

IMPORTANT ASPECTS OF USING THEORETICAL PEDAGOGY IN THE PROCESS OF TEACHING MATHEMATICS.

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Annotation: *This article discusses theoretical pedagogy in the process of teaching mathematics and modern methods in the learning process.*

Key words: *Mathematics, theory, practice, pedagogy, result, student.*

One of the important measures in the organization of modern education is the achievement of high results in a short time without spending too much mental and physical effort. Bringing to students certain theoretical knowledge in a short period of time, the formation of their skills in connection with certain activities, as well as monitoring the activities of students, checking the knowledge they have acquired, skills and certain actions. skills, as well as monitoring the activities of students, assessing the level of knowledge, skills and abilities they have acquired, requires the teacher to have high pedagogical skills and a new approach to the educational process. To date, a number of developed countries have accumulated a lot of experience in this regard, and the methods that form the basis of this experience are called interactive methods. Modern pedagogical technologies, interactive methods, which are considered an integral and important part of the process of reforming education, enter the educational process without knowing it. Experience shows that modern interactive strategies effectively absorb knowledge. Because the students who fill the classrooms today are happy and innocent children, sometimes dreamers. Among them there are even students who look forward to the end of the 45-minute lesson and look at education superficially.

The expanded use of technology in teaching mathematics makes it possible to adapt the educational process to a greater extent. Because no two students are the same, technology can provide content and support to individual students that are particularly beneficial to their individual needs. Kids can access lessons, tutorials, screencasts and other learning resources on their devices and at their own pace. Thus, if one student is still stuck on a topic and another is ready for new challenges, the technology allows everyone to take the appropriate next step.

The integration of technology into mathematics education has been found to be related to three important factors; design of technology,

training activities and tasks; the role of the teacher; and educational content. The teacher should organize learning, for example, by synthesizing the results of high-tech activities, helping to develop effective ways to use the tool, and connecting experience in a technological environment with paper and pencil or other mathematical activities. It argues that math teachers should participate in a constructive process as collaborators and researchers to transform math practice using digital technologies; However, the design process is very complex, where: the dialectical influence of tools on mathematical expression and communication must be considered, and there are different centers of design and analysis

Students are unlikely to use technology on their own in a way that leads to positive learning outcomes. Effective practice must be developed through teacher-student interaction and teacher-led development. To achieve this, a process of advanced training of teachers is necessary, which includes the development of the technological and pedagogical content of knowledge.

It is known that the science of mathematics uses the methods of "scientific research" in the process of studying the spatial forms of things in the existing material world and the quantitative relations between them. Therefore, this textbook attempts to explain the use of observation and experiment, comparison, analysis and synthesis, generalization, abstraction and specification of scientific research methods in mathematics lessons from a scientific and methodological point of view. Also, a way of forming thought forms in the process of teaching mathematics is highlighted, that is, logical connections are revealed between emotional knowledge (intuition, perception, imagination) and logical knowledge (concept, judgment, conclusion). Mathematical concepts and ways of their formation in the minds of students, mathematical judgments and their types, such as axioms, postulates and theorems, are highlighted. The application of mathematical inference and its inductive, deductive and analog types during the lesson is shown. Particular importance is attached to teaching types of didactic principles in teaching mathematics.

The main task of teaching mathematics at school is to ensure the conscious and lasting assimilation of mathematical knowledge and skills that are used in everyday life and work in accordance with the age of the student and which are necessary for continuing education in the future. . The science of the methodology of teaching mathematics is directly based on philosophy, psychology, pedagogy, didactics, mathematics, drawing, logic, history and other sciences. When studying problems related to the

theory of mathematics and its teaching, it is advisable to take into account the specifics of mathematics and its teaching. Modern education creates an opportunity for the student to work on himself, to expand and deepen his knowledge outside the classroom.

Mathematics, like other sciences (physics, chemistry, history, etc.), studies real existence. Explores the structure of real life and its laws. He builds different models of real existence. If the natural sciences in their research are based on experiments, then mathematics is not based on experiments. One can turn to experience in understanding and imagining the problems associated with connecting theory in mathematics with practice. However, the experimental method is not accepted for proof in mathematics. While the natural sciences are conducting research to search for unknown properties of real existence, mathematics finds new properties in the considered models of the material world and creates new models. An example of this is mathematical modeling, which makes it possible to give a holistic interpretation of existing phenomena.

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