

The Importance of a Child's Brain Development in Mental Arithmetics and its Role in Life

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Annotation: This article discusses mental arithmetic in preschool education and provides a promising platform for further education, allowing to achieve excellent intellectual and creative development results in the learning process.

Keywords: Mental arithmetic, mathematics, ability, memory, numbers, figurative thinking, development;

Introduction

Mental arithmetic is a very effective program for developing mental abilities using arithmetic calculations. Develops the ability to be independent, enterprising and self-critical. Mental arithmetic already works in 52 countries around the world.

Main Part

Mental arithmetic develops a child's brain and mathematical thinking, allowing students to focus on assigned tasks, memorize large amounts of information, and solve complex mathematical examples. Acquired skills have a positive effect on the development of the mind and the individual to the child.

The rapid pace of scientific and technological progress encourages us to keep pace with the times and pay due attention to the education of modern children. There are not enough school and preschool programs. That is why mental arithmetic is so important.

During arithmetic, the child simultaneously moves the wooden bones with the thumb and forefinger of both hands, which helps the two hemispheres of the brain to develop harmoniously. At the same time, the child learns to express numbers and mathematical movements in the form of a certain position of the bones on a knitting needle.

For mental arithmetic, the age of 4 to 12-14 years is the most intensive period of brain development. After the age of 12-14, the brain's ability to acquire and use such complex quantities and speed decreases.

Practice has shown that for many children, learning outcomes improve not only identified computational ability, but also concentration, memory, figurative thinking, imagination and observation, and the ability to analyze and summarize. At the same time, emotional and volitional qualities (independence, determination to achieve results, voluntary regulation of behavior, self-confidence) develop.

The left hemisphere of the brain is responsible for logic, mathematical abilities, and language differences, while the right hemisphere is responsible for creativity, art, imagination, visualization, and nonverbal aspects. Malaysian scientists also support this conclusion. Using both hands when working on an abacus initially stimulates both sides of the brain. Because the child is always moving with both hands. Working with an abacus is a continuous process that constantly feels and moves the baby's bones. It activates both parts of the brain. In the past, man only achieved the extraction rate possible for mathematical geniuses.

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Conclusion

In conclusion, with the right approach to teaching and reinforcing the knowledge of preschool and primary school age children, it emphasizes that they demonstrate phenomenal skills in performing arithmetic operations in their minds with 2,3,4-digit numbers. Scientists and practitioners see an important factor in the

effectiveness of the program as the fact that in the learning process the child almost always experiences a process of success, which is associated with a positive reinforcement, a unique approach.

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