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## DIDACTIC PRINCIPLES OF MATHEMATICS TEACHING METHODOLOGY IN PRIMARY CLASSES

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Abstract. In this article, the specific features of the structure of the mathematics course in the primary grades of the school, its content, methods of teaching mathematics in the primary grade, methods used to increase the effectiveness of teaching, forms of organizing the teaching of mathematics in the primary grade, the content of the structure and lesson system of the mathematics lesson in the primary grade, didactic principles, mathematics teaching tools and their tasks, and the features of mathematics teaching in schools with few sets are covered.

**Key words:** didactic principles, skills, addition algorithm, course of the lesson, lesson plan, didactic issues.

Each lesson has different didactic goals. Among them, one is the main goal and it is called the main didactic goal of the lesson. The purpose of each individual lesson determines the purpose of the lesson system and reveals the content of the taught subject to the students. In this case, it is to introduce students to new concepts, in the second case, to expand and deepen the introduced concept, in the third case, to create some skills and abilities, in the fourth case, to check knowledge, skills and abilities, etc.

The experience of schools has created a certain system of lessons, which most teachers follow and achieve certain good results. Usually, at the beginning of the lesson, homework is checked or the previous topic is repeated, and then there is a question-and-answer session on the previous topic. After that, the new material is presented, and to strengthen it, students are solved examples and problems or are given control questions. At the end of the lesson, homework and exhibitions are given.

Sometimes, it can be dedicated to one of these goals. This one goal is called the main didactic goal of the lesson, and others are subordinate to it.





The following types of mathematics lessons can be shown in elementary grades.

1) Lessons to introduce students to new concepts, create new knowledge and skills (calculation, graphic or problem solving skills are formed in these lessons);

2) classes to strengthen new knowledge, skills, and abilities with the help of various exercises;

3) repetition and generalization lessons;

4) lessons for checking knowledge, skills and abilities in order to prevent mistakes at the next stage. Different didactic goals can be implemented in each lesson: checking homework; to describe the purpose of the lesson and the topic; preparing students to master new material by repeating what was previously learned or recalling children's life experiences; special exercises for oral calculation, learning new material (the main part of the lesson); strengthening of previously acquired knowledge and skills of children; calculation of learned knowledge; exercise, application of knowledge and skills (the main part of the lesson); independent use of students and its verification; repetition of previously mastered materials; giving homework; summarizing the lesson.

The main parts of the lesson can be combined in different ways and with different methods. Each part of the mathematics lesson in elementary school should be focused on solving general didactic problems. Parts of the lesson should be interconnected according to the main didactic goal. We will look at the content of individual classes.

For example: Lessons to introduce students to new concepts, create new knowledge and skills.

Another way to focus the students' attention is to clearly announce the topic and purpose of the lesson. In this case, it is necessary to increase the interest of





students and create a problem situation. For example: If students are only familiar with the oral method of counting, if they are advised to add two to three-digit numbers, in this case, students will apply their excess knowledge and skills. Students go through certain difficulties. Thus, it is ensured that this example is not difficult to complete with previously learned calculation processes. It is necessary to master a new oral method. The lesson will be devoted to this method.

In the second case, it can be conducted with a short conversation with the students. Such a lesson can be used to explain the multiplication of one-digit numbers.

In order to actively prepare students for mastering new educational material, previously mastered materials are repeated, materials of the nature of repetition are often performed by oral calculation. It is also possible to independently solve examples and problems aimed at mastering new material.

Depending on the complexity of the educational material, a rational way is found at each stage.

When preparing for a mathematics lesson, first of all, it is necessary to determine how well the students are prepared for the new lesson material, and what needs to be repeated for this.

After preparing the mathematics program, work plan, textbooks and training manuals, methodical literature and instructional tools, the teacher starts preparing for the next lesson. First of all, the next lesson determines in what place in the mathematics program, in connection with which topics, the concept should be explained. After all these questions have been stated, it follows that the main didactic purpose of the lesson and its typical features should be firmly established. This helps to determine the content of the lesson. For the didactic purpose of the lesson, the content of the lesson becomes a single system, that is, the integration of separate sections of the lesson, their organic unity complements the parts of the





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lesson and connects each other. When creating a plan or text of a lesson, it is necessary to start by creating the main parts that meet the didactic purpose of the subject. If the lesson consists of explaining new knowledge, for example: the topic of written addition of three-digit numbers, the teacher should first explain the written addition algorithm to the students, and then repeat what was learned from the previous lesson it is necessary, on this basis, it is possible to master the new topic well, that is, whether it is necessary to check the homework before the topic or not, he should think about which assignment to recommend to the students to master the new topic. After that, the teacher takes into account what educational material it is necessary to fill some part of the lesson, what methods and methods of teaching to use, what visual aids can be prepared and used.

It is necessary to determine how much time it will take to complete each section of the lesson. Naturally, the largest part of the lesson should be focused on the section that solves the main didactic purpose of the lesson.

In preparation for the lesson, it is useful for the teacher to show students how to perform the task, that is, solve examples and problems, prepare schematic writing and graphic works. Only after determining the purpose of the lesson, its system and content, the plan or text of the lesson is written.

The plan of the lesson shows the topic and didactic purpose, the visual aids used. According to the order, the structural name of the lesson sections and its content, as much as possible, the approximate time will be shown.

In the text of the lesson, all details are covered as fully as possible. All the questions that help to conduct the conversation are shown, and the answers expected from the students are written. Demonstrations are written when solving examples and problems, as well as performing other tasks. Thus, the teacher should perform the following tasks.

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The plan or text of the mathematics lesson shows the teacher the general



direction and sequence of the work to be done with students, examples, examples of algebraic expressions.

The teacher freely uses the plan or synopsis he made during the lesson, sometimes it is necessary to deviate from the plan he made. For example, if the students did not understand the teacher's explanation, he will give an additional explanation, and if the students have difficulties, he will provide the necessary help. If there are enough exercises to strengthen knowledge, some can be left. In order to find out how the students understood the knowledge, it is possible to ask and check whether they complete the tasks.

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