

# FORMS OF MONITORING STUDENTS' KNOWLEDGE, SKILLS AND ABILITIES IN MATHEMATICS

No'monova Kamolaxon Abdug'opir qizi  
Student of Mathematics, Andijan State Pedagogical Institute  
E-mail: nomonovakamola07@gmail.com

## **Abstract**

This article analyzes the main forms of monitoring students' knowledge, skills and abilities in the process of teaching mathematics, their didactic significance and role in increasing educational efficiency. It also discusses oral, written, test, practical and modern digital forms of monitoring. It is substantiated that the educational process can be effectively organized through regular assessment of students' knowledge.

**Keywords:** control, assessment, mathematics education, knowledge, competence, skills, test, oral control, written control.

## **Introduction**

The main tasks of control are: One of the important components of the educational process is the control and assessment of students' knowledge, skills and abilities. The control process is especially important in teaching mathematics, because mathematics is a subject that forms the skills of logical thinking, analysis and drawing conclusions.

Through supervision, the teacher determines the level of students' mastery of the educational material, identifies shortcomings in the learning process and determines measures to eliminate them. At the same time, supervision encourages students to work regularly, consolidate their knowledge, and feel responsible.

The concept of supervision and its importance.

In pedagogical literature, control is defined as an activity aimed at determining and assessing the level of knowledge, practical skills and abilities of students, as well as checking the effectiveness of the educational process.

The main tasks of supervision are:

1. determining the level of knowledge of students;
2. checking the level of mastery of the educational material;
3. identifying shortcomings in the educational process;
4. encouraging students to work independently;
5. improving teaching methods.

Control in mathematics allows not only to check knowledge, but also to assess students' logical thinking and problem-solving abilities.

Forms of control in mathematics. In mathematics education, control of students' knowledge is carried out in various forms. Each of them performs a specific didactic function.

1. Oral assessment is a widely used method in mathematics lessons. In this form, the teacher asks questions to students, and they respond orally.

Oral control has the following advantages:

1. allows you to observe the thinking process of students;
2. creates the opportunity for quick assessment;
3. develops students' speech culture.

For example, the level of knowledge of students is determined by verbally explaining formulas, theorems, rules, or problem-solving methods.

2. Written assessment is one of the most effective forms of assessment in mathematics. This method determines students' ability to solve problems independently.

Written control includes:

1. independent work;
2. control work;
3. mathematical dictations;
4. checking homework.

Written control allows for a deeper analysis of students' knowledge and develops their independent thinking.

3. Test control is widely used in the modern education system. With the help of tests, it is possible to determine the level of knowledge of students in a short time.

Advantages of test control:

1. objectivity of assessment;
2. time saving;
3. the ability to check the knowledge of a large number of students.

Test tasks can be of various types:

1. multiple choice;
2. matching;
3. fill-in-the-blank;
4. short answer questions.
4. Practical testing tests students' ability to apply mathematical knowledge in real-world situations. In this, students perform tasks such as solving various problems, drawing graphs, or modeling.

This form:

1. develops mathematical thinking in students;
2. forms the ability to solve problem situations;
3. connects theoretical knowledge with practice.
5. Modern forms of digital control are now widely used in the educational process of information technologies. Control work is also organized in mathematics lessons using various electronic platforms.

### **For example:**

Online tests, interactive assignments, electronic assessment systems.

Such methods increase student interest in the lesson and make the assessment process more transparent.

### **Summary**

In mathematics, monitoring students' knowledge, skills, and abilities is an integral part of the educational process. Effective use of oral, written, test, practical, and digital forms of monitoring helps to improve the quality of the educational process.

In addition, the control process not only determines the level of knowledge of students, but also helps them to think independently, research, and develop mathematical thinking. Therefore, it is advisable for the teacher to use different forms of control in a harmonious way.

### **References**

1. Bikbayeva N.U. **\*\*Mathematics teaching methodology.\*\*** – Tashkent: Teacher, 2019.
2. Azizkhodjaeva N.N. **\*\*Pedagogical technology and pedagogical skills.\*\*** – Tashkent, 2018.



3. Tolipov O., Usmonboyeva M. **\*\*Theoretical foundations of pedagogical technologies.\*\*** – Tashkent, 2017.
4. Ministry of Public Education of the Republic of Uzbekistan. **\*\*State educational standard in mathematics.\*\***
5. Ishmuhamedov R. **\*\*Innovative technologies in education.\*\*** – Tashkent, 2020.