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DEVELOPING IMAGINATION ABOUT SPACE OF PRIMARY SCHOOL STUDENTS IN THE LEARNING PROCESS

Gulchehra Sofiboyeva

Basic Doctoral Student (PhD)

Namangan State University, Uzbekistan

ABSTRACT: In this article, we have focused on the learning process of educators and learners. Objective: To study the current situation and the problem of improving the effectiveness of the study of geometric materials through the development of spatial imagination of primary school students in educational institutions. It's about finding the right solution to a problem.

KEYWORDS: imagination, spatial imagination, geometry, geometric materials, spatial shapes.

INTRODUCTION: The role of the child's imagination is enormous. Children because of their imagination they can easily remember the past, for example, if you tell a child the name of something that is not in front of his eyes, he will look around with his eyes and look for it [1]. Educational activity at the primary school age is a leading activity. Advanced thinking, including spatial imagination, is the basis for the development of cognitive processes and qualitative change, which in turn becomes the basis for success in educational activities. [2]

In "Developing the Spatial Thinking of School Students," I.S. Yakimanskaya gives the following definition: "Spatial thinking is a type of mental activity that allows the creation of spatial images and their operation in the process of solving various practical and theoretical problems" [3].

Through the child's perception of the environment, a spatial imagination is formed in him. Children begin to demonstrate spatial features by drawing and modeling. Their geometric spatial representation is evident through their drawings and models. One of the most effective ways to teach geometry is to do more practical work in teaching geometry in primary education.

In order to improve the quality of teaching geometry and mathematics, we focused on the learning process of teachers and students. We have studied the current situation in the study of geometric materials and increase their efficiency by developing the spatial imagination

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of primary school students in educational institutions. During the observation, we received questionnaires from teachers and students. As a result, students do not fully develop general competence in geometric content. One of the main reasons for this is that students do not develop spatial imagination.

MATERIAL AND METHODS. Children have simple tasks to develop spatial imagination (Figure 1). Along with the teacher, parents have a big role to play in this task.

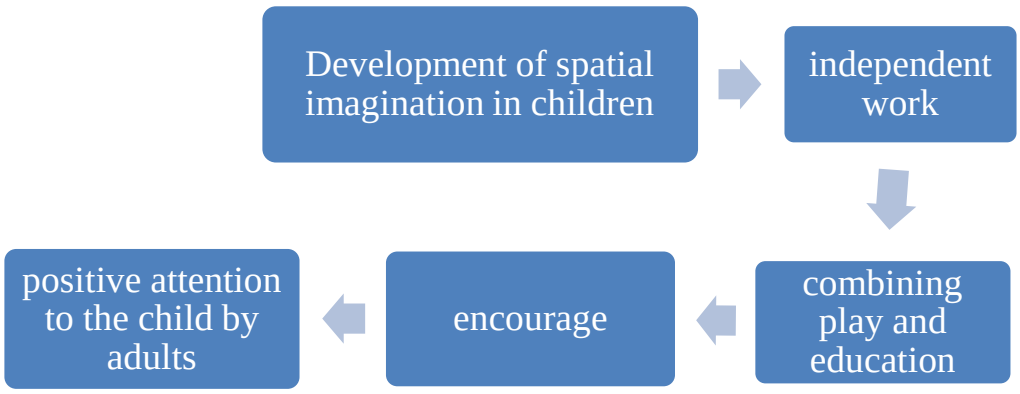

Figure 1. Tasks of developing spatial imagination in children

The tasks listed require a brief explanation. The tasks of developing spatial imagination are the study of geometric materials and the development of spatial imagination of primary school students.

As a result of the organization of experiments and observations, we can see that in the primary grades there is almost no introduction to geometric materials and practical training, limited only to the provision of theoretical knowledge. Proof of this is the fact that the questionnaires received from students were difficult to complete. The questionnaires in the questionnaire were grouped according to the SES requirements. In order to overcome these shortcomings and further develop our students 'geometric knowledge, we set up a team of teachers and planned a series of activities.

In order to improve the methodology of teaching geometric materials, we have identified the following "Tools used in teaching geometric materials" (Figure 2). The effective use of the above tools can be widely used in primary school to improve the mastery of geometric materials and increase the effectiveness of the lesson.

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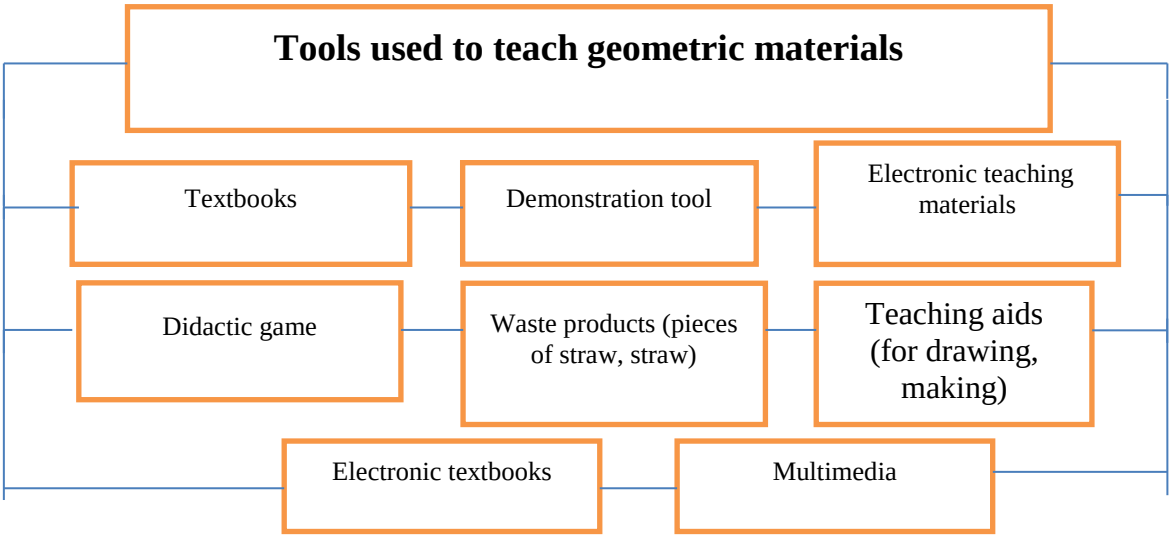

Figure 2. A tool module used to teach geometric materials.

Well-developed spatial perceptions in primary school can be a solid foundation for mathematical achievement in primary school and beyond [4].

Spatial perceptions develop and become stronger over time. As a result of the analysis of psychological and pedagogical literature, the approaches of scientists, educators and psychologists to this topic were studied, the features of the development of spatial imagination of primary school students were revealed[5-8].

CONCLUSION. The following pedagogical and psychological conclusions are appropriate:

- The work on the development of spatial imagination in students should be ongoing and systematic.
- Taking into account the learning activities of students in the planning of lessons and the use of didactic materials.
- Ensuring the use of a variety of methods and training to develop spatial awareness.
- Establish controls after spatial development exercises.

The spatial imagination formed during primary education is the most positive and effective. Therefore, we believe that textbooks should include as many materials and assignments as possible that develop geometric spatial imagination.

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