



INTERESTING MATHEMATICS TRAINING IN PRESCHOOL EDUCATIONAL ORGANIZATIONS AS A TOOL FOR THE DEVELOPMENT OF LOGICAL THINKING IN CHILDREN

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Annotation: *the article presents information on the impact of interesting mathematics training on the development of the child, on the formation of the child's mathematical thinking, in which it also serves to increase interest in science and knowledge. Advanced pedagogical technologies, in particular the montessori methodology, STEAM education and gaming technologies, have been cited as very effective in shaping mathematical thinking in children.*

Аннотация: *в статье представлена информация о влиянии интересного обучения математике на развитие ребёнка, на формирование его математического мышления, что также способствует повышению интереса к науке и знаниям. Передовые педагогические технологии, в частности методика Монтеessori, STEAM-образование и игровые технологии, считаются очень эффективными для формирования математического мышления у детей.*

Pedagogical studies show that interesting mathematics training has a positive effect on the development of the child not only mentally, but also socio-emotional. Through team training, children develop skills such as collaborating with each other, engaging in dialogue, and expressing their thoughts. This is instrumental in strengthening their readiness for the future learning process. Therefore, in the preschool system, it is recommended to teach mathematical knowledge in interesting and interactive ways. This includes mathematical games, interesting examples, practical experiments and the use of didactic materials. This approach, along with

the formation of the child's mathematical thinking, also serves to increase interest in science and knowledge in it.

The views of modern pedagogical psychologists on the development of logical thinking through interesting mathematics in preschool adults and the provision of elementary mathematical knowledge to them require the use of new methods in the educational process. Studies show that in children's cognitive development, it is important not only to master ready-made knowledge, but also to actively research, experiment and understand logical connections. For this reason, combining playful education, interactive methods and cognitive development techniques in math activities designed for children increases efficiency.

From the point of view of modern educational psychology, the interactivity of the environment and the process of learning connected with movement are of great importance for the development of logical thinking in children. Researcher J. Bruner emphasized the gradual development of children's cognitive activity, forming first sensorimotor experience, then visual perception, and finally abstract thinking. Therefore, in the provision of mathematical knowledge for preschool children, it is necessary not only to rely on visual tools, but also to use such techniques as direct experimentation with them, holding objects, acting with forms. Also, explaining mathematical concepts for children through interesting mathematics through an understandable and intimate environment increases efficiency. For example, preschool children realize the concepts of number and quantity through simple activities such as comparing objects in the environment, comparing their shape and size, grouping. Therefore, it is recommended that educators and parents communicate with children in the form of a game, explaining simple mathematical actions such as counting, comparing and sorting in relation to life situations.

Scientific research shows that advanced pedagogical technologies, in particular the montessori methodology, STEAM education and gaming technologies, are very effective in shaping mathematical thinking in children. In the

Montessori methodology, children are given the opportunity to independently discover mathematical concepts. Through this method, children understand logical connections through practical activities such as picking, grouping, comparing objects.

STEAM education, on the other hand, combines math, engineering, and art directions to offer children more interactive and engaging activities than traditional approaches. For example, by creating construction projects using simple geometric shapes or composing shapes, children can reinforce mathematical concepts in their own experiments. Also, in modern children's psychology, the importance of teaching with the help of informative Technologies is growing. In the study of mathematical concepts, digital games, interactive programs and visual animations increase the interest of children and actively involve them in the topic. For example, it is possible to develop children's logical thinking through the familiar games of mathematical puzzles, counting and shapes using computer programs.

Mathematical education for preschool children should be considered not only as the study of numbers, but also as a process of strengthening their thinking skills, developing observability and teaching them to the systematic perception of the environment. Therefore, educators and psychologists should take into account the wide application of interactive methods in classes with children, the creation of opportunities for experimentation and the individual development characteristics of each child. This approach also helps a lot to prepare children for the next stage of Education.

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