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STEPS OF TEACHING PROBLEM SOLVING IN PRIMARY GRADES AND ITS LOGICAL BASIS

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ABOUT ARTICLE

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Abstract: In this article, the importance of teaching primary school students to solve problems, through which the stages of development of logical thinking in students are mentioned. Information about the stages of teaching problem solving is provided.

INTRODUCTION

Text problems in elementary school mathematics textbooks are the main means of developing logical thinking in students. As President Sh. Mirziyoyev said, mathematics is the basis of all sciences. A child who knows this subject will grow up to be intelligent, broad-minded and able to work successfully in any field. The science of mathematics develops a person's intelligence and attention, educates determination and will to achieve the desired goal, ensures algorithmic discipline and expands thinking.

Especially in elementary grades, by solving problems, pupils' life, economic and social thinking skills are well developed.

Problem is a natural language expression of situations we encounter in our daily lives. The matter consists mainly of three parts:

1. The condition of the problem means information about the known and unknown quantitative values characterizing the studied situation and the quantitative relationships between them.

2. The requirement of the problem means to express what should be found in the quantitative relations in the condition of the problem.

3. The operator of the problem is a set of actions performed in relation to the quantitative relations in the condition to fulfill the requirement of the problem. Solving complex problems, dividing it into simple problems and solving these simple problems.

Let's talk about the types of problems: all are arithmetic problems are simple depending on the number of operations to solve them and it is divided into several issues. One arithmetic operation is performed to solve a necessary problem is called a simple problem. It is a complex problem that requires the practical implementation of several related actions, regardless of whether they are the same action.

Depending on how simple problems are solved (adding, simple problems solved by subtraction, multiplication, division) or theirs types depending on the concepts formed during the solution can be separated.

Below we present a simple problem and ways to introduce elementary school students to the initial concepts in solving such problems.

1. Views of simple problems

At the initial stage of introducing children to simple problems, a number of complex problems suddenly appear before the teacher:

1. Secondary signals about specific concepts related to the issue should enter and be reinforced in the minds of children.

2. Developing the ability to see the given numbers and the number being sought.

3. Teaching the conscious equalization of actions and their components. After children have mastered some skills of counting in 5, it is necessary to continue to learn it, as well as introduce problems and solve them. The teacher takes 2 notebooks from the table in his left hand and says "There are 2 notebooks in his left hand", then he takes 2 more notebooks in his right hand and says "I have 2 notebooks in my right hand I have a notebook. How many notebooks do I have in both hands?" - he says.

After the children have mastered solving moving problems and have solved one of these problems, the teacher can say: "We have solved the problem with you, now we will solve one more problem. Listen, I will read the problem" - condition of the problem and the children take it off.

The teacher does not give a definition of the concepts "Condition, action, problem, question solution, answer". Children learn these things themselves.

In one of the next lessons, students will get acquainted with the given and sought number.

It is known that the process of solving any text problem consists of several stages:

1. Mastering the problem and its preliminary analysis.

2. Search for a solution, create a solution plan.

3. Perform the solution and answer the problem question.

4. Check the solution and correct it if necessary. Summarize the answer to the problem question.

What is the main task of the student at the first stage?

What is known about the matter? What to find?

The following methods are used to perform this step:

1. Imagine the life situation described in the problem.

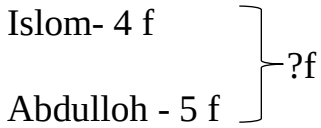
2. Divide the problem text into meaningful parts.

3. Restatement of the text of the problem.

4. Describe the situation described in the problem using: a) real objects b) object models v) graphic models in the form of pictures or drawings.

The form of the short form of simple problem can be different. Which form to choose depends on the structure and content of the matter. Choosing a form of writing, it is necessary to place the given and the sought in such a way that the connections between them are the most understandable. For example, let's write the problem analyzed above in the form of a column, in this case, the writing clearly expresses the mathematical content, the connection between the given and the sought is clearly visible.

"Islam caught 4 fish and Abdullah caught 5. How many fish did the children catch in total?" It is convenient to place a short text on one line and combine the given ones with a big parenthesis. A parenthesis and a question mark below it with the ones given in this case? Represents the connection between the searchers.



From the first grade, conditional symbols are used. For example,
Karim has 7 pens, Sabir has 3 more.
How many pencils are in the bag?
How should children be helped to choose the right course of action to solve a problem? First, the problem must be analyzed, as we discussed above. Children must be taught to imagine the specific situation described in the problem and to understand the connection between what is given and what is sought.
Separating certain meaningful parts in the text of the problem that correspond to those given in the condition helps to correctly write the condition that summarizes the problem and correctly select arithmetic operations.
The ability to formulate simple problems in an independent manner is of great importance in successfully teaching children. When solving complex problems, it is necessary for students to find simple problems and independently construct a series of them. If a student has the skills to construct simple problems, then it is easy to teach such students to solve complex problems. This is why, when solving simple problems, children are forced to think about all kinds of questions about them and select relevant information for the questions.

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