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Methodology for Teaching the Enumeration of Natural Numbers in Primary School

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Abstract: This article outlines the methodology for teaching the enumeration of natural numbers in primary school. It discusses the stages of learning enumeration, from the first decade to larger multi-digit numbers, along with the introduction of arithmetic operations. Emphasis is placed on oral and written enumeration, the gradual increase in the range of numbers studied, and the importance of generalizing and reinforcing concepts throughout the curriculum. It also highlights the role of the decimal system in forming students' understanding of numbers.

Keywords: Primary education, natural numbers, enumeration, arithmetic operations, decimal system, pedagogical methodology, primary school mathematics.

INTRODUCTION

General Issues in Learning Enumeration

The first decade of enumeration covers counting the numbers 1-10, reciting numbers, and mastering the understanding of the order of numbers. The number 0 is also taught along with the first decade as a characteristic of an empty set. During the learning process, enumeration from 11-20, followed by 21-100, is introduced. The formation of numbers 1, 2, ... up to tens is done along with explaining the essence of the decimal number system. In subsequent grades, students will learn the written and oral enumeration of numbers up to 1000 and larger multi-digit numbers, and perform arithmetic operations.

The primary role in the arithmetic curriculum is the systematic formation of arithmetic theory (operations and their properties, relationships between components and results, quantity, number, measurement, calculation, problem-solving, and numeral systems). The methodology for teaching primary mathematics has been developed accordingly. Throughout all stages of primary education, methods are designed to activate students' thinking, generalize observations in a timely manner, recognize connections between problems, and foster independent work and critical thinking.

Enumeration and operations with natural numbers form the foundation of the mathematics curriculum, introducing elementary concepts of algebra and geometry. As a result, higher-level concepts such as numbers, arithmetic operations, and relationships are presented.

The oral and written enumeration of natural numbers is a central issue in primary mathematics. When learning oral enumeration, students are taught to count and express numbers using words such as 1, 2, 3, ..., which play a significant role. Written enumeration introduces the 10 digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9), and introducing these initial concepts is one of the primary tasks.

It is important to repeatedly explain that only the 10 digits are used in written enumeration, whereas new words are created in oral enumeration, such as zero, one, two, ten, twenty, thirty, forty, fifty, etc., as well as hundred and thousand, which emerge during the teaching process.

METOD

From the beginning of instruction, some essential generalizations are formed. For example, students determine how the next number in the natural sequence is obtained. Relationships between any given number and the previous and following numbers are established (i.e., the number a is followed by a-1 and a+1).

Different Ranges for Enumeration of Numbers

The teaching material is gradually expanded, as the scope of numbers increases throughout the school years: in the 1st grade, students learn numbers from 1 to 100; in the 2nd grade, numbers from 1 to 1000; in the 3rd grade, from 1 to 10,000; and in the 4th grade, up to one million.

The material on enumeration and arithmetic operations is divided into four sections: tens, hundreds, thousands, and multi-digit numbers up to a million. Based on these sections, students become familiar with the essence of arithmetic as they learn to enumerate and perform operations within each range, deepening their understanding with each new set of numbers.

Thus, each preceding section prepares students for future learning, while each subsequent section generalizes and reinforces the previously learned material.

RESEARCH RESULTS

Formation of the Concept of Natural Numbers

After students learn to count, they are taught to express these numbers in written form. The numbers obtained from counting and their written representation using digits are referred to as natural numbers. The concept of natural numbers should be explained in relation to the concept of a set. When asking how many elements are in any given set, we count the elements. These numbers are expressed as 1, 2, 3, ..., and each of these numbers is understood as a natural number.

For example, while explaining the number 4, one can refer to 4 legs of a table or chair, 4 corners of a house, 4 wheels of a car, or 4 coins. All of these belong to the same class of sets, and are designated as the natural number 4.

To create a sequence of natural numbers, we begin by describing a set with a single element, characterized by the number one. Adding another element creates the number two, adding another creates three, and so on. In this way, the sequence 1, 2, 3, 4, ... is formed.

Conclusion

This article analyzes the methodology of teaching the numbering of non-negative integers and arithmetic operations in primary school. The main objective of mathematical education in this context is to teach students the order of numbers and how to perform operations on them. Teaching students to number numbers both orally and in writing, as well as explaining the decimal and hundreds number systems, is of significant importance. The educational process focuses on providing students with deep understanding of natural numbers and their

relationships, and enhancing their mathematical knowledge through performing arithmetic operations.

In various stages of teaching, the introduction of new counting units and the use of practice-based approaches help develop students' thinking skills. Gradually teaching numbering and arithmetic operations, and reinforcing and expanding prior knowledge in each new section, allows for a more effective learning process. Thus, using the right methodology and a systematic approach is crucial in improving the effectiveness of teaching mathematics in primary school.

REFERENCES

1. *M. Abdullayev, E. Xakimov «Vvedeniye v etiku»-Namangan, 1998.*
2. *Abdulla SHer «Axloqshunoslik» Ma'ruzalar matni, Toshkent, 2000*
3. *V.G. Fedsov «Kultura servisa» Uchebno-prakticheskoye posobiye - M.,*
4. *«PRIOR», 2001.*
5. *A.A. Avloniy «Turkiy guliston yohud ahloq», T. 1992.*
6. *Y. Y. Petrunin, V.K. Borisov «Etika biznesa» M., «Delo»,2000.*
7. *S. S. Gulomov «Tadbirkorlik va kichik biznes» - T., «Shark», 2002.*