

## About the teaching method and skills of mathematics

N.V.Rakhmonova  
Kokand University

**Abstract:** This article covers the methodology of teaching mathematics. In addition his theory was considered also about the content of the introduction of understanding about this.

**Keywords:** mathematics, concept, teaching problems, higher mathematics, elementary mathematics, special methodology, exact methodology

As we know, the subject of the methodology of teaching mathematics is a certain branch of pedagogical science, which is engaged in the study of the rules for teaching mathematics. The methodology of teaching mathematics in the process of studying the laws of teaching mathematics is inextricably linked with the disciplines of pedagogy, logic, psychology, mathematics, linguistics and philosophy. In other words, the problems of teaching mathematics at school are solved in close connection with the disciplines of logic, psychology, pedagogy, mathematics and philosophy. The methodological basis of the methodology of teaching mathematics is based on the theory of cognition. The word mathematics is derived from the ancient Greek word mathema, which means "knowledge of the sciences". What mathematics studies consists of the spatial forms of what exists in matter and the quantitative relationships between them. In the current era, mathematics is conditionally divided into two.

- 1) elementary mathematics
- 2) higher mathematics

Elementary mathematics is also a science with independent content, built on elementary data from various fields of science, namely theoretical arithmetic, Numerology, higher algebra, mathematical analysis and the logical course of geometry. Higher mathematics, on the other hand, is applied by finding mathematical laws that fully and deeply reflect the spatial forms of the Real world and the quantitative relationships between them. Elementary mathematics forms the basis of the school mathematics course. The purpose of the school mathematics course is to convey to students through a certain method (methodology), taking into account the psychological characteristics of the system of mathematical knowledge. (The term method is a Greek word meaning "way"). The methodology of mathematics is one of the main sections of pedagogy and didactics, an independent science that studies the laws of teaching, learning mathematics corresponding to educational goals at the level of the development of our society.

The mathematical methodology answers the following three questions related to the educational process:

1. Why do you need to study mathematics?
2. What to learn in mathematics?
3. How to learn mathematics?

In mathematics classes, the curriculum can be applied by students in the study of new materials, in the initial stages of identification and repeated teaching. It should be noted that during the tutoring phase for the upper classes, the teacher usually applies curricula when working with unsuccessful students or for some reason with those who have gaps in the material under consideration. In the next decade, the use of computers in the teaching of mathematics was carried out in several main directions. These include computer-aided knowledge assessment, development and development of teaching programs of various types, development of mathematical games related to knowledge, etc.

Another aspect of computer accessibility in mathematics teaching is the modeling of certain learning situations. The purpose of using modeled programs is to ensure that when other methods of teaching are used, imagination makes the materials that are difficult to bring to the eye understandable. With the help of modeling, it is possible to provide information to students in graphic mode in the form of computer multimedia. Therefore, they tend to have a deep study of mathematics and to show a significant degree of independence in the learning process.

To solve a mathematical problem that arises in many cases quickly and with a given accuracy, a professional mathematician is required to know a certain algorithmic language and programming at the same time as his profession. To this end, in the 90s of the 20th century, mathematical systems were created that had much more facilities for mathematicians. It is possible to make various numerical and analytical mathematical calculations using special systems, starting with simple arithmetic calculations, and making graphs in addition to solving differential equations with a private derivative.

1. General methodology of teaching mathematics. This section reveals the purpose, content, form, methods of mathematics and its means on the basis of the methodological system, the laws of pedagogy, psychology and didactic principles.

2. Special methodology of teaching mathematics. This section shows the specific subject materials of the laws and regulations of the general methodology of teaching mathematics, the ways to improve.

3. A clear methodology for teaching mathematics.

This section consists of two parts:

1. Private issues of general methodology;

## 2. Private issues of a special methodology.

The science of mathematics uses methods of "scientific research" in the process of studying the spatial forms of objects in the existing material world and the quantitative relationships between them. Therefore, it has been attempted to explain scientifically-methodically the use of scientific research techniques to observe and experiment, comparison, analysis and synthesis, generalization, abstraction and concretization in mathematics lessons. In the process of teaching mathematics, the methodology for the emergence of forms of thinking is also covered, that is, the logical connections between emotional cognition (intuition, perception, imagination) and logical cognition (understanding, judgment, conclusion) are revealed. The methodology of teaching mathematical understanding and its formation in the minds of students, mathematical judgment and its types, axioms, postulates and theorems, are covered. The mathematical conclusion and its implementation in the course of the lesson of inductive, deductive and analogical types are indicated. Particular importance was attached to teaching the types of didactic principles in teaching mathematics.

### References

1. Alixonov S. « Matematika o'qitish metodikasi » Qayta ishlangan II nashri. T., «O'qituvchi» 1997 yil.
2. Bikboeva N.U. va boshqalar «Boshlang'ich sinflarda matematika o'qitish metodikasi», T., «O'qituvchi», 1996 yil.
3. Ikramov Dj.I. «Matematicheskaya kultura shkolnika» T., «O'qituvchi», 1981.
4. Kolyagin Yu.N. va boshqalar Metodika prepodavaniya matematiki v sredneyshkole. Obhaya metodika., M., «Prosveshenie», 1988.