ABSTRACT

This topic deals with the problem of mathematical education of pre-schoolers. The content of mathematical development of children, its structure and approaches to the development of the content of mathematical development is given on the basis of program documents "From birth to school", "Childhood". Here is the implementation of the principles of mathematics, a personality-oriented approach, developing learning in the formation of mathematical representations of preschool children of older groups.

KEYWORDS

Teaching the subject of mathematics, mathematical concept, mathematical representation, features of mathematics in preschool age.

INTRODUCTION

Getting acquainted with the article, students should understand the meaning of "the content of mathematical development of preschool children", the main approaches to the selection of content. Students will get acquainted with the variable teaching of mathematical development of children, compare with historical views on the content, learn to prove their point of view on this problem. Students work with the program, revised in accordance with the standard of preschool education: "From birth to school".

MATERIALS AND METHODS

In the article, the question "What to teach?" and how to teach remain the same. To give knowledge to children the basics of knowledge, whether to equip them only with a set of specific skills with which they
would have some practical orientation, is an important problem of kindergarten didactics. The content of mathematical development is reflected in the program of teaching mathematics to children, and it can be conditionally divided into three such areas:

- representations and concepts;
- dependencies and relationships;
- mathematical operations.

The content of training is understood as the volume and nature of knowledge, skills and abilities that children should master in the process of organizing various activities. The study of various articles on the mathematical development of children allows us to consolidate that the main content in their content is a very diverse range of ideas and concepts: “quantity”, “number”, “set”, “value”, “measure”, “object shape”, "geometric figures"; ideas about space and time. Each mathematical concept is formed in stages, according to the linear-concentric principle. All mathematical concepts are closely related. At preschool age, basic mathematical concepts are introduced descriptively, without any definitions or even descriptions of these concepts. Each concept is introduced visually, by contemplating specific objects or by operating them in practice. In the period of preschool childhood there is a rather extensive area of "mathematical", "geometric" concepts. The content of "geometric" concepts is very vague, it covers the most diverse forms that precede these concepts. Nevertheless, "everyday" concepts are important for the mathematical development of the child as a whole. A specific feature of "everyday" concepts is that they are built on the basis of a generalization of the features of objects that are essential from the point of view of any needs of a person, the performance of various types of practical activities. The second direction in teaching mathematics to preschoolers is to familiarize children with a number of mathematical dependencies and relationships. So, children are aware of some relationships between subject sets (equal number - unequal number), the relation of the order to the mathematical series, temporal relations; relationships between the properties of geometric shapes, between magnitude, measure and measurement result. Especially it is necessary to show the requirements for the formation of certain mathematical representations: overlaying, applying, recalculating, counting, measuring, etc. It is the mastery of actions that has the greatest influence on development.

There are two groups of mathematical operations in the methodology:

- basic (account, measurement, calculations);
- additional, propaedeutic, designed for didactic purposes (practical comparison, imposition, application; equalization and acquisition; comparison.

Thus, the content of "pre-mathematical" preparation in kindergarten has its own characteristics. They are explained:

- specificity of mathematical terms;
- historical in teaching preschoolers;
- the requirements of the modern school for the mathematical development of children. Mathematics teaching material is programmed so that on the basis of already acquired simpler knowledge and ways of activity, new ones are formed in children, which, in turn, will speak as a prerequisite for the formation of complex knowledge and skills.

RESULTS AND DISCUSSION
All attention in organizing the process of forming mathematical representations in children of 3 and 4 years of age is given to the creation of a developing environment. In this program, it is noted that all objects, toys should differ in size and shape. In the process of playing actions with objects, geometric shapes, sand and water, children learn their properties, determine the singularity and differences of objects by properties. The adult creates the conditions and environment favorable for the worthy development of the child in the activity of comparison, reading, creation, grouping, regrouping. With this initiative in modern games, the action belongs to the child.

The educator chooses, studying, analyzes the situation, directs the process of its development, contributes to obtaining the result.

**CONCLUSION**

From early childhood, the child is faced with objects that differ in shape, quantity and color. It was then that the first idea of mathematics was laid and formed in the child. Acquaintance with geometric shapes begins with the first toys: cubes, pyramids, constructor. Parents teach children to name their shapes and colors. Mathematical representations are ideas about number, counting, simple calculations, set, geometric shapes and their shape, measurements and quantities. The educator creates conditions that are favorable for the child to be involved in comparisons, reproduction, grouping, regrouping, and so on. At the same time, the initiative for the development of play and actions belongs to the child. The educator highlights the situation, analyzes it, conducts it, helps to get the result.

The article considers mathematical teaching and methodological development and education of preschool children from 3 to 6 years old and is one of the structural components of the educational system. The main goal of the article is to always implement the principle of continuity and ensure the development and education of preschoolers in accordance with the concept of the educational system. The main attention in the article is paid to the development thinking and creative abilities of the child. Preschoolers do not just explore various mathematical forms, but come up with images of numbers, numbers, geometric shapes. Starting from the very first lessons, they are systematically offered tasks that allow different options to solve.

**REFERENCES**

1. Beloshistaya A.V. What is the mathematical development of a preschooler// Kindergarten: theory and practice 2012, No. 1.-p.6-17