

# MONITORING STUDENTS' KNOWLEDGE AND METHODS OF IMPROVING IT IN MATHEMATICS LESSONS

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#### Annotation.

Mathematics in their classes students knowledge increase \_ Knowledge improvement methods about data

#### Key words

Mathematics, pedagogy and pedagogical knowledge, improvement.

## PLAN:

- 1. Enter
- 2. What is pedagogical technology?
- 3. Non-traditional teaching methods
- 4. Summary
- 5. Used literature

Solving the complex tasks of education and upbringing of young people depends crucially on the teacher's ideological beliefs, professional skills, art, talent and culture.

One of the primary tasks of teachers is to mobilize all available opportunities to properly organize the educational process.

Mathematics has great potential as an educational subject in the development of the young generation. It develops the student's thinking, prepares their mind, organizes it, forms the qualities of goal orientation, logical thinking, resourcefulness in students. At the same time, the correct and beautiful composition of comments will educate students to be tasteful and need beauty.

Taking into account the requirements for the teaching of sciences based on the development of life development techniques and technologies, harmonizing the school mathematics course with their modern development is one of the main goals of teaching mathematics to students at school.

Mathematical science requires the will and concentration of students; requires ability and activity, development of imagination, independent, responsible, hardworking, disciplined and logical thinking and ability to defend one's views and beliefs on the basis of evidence.

One of the most important requirements for modern lessons is that the topic selected in each lesson should be scientifically based, that is, determining the size of the topic, taking into account the purpose of the lesson and the ability of the students, determining its complexity, connecting it with the previously studied topic, determining the sequence of assignments and independent work for students , defining the equipment needed in the lesson and enriching it with additional visual aids, creating a problem situation using additional information technologies. During the lesson, the teacher should take into account the students' physical condition, creativity, and quick thinking.

The use of advanced pedagogical technologies in the process of teaching mathematics is clearly visible as one of the factors of increasing the effectiveness of teaching. Because advanced, non-standard (interactive) forms of teaching are one of the ways to improve educational activities aimed at effectively solving educational and educational issues, strengthening students' cognitive activity.

In teaching mathematics, I have adopted the following four slogans in order to summarize the students' practical activities with their life imaginations, and strive for their conscious assimilation and implementation of mathematical concepts and relationships.

A valued friend is inseparable,

Don't take money out of your wallet.

For this, friends, you,

Know the math.

I engage students using non-traditional, stimulating teaching methods. To make the lesson interesting and meaningful, I divide the students into 3 groups (for example, "Knowers", "Smart", "Smart"). During the lesson, the scores obtained by the groups are explained and shown on the blackboard indicator.

**competitive lessons**, students are encouraged to think quickly, correctly, be agile, and collect more points for their group.

The competition has begun. A student comes out from each group. The same task is assigned. Whoever gets it right first gets bonus points. The game continues in this way. Homework will be checked.

Repetition of necessary formulas, question-and-answer, mathematical dictation will be held. Then a conclusion is drawn.



**The tournament lesson** also gives a good result. The purpose of this lesson is to repeat what has been learned, and this kind of lesson I do more often in 7th grades by combining 2 parallel classes and holding a tournament between them. Such a lesson is designed for 2 hours. Students arrange chairs in a circle and take their seats. The lesson will be held in the following stages.

#### Stage 1. "We know DTS, we follow it."

At this stage, students take turns answering 5 out of more than 30 structured, handout questions. "5" points for the correct answer, (If there is a filler from the group, "4" points will be given).

Questions and answers get interesting. Pupils will acquire knowledge based on the requirements of the Law of the Republic of Uzbekistan "On Education", "National Program of Personnel Training" and "State Education Standards".

## 2nd stage. "Two times two, the one who doesn't know will hear it!"

At this stage, students use the "Charkhpalak" method. Students of the group sitting in a circle ask each other about the times table in a row, for example, 5 times 9 should say the answer: 45. The students of the group who were confused and given the wrong answer will not get points. The game continues in this way. At the end of the game, the total score will be announced. A red circle with a score of 5, a blue circle with a score of 4, and a yellow circle with a score of 3.

## Stage 3. "Question and answer competition, whoever loses is a turtle."

<sup>r</sup> that stage, the groups ask each other questions about the topics covered. Questions should be clearly asked, answers should be clearly and fully returned. Each group asks 3 questions. This is encouraged through step-by-step forms. To the one who asked the question  $\Delta$ - (1 point), to the one who gave an incomplete answer -

<sup>c</sup> (2 points), to those who answered completely - (3 points). At the end of the game, the points are tallied and the winning team is promoted.

## 4. "Tell me an interesting question, find it and be disappointed!".

At this stage, groups ask interesting questions about the development of students' logical thinking related to mathematics.

For example, Alisher has as many brothers as there are sisters. The number of sisters of the older sister is 2 times less than the number of brothers. How many boys and how many girls are there in this family?

Similarly, each group will say 2 questions. Stimulation is carried out as in step 3. In this way, as a result of forming consistent logical thinking in students, to help them to develop their intelligence, to find optimal ways to solve problems in nature and society.



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#### 5. "Test question, quick answer".

At this stage, groups demonstrate their knowledge through test questions. Test questions are given to groups by handouts, choosing 5 of them. Points are awarded for the group that answered the test question quickly and correctly, otherwise not. The use of the test prepares the students' mind, organizes it, and develops in them the qualities of goal orientation, logical thinking, resourcefulness.

# 6 . "What is the homework, answer without thinking."

Assignments given to the home by groups are checked and evaluated by judges. The purpose of this stage is that in learning mathematics, students will get used to express their thoughts and reasonings in a clear and complete, concise and meaningful way, acquire the skills of making mathematical records intelligibly, concisely and literately.

# 7. "Mathematical proverbs, skirts to the truth."

At this stage, groups say mathematical proverbs.

Purpose: formation and development of patriotism, national pride. To inform the students about the great contributions of our lexicographers to the science of mathematics.

Together with reciting mathematical wisdom, the groups will talk about the contributions of our great scholars Abu Abdullah Muhammad ibn Musa al-Khorazmi, Ahmad Farghani, Abu Ali ibn Sina, Abu Raikhan Beruni, Ghiyaziddin Jamshid al-Koshi, Mirza Ulughbek to the science of mathematics.

Clear and correct answers are evaluated by judges.

- one hour of learning is better than one day of prayer, 3 hours of learning is better than 3 months of fasting.

At the end of the lesson, a conclusion is drawn. The winning group will be determined. They will be awarded prizes.

In this type of lessons, all children's exercises are performed with the participation of students. This rule of the game encourages all participants to be as attentive as possible and actively participate in the lesson.

According to Dumak, special attention should be paid to the development of independent personality and social activity, independent thinking, personal pride and confidence in the student.

Lessons based on the application of advanced pedagogical technologies in mathematics teach students to be independent thinkers, to have their own opinion and to justify their point of view.



Har one of time to himself typical there are signs . Current time changes period and the first next , this changes school life , study to the process of requirements increase with depend  $\_$ 

Mathematics according to knowledge quality decrease problem current and is important because study information of size common growth under conditions , without knowledge , school of students skill and skills without development and their study their work independent respectively organize without \_ their variable in the world to life high good quality to be prepared provide possible it's not .

Mathematics from science knowledge of quality decrease reasons very many are these \_ of the student previous preparation level low , in education shortcomings , difficulties overcome of will weakness , lessons passing sending , students to know of activity low , of students knowledge of activity low , knowledge level low \_ parents by home duties control to do and others \_

The main reason for the decline in the quality of knowledge in mathematics is the lack of appropriate motivation in both children and parents, which helps students actively learn this subject.

I consider conducting a diagnosis to determine the level of development and the initial level of motivation for educational activities as the first step in the implementation of this problem. A school psychologist helps the mathematics teacher in working in this direction. According to his diagnostic results, you can see which students have a high level of development and motivation, an average level, and which ones have decreased.

Analytical monitoring of the current state of the educational process and the effectiveness of the educational process is becoming more and more important for the successful implementation of the educational process. the means of evaluating the quality of knowledge and improving the effectiveness of the educational process is the control of the quality of the teacher's work and the knowledge, skills and qualifications of students. Students \_ knowledge , skill and qualifications control to do attention let's look . Monitoring system two main from the component consists of : main and thematic .

Basic monitoring input , intermediate and final from the tests consists of Mathematics in teaching An important element is students knowledge spaces eliminate to do directed purposeful the work being , this the work for thematic monitoring is used . thematic control mathematics in the chair to be studied topics according to control in the form of present will be done . before studied topics and of the child they are with depends problems If so , I to the students self teaching for



them separately to the notebook to write and of the teacher control under in knowledge spaces eliminate to reach recommendation i do

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