

УДК: 13.00.02

Sharapov Iskandar Rustamovich

*Senior lecturer of mathematics at the academic lyceum of the Tashkent
State University of Oriental Studies*

EFFECTIVE METHODS OF TEACHING MATHEMATICS

Annotation: The article deals with the basic requirements for the lesson of mathematics and the classification of methods for its study on the basis of the specifics and relationship with other sciences

Key words: methods of teaching mathematics, teaching, didactic goal, educational goals

Шарапов Искандар Рустамович

*Старший преподаватель математики в академическом лицее
Ташкентского государственного университета востоковедения*

ЭФФЕКТИВНЫЕ МЕТОДИКИ ПРЕПОДАВАНИЯ МАТЕМАТИКИ

Аннотация: В статье речь идет об основных требованиях к уроку математики и классификация методов её изучению на основании специфики и взаимосвязи другими науками

Ключевые слова: методика преподавания математики, обучение, дидактическая цель, цели воспитания

Despite the fact that mathematics is the most hours-long subject of all subjects emitted in schools around the world, interest in this subject is becoming less and less. Pupils consciously choose subjects related to nature and everyday life for their future profession.

To do this, in order to avoid this problem in the future, special attention of students focuses on "entertaining" interesting facts to attract the attention of students of mathematics.

Interesting teaching methods are proposed to be used in the learning process of mathematics: entertaining mathematics, historical information, computer animation, Japanese origami, and other materials for an accessible and interesting presentation: mathematical sentences, problems, formulas in the process of teaching mathematics, as well as deepen understanding, develop logical and critical thinking, increase student observation and interest in learning mathematics.

Entertaining methods of teaching mathematics are used in the professional training of future mathematics teachers in pedagogical universities, teaching mathematics in secondary schools and in preparing children for school. At the same time, entertaining materials are used in the educational process, activating the logical and critical thinking of students and forming the ability to study mathematics.

A great role in the selection of means, methods and techniques of work in the lesson is assigned to the teacher. The success of the case here largely depends on how deeply the teacher penetrates into the specifics of the educational material, how skillfully he sets educational cognitive tasks, taking into account the level of general and mathematical training of students, their personal qualities and predicting the results of using a particular means, method or technique.

When choosing the means, methods and techniques of teaching, it must be remembered that they cannot be universalized. None of the means, none of the methods, taken in isolation, will be able to achieve the learning goals.

The specificity of the very subject "mathematics" is such that the main thing in teaching is visual-verbal means in various combinations. A mathematics lesson is characterized by the complex use of visual and technical teaching aids.

Mathematics, as an academic discipline, has a number of specific features that have influenced the development of teaching methods. The specificity of mathematics lies in the fact that it is interconnected with other

sciences, which influence not only its development as a discipline, but also teaching methods. The methods of other sciences, successfully used by teachers in other areas, are adapted for teaching children mathematics and show high results as a result of their implementation. Classification of methods of teaching mathematics on the basis of its specificity and interrelation with other sciences: General didactic methods or methods of pedagogy are aimed at studying general didactic laws of teaching mathematics. This includes methods of organizing a lesson, stimulating students to learn, monitoring the educational and cognitive activities of students. Methods of psychology - study the patterns of thought processes in students (analysis, synthesis, generalization, systematization, classification, etc.), on the basis of which the activity approach to the learning process is determined. Logic methods - aimed at studying the forms and laws of logical thinking in students. For example, methods of studying concepts and theorems, methods of induction, deduction and analogy. Methods of mathematics - basic and special methods of cognition, adapted for teaching mathematics. For example, methods of mathematical modeling, learning through problems, the axiomatic method, etc. 5. Methods of informatics - based on the use of such teaching methods as: programming, computerization, machine experimentation, etc. Assumes the technologization of the learning process. Empirical methods - imply the use of experimental methods: experience, measurement, observation, etc. History methods - involve the use of a historical approach to the learning process. Central to the learning process of mathematics are teaching methods that answer the question "how to teach?" The choice of a method of teaching mathematics, which will contribute to obtaining high results, must be carried out on the basis of taking into account the goals of learning, the specifics and content of the subject, as well as taking into account those results that were previously obtained by colleagues.

LITERATURE

1. Джанабердиева С.А. *ЗАНИМАТЕЛЬНЫЕ МЕТОДЫ ПРЕПОДАВАНИЯ МАТЕМАТИКИ* // *Международный журнал прикладных и фундаментальных исследований.* – 2014. – № 3-1. – С. 92-96; URL: <https://applied-research.ru/ru/article/view?id=4757> (дата обращения: 18.09.2021).
2. Епишева О.Б. *Общая методика преподавания математики в средней школе* / Тобольск, Изд-во ТГПИ им. Д.И. Менделеева, 1997
3. Abidova D. M. *PECULIARITIES OF SOCIAL AND PEDAGOGICAL ACTIVITY* // *Мировая наука.* – 2018. – №. 5. – С. 10-12.
4. https://spravochnick.ru/pedagogika/teoriya_obucheniya/metody_obucheniya_matematike/