Volume-11| Issue-2| 2023 THE IMPORTANCE OF MATHEMATICS IN THE DEVELOPMENT OF THE INTELLECTUAL POTENTIAL OF PRESCHOOL CHILDREN



Physical education is important in raising healthy and well-rounded children of preschool age. Physical education of children has a special place in the educational system, it prepares the ground for the child's health, proper physical development, and deep learning of the knowledge provided in the preschool education system.

The need to develop the concept of continuous mathematical development of a preschool child is determined, on the one hand, by the modern requirements of the organization of a person-oriented educational process in a preschool educational institution, the purpose of which is the child's development, on the other hand, continuous death during the preschool education stage related to the need to solve the problem of creating a training process.

In the process of forming mathematical ideas, the initial condition of the intellectual development of preschool children is the goals and tasks of the educational process reflected in the relevant concepts. The urgency of the problem of intellectual development of older preschool children in kindergarten determines the need for a careful analysis of research and literary sources on the problem under consideration.

Criticality is one of the qualities of mind formed in the process of intellectual education of preschool children. Criticality of the mind refers to the ability to evaluate the results of cognitive activity (one's own and other people), selected methods of solving problems, conclusions, judgments.Intellectual development is manifested in the breadth of consciousness - the ability to consider the phenomenon in various connections and relationships, the ability to generalize. International Journal of Education, Social Science & Humanities. FARS Publishers Impact factor (SJIF) = 6.786

Thus, intellectual development is the process and level of cognitive activity of a growing person in all its forms: knowledge, cognitive processes, abilities, etc.; this is done as a result of the influence of life and environmental conditions on the child. The hereditary fund of deposits is also important. However, the leading, defining role in intellectual development belongs to systematic intellectual education. It includes organizing and managing the process of acquiring knowledge and managing the process of forming a system of intellectual actions and knowledge skills as a targeted pedagogical effect.

The intellectual development of the child includes the child's worldview, a stock of unique knowledge. The child should master regular and separate perception, elements of theoretical attitude to the studied material, generalized forms of thinking and basic logical operations, semantic memorization. However, mainly the child's thinking remains figurative, based on real actions with objects and their substitutes. Intellectual development also includes the formation of the child's initial skills in the field of educational activity, in particular, the ability to distinguish the educational task and turn it into an independent goal of the activity. In older preschool age, the nervous system improves, the functions of the cortex increase. The child's psyche is developing rapidly. Interdependence of the processes of excitation and inhibition changes. The accuracy of the sense organs increases. Color sensitivity increases by 45%, articular-muscular sensations improve by 50%, and visual perception by 80% compared to the average age of preschoolers.

The cognitive activity of an older preschool child is mainly carried out in the educational process. Expanding the field of communication is also important.

The perception of older preschool children is characterized by instability and chaos, but at the same time it is characterized by sharpness and freshness. Perception is a special-purpose activity that becomes more complicated and deeper, analyzes more, differentiates, and acquires an organized character.

Attention of older preschool children is not arbitrary, not stable enough, limited in size. Voluntary attention develops along with other functions and, above all, learning motivation, a sense of responsibility for the success of educational activities.

In older preschool children, thinking continues to be emotional-figurative, abstract-logical, and related to their speech. The vocabulary consists of about 3500-4000 words.

Memory is of great importance in the cognitive activity of an adult preschool teacher, which is mainly visual-figurative in nature.

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A characteristic feature of children of this age is to understand the surrounding events, to search for the determinant of the surrounding reality. Cognitive activity of children of this age helps to develop intelligence and prepare for systematic learning. Therefore, it is very important to develop horizons from the age of three, to be saturated with activities available to understand children, which will give food to the mind of a four-year-old child and make it necessary to study the nature of the things that surround him. emits

"On the basis of children's curiosity, later interest in learning is formed; the development of cognitive abilities serves as the basis for the formation of theoretical thinking; the ability to communicate with adults and peers allows the child to move to educational cooperation; the development of independence is educational allows to overcome difficulties in solving problems".

Having studied the intellectual development of preschool children, N.N.Poddyakov wrote: "One of the general tasks of studying the problem of intellectual education of preschool children is the development of the content of education, the mastery of which enables children to successfully move in the surrounding spheres of reality that they encounter in everyday life within the limits available to them. allows them to do "

In the preschool group, children learn some hidden important mathematical connections, relations, connections between "equal", "large", "small", "whole and fractional" quantities, the connection between measurement quantities and numbers. special attention is paid to the development of the ability to identify connections. Formation of the mathematical imagination of children of preschool age creates a basis for raising their logical thinking to a new level and for the development of their mental activity in general. Children are taught to count visually and mentally. Their ability to see with their eyes and quickly distinguish shapes develops. At this age, it is very important to develop mental abilities, independent thinking, aspects such as analysis, synthesis, comparison, the ability to discuss, draw conclusions, and quantitative imagination. The program for the development of elementary mathematical imagination of the pre-school preparatory group envisages the generalization, systematization, expansion and deepening of the knowledge acquired by children in previous groups. In the preparatory group for school, 2 classes in mathematics are held a week, 72 classes are held during the year. Duration of classes: the first - 30 minutes, the second - 20-25 minutes. The structure of each exercise is determined by its content. It serves to learn new material, repeat and consolidate what has been learned, and check children's acquired knowledge. It is characteristic that didactic instructional materials are widely used in the mathematical training conducted in the preparatory group. Assignments related to practical work, exhibition organization International Journal of Education, Social Science & Humanities. FARS Publishers Impact factor (SJIF) = 6.786

can also be considered as examples. The teacher-educator can make corrections to them, taking into account the instructions he has. One of the goals of teaching children mathematics and improving the educational process in preschool education is the development of mathematical concepts in children. Mathematical knowledge in children makes it possible to study the world in a deeper and fuller way without being separated from life. The process of solving mathematical problems requires independent thinking in its essence, develops resilience, and develops creative abilities. The level of development of mathematical concepts is different for different people. Its formation requires constant training. These exercises begin with family and preschool education. If there are parents in the family, there will definitely be a teacher-pedagogue in preschool education.That's why every pedagogue should be armed with the theory of pedagogy and modern pedagogical technologies of teaching (interactive methods, individual approach, teaching independent practice, etc.) Modern pedagogical technology based on theory

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