

## BASIC DIDACTIC PRINCIPLES OF EDUCATION OF FORMATION OF MATHEMATICAL IMAGINATION IN PRESCHOOL CHILDREN

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### ANNOTATION

The history, current state and modernity of the theory of the method of forming mathematical ideas. Based on the requirements of the Law of the Republic of Uzbekistan "On Education", the Law of the Republic of Uzbekistan "On Preschool Education and Training" and the State Curriculum "Ilk Kadam" The main goal of education is to educate the young generation as a healthy, comprehensively developed person based on the ideology of independence and to prepare them for school education.

**Keywords:** Education, preschool education, mathematical skills, pedagogy, task, scientific principle.

The main tasks of educating children of preschool age is to prepare children for regular education based on national and universal values, taking into account their innate abilities, interests, needs and opportunities for physical, mental and spiritual development. One of the main tasks of improving the process of education for children of preschool age is the scientific and methodical provision of the future pedagogue, increasing his professional training. In order to form the concepts of quantity and number, size and shape of objects, and geometric figures in children of preschool age, repeating the same methods of movement many times in different situations and with different visual materials allows children to master them. will give.

General didactic principles of formation of mathematical concepts in children. The formation of children's elementary mathematical ideas is based on the following didactic principles:

1. Scientific principle. This principle requires that the facts studied in pre-school educational organizations should be covered in accordance with the way they are covered in science, that is, when we talk about scientificity, first of all, the content of the given knowledge should be structured on the basis of scientificity. we need to pay attention.
2. The principle of unity of theory and practice. This principle requires that theoretical knowledge be connected to life and practice by all measures. This principle is widely implemented by moving directly from mathematical theory to solving various exercises and problems. It is really necessary to train young children in connection with things that they see every day in the room, on the street, at home, that is, to give them knowledge, because this will help them quickly understand, helps to master.
3. The principle of directiveness. It depends on the characteristics of the development of children's thinking from clarity to abstraction. The main goal of teaching mathematics is to develop logical thinking; However, the teaching of mathematics cannot be separated from concrete facts and images, on the contrary, the study of any problem should begin with the examination of these concrete facts and images.

Demonstration makes it easier to master the educational material and helps to consolidate knowledge. For example, when we talk about a circle, give each child a circle and have them hold it between their hands. The fact that it is round and flat is better remembered by the child with the participation of all analyzers at the tip of the hand.

4. The principle of systematicity, sequence and consistency in knowledge acquisition. In mathematics, the importance of systematic presentation of material is very important, because logical connections between certain facts are extremely important in mathematics. The knowledge given to children should not be piecemeal, but should be connected with each other, starting with easy examples and gradually becoming more complicated.

And thorough mastery is especially important in mathematics. Mathematical concepts are so interconnected that even if they do not know even a part of the mandatory minimum, children will not be able to use their knowledge in life, and it will be more difficult to continue learning mathematics. In mathematics, it is very important to master the skills of numbers and counting, size, geometric figures, knowing the surroundings, and measuring time. Especially in mathematics, more than in other subjects, it is impossible to move forward successfully without mastering some part of the program and without strengthening skills.

5. The principle of individual approach. This principle comes from the requirements that children's age characteristics, that is, their abilities, psychology should be taken into account, and this principle must be implemented during the teaching of mathematics.

Organization of development of mathematical ideas in preschool educational organizations. The main form of work on the formation of mathematical ideas is an educational game activity. Most of the tasks of the program are solved in educational monthly activities. In children, imaginations are formed in a certain consistency, necessary skills and abilities are formed. Didactic games and exercises are widely used in educational activities and in everyday life. Children's mathematical ideas are strengthened, deepened and expanded by organizing games outside of the educational activities. The following interactive methods aimed at expanding children's knowledge and intended for participation are used in educational monthly activities:

- Short story
- Explanation
- Display
- Working in small groups (group work)
- Work in pairs
- Walk to the gallery
- Problem situation
- Question - answer
- Encouragement
- Practical work
- Creativity
- A game to strengthen knowledge
- Formulating a problem, finding a solution
- Graphic dictation

These methods have been used alternately in training. The Ministry of Preschool Education of Uzbekistan redeveloped this program taking into account the specific aspects of our republic:

climate, geography, economy, culture, and national conditions. The program includes the scope of knowledge and skills that children from birth to seven years of age should acquire. It implies the comprehensive development of preschool children, taking into account their psychological and physiological characteristics.

In preschool educational organizations, education is carried out by a pedagogue-educator. It occupies a central place in the pedagogical process. That's why the educator should have deep knowledge of his field, master various methodological tools, and have thorough pedagogical and psychological training. In addition, specialized subjects, including the Law "On Education", the National Program of Personnel Training, pedagogy of preschool education, the state program "Ilk Kadam", State Education Standards, it is necessary to thoroughly master the science of methods of preparing children for school and others. By the time of schooling, children should have relatively more knowledge about sets and numbers, shapes and sizes. didactic requirements. The requirements for conducting mathematics educational activities are as follows:

1. In the educational activities of mathematics, planning other sections of the program along with the numeracy section, the program task in the numeracy section should occupy the main place in all classes.

2. Two-three program tasks are planned for each educational activity.

The first one is new, the next ones are duplicates.

3. After six to eight educational activities, it is recommended to conduct educational activities repeatedly.

4. The main teaching method in mathematics educational activities is the visual teaching method. Action games and didactic game methods occupy a large place in the teaching method.

5. In mathematics educational activities, the content of the program is explained to children on the basis of visual materials.

6. At the end of the training in the second small and medium group, the teacher summarizes the content of the program in understandable words for the children.

7. It is summarized with the participation of children in the adult and preparatory group. When organizing educational activities, the educator is required to:

1. To know the fundamental laws of children's scientific, psychological and pedagogical development.

2. Knowing the scientific system in the development of children's mathematical imagination.

3. To know the program for teaching elementary mathematics ideas in each age group, that is, the content of the work.

4. Mastering methodological methods of teaching children, that is, how to conduct work.

5. To know that mastering the material of the training program is carried out only in special educational activities.

6. Knowing how to plan other mathematical concepts: size, shape, circumference, time, together with counting activities in each educational activity.

7. Knowing that educational activities are structured on the basis of the didactic principle.

8. Wide use of various analyzers in educational activities.

9. Knowing that extensive use of visual materials is one of the most important conditions.



10. Every child should know that working with handouts is the main condition of every educational activity.

Educational activities in mathematics should be held on a certain day of the week.

Methodology and organizational features of conducting mathematical educational activities in different age groups of the preschool educational organization. The teacher carefully studies the content of the program while preparing for the educational activities. Mathematical knowledge is given to children in a strictly defined system and consistency, in which new materials should be at a level that children can master. Each task is divided into a number of sub-tasks. These subtasks are studied sequentially. For example, introducing the children of the preparatory group to dividing things into pieces is carried out in this sequence: in the first educational activity, children practice dividing things into two equal parts and learn what half is; in the second educational activity, children's understanding of divisible objects is expanded and corresponding vocabulary is activated; in the third educational activity, the educator introduces children to the methods of dividing objects into four equal parts, and also shows the relationship of the whole to the part;

later shows children different ways of dividing geometric shapes into two and four parts, children learn the relationship between the whole and the part. Thus, each section of the program is implemented in several (three-six) educational activities held in a row. Children's knowledge is expanded, clarified and strengthened when moving from one educational activity to another. When moving from one section of the program to another, it is important to repeat what has been passed, to ensure the connection of new knowledge with acquired knowledge. In the process of learning new material, repetition of previous material not only deepens children's knowledge, but also allows them to focus on new material and learn it thoroughly. Usually, a new topic is studied during three to five lessons, first in its first part, and later in the second part. The topic should be repeated after two weeks, sometimes three weeks. As the period of returning to the old material progresses, each studied section of the program should remain in the educator's mind until the end of the school year.

## CONCLUSION

In this regard, studying issues related to one section of the program or different sections, namely "Quantity", "Count", "Size", "Shake" and other sections of the program in one session. and can be repeated. In this way, it will be possible to ensure that children study the program consistently in all sections and form a system of elementary mathematical knowledge in them. Various types of educational activities are used in teaching mathematics.

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