanding the new concepts of "innovation", "new", "innovation", "innovation process", etc. The word "innovation" - occurs from Latin, which means renewal, change, introduction of something new, introduction of novelty or innovation. The concept of "innovation" (innovation) is defined both as an innovation and as the process of introducing this innovation into practice.

Innovation lies in the fact that significant learning goals are gradually reevaluated and priority is given to development goals. In this regard, in the modern mathematics curriculum, as is known, there are 3 levels of task complexity:

1. Meets mandatory program requirements. The knowledge of each student must meet these requirements and the required level of knowledge, skills and

abilities must be achieved by each student in the allotted time.

- 2. There are tasks of medium difficulty level.
- 3. Tasks that are intended for students who show increased interest in mathematics, as well as for use in classes, schools, with in-depth study of mathematics.

If previously the teacher was focused mainly on the average student, then modern innovative approaches to teaching mathematics require a mandatory differentiated and personality-oriented approach, according to which each student chooses his own learning path. The requirements for each student and specific work with him will be determined by the level of abilities, capabilities and interests of each student.

The mathematics program of secondary educational schools provides for the development, first of all, of the intellectual sphere of students, the development of schoolchildren's thinking, the basis of which is the mental operations of analysis, synthesis, comparison, generalization, classification and the ability to make inferences. Differentiated mathematics instruction is closely related to improved goal setting for mathematics learning. The system of goals of educational activities in mathematics can be presented in the form of a certain system of actions of the student, where he must learn to perform as a result of training and this will mean a shift in emphasis from mathematical education to education with the help of mathematics.

Simultaneously with traditional methods, an innovative method is used in mathematics lessons - programmed learning technology (block learning). When using this technology, schoolchildren develop an interest in processing visual information, the desire and opportunity to analyze it, raising the question of unknown connections, and obtain the desired result. For traditional and modern methods of teaching mathematics, the priority was education that ensures the development and self-development of the student's personality, based on the identification of his individual characteristics. Currently, student-centered technology is often used as a modern method of teaching mathematics. It is based

on the recognition of each student's right to choose their own path of development through the creation of alternative forms of education.

Modern pedagogical technologies reflecting a student-oriented approach include:

- learning in collaboration;
- project method;
- multi-level training;
- student's portfolio;
- Internet technologies;
- -developmental training.

The use of information and computer technologies (ICT) in mathematics classes is explained by the need to solve the problem of finding ways and means of activating the cognitive interest of schoolchildren, as well as developing their creative abilities. When using computer tools in the educational process, the center of activity becomes the student, who, based on his individual abilities, builds the process of cognition. In the system of such training, two types of activities are distinguished - teaching and educational. The first is characterized by the interaction of students with a computer. The computer determines the task, evaluates its correctness and provides the necessary assistance. The second type is characterized by the fact that the computer helps the teacher in managing the educational process, receives the results of control tasks, and the computer can also compare the performance of different students in solving tasks, and can give recommendations on the application of specific educational influences to students. In teaching mathematics in secondary schools, the computer is used at all stages of the lesson, when explaining new material, consolidating, repeating, and monitoring.

Thus, one of the directions for increasing the efficiency of training specialists in secondary vocational education is the use of new information technologies, in particular in teaching mathematics. Today, teachers are looking for ways to improve methods for developing non-traditional didactic materials and methods for

monitoring knowledge, skills and abilities in mathematics. There are quite a lot of different methodological and didactic materials for studying mathematics and computer science in a secondary specialized educational institution, but publications covering the experience of studying mathematics using information technology are rare.

List of used literature:

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