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THE ROLE OF LOGICAL ISSUES IN TEACHING MATHEMATICS TO PRIMARY SCHOOL PUPILS

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ABSTRACT

In the article pedagogical prerequisites are considered for the performance by younger school students of the system of assignments in mathematics as a method of forming logic acknowledges skills and means of the practical study of logical concepts. At three stages, circular schemes, models of actual things, and verbal representations of logical relationships are used as a tool instead of visual models. Junior high school students believe that the process of learning and cognition is not limited to mathematics lessons and textbooks, but rather pervades their whole lives.

KEYWORDS: *Logical Thinking, Junior Schoolchild, Mathematics Lesson, Problem Situation.*

INTRODUCTION

In the professional training in future teachers of pedagogical educational institutions, logical training is a required and essential component. It is inextricably related to psychological-pedagogical, methodological, and specialized education. According to the findings of the study, it is essential to develop general logical skills in conjunction with the teaching of fundamental disciplines. Because of its characteristics as a science and an academic subject, mathematics is the best discipline for developing logical literacy in students. A list of skills that make up so-called logical literacy defines and represents the content of general logical training for students as a whole. The current practice of logical training primary school age children was validated by an analysis of the existing practice of logical training primary school age children. One of the

key goals of our research is to develop methodological principles for the rational training of students in mathematics. In this regard, we will mention the problem-solving methods that have been the focus of special analysis and incorporation into our methodology.

The method of propaedeutic exercises is one of the sources in the primary education process for forming and developing critical thought in younger schoolchildren. These activities, on the other hand, can only become a means of improving critical thought if the students' mental behavior is adequately guided and supervised by an instructor during their execution. General methodological principles of work on formation logical awareness and skills in teaching mathematics at school have been determined in a variety of methodological studies. We developed the following fundamental principles of organization logical training based on the study of these works and taking into account the details of modern elementary school.

Children's logical reasoning methods cannot be developed individually at the stage of cognitive growth until they reach school. The teacher's job is to lay the groundwork for critical thinking and skills. Every action should be carried out in a material and materialized plan, with the obligatory pronunciation of each procedure, taking into account the age opportunities of children. The work on forming logical concepts and behavior is propaedeutic in nature since it requires logical terminology and definitions; additionally, schoolchildren are not expected to know such logical laws. This work aims to develop students' basic logical knowledge and skills, which serve as the foundation for further education. To help junior high school students develop logical knowledge and skills, we can use a range of learning resources that include content at various levels of abstraction. Specific objects appear at the first rank, the lowest, as an indicative basis of action. We may use circular schemes as visual models of operations and relationships.

""Identifying and running object features," "Working with logical terms," "Classification," "Definitions," and "Inferences." We regard junior schoolchildren's completion of the problems system as a method of logical understanding and ability formation as well as a means of their realistic analysis of logical concepts, behavior, and disclosure of their relations. Thus, the work on logical training of junior schoolchildren should be based on the following foundations:

- Organic connection with specific (strictly mathematical) content of the course;
- Continuity between primary and secondary schools;
- Gradual, purposeful and systematic formation of each skill;
- Gradual increase of the abstraction level of the proposed material and the methods of operating it (from actions with real objects to operating their models and verbal descriptions);
- Disclosure the general validity of logical relations and forms by attracting a diverse content (both mathematical and non- mathematical) to formulate the same skills;
- Mastery by logical skills without using special terminology.

Different approaches to classifying issues can be found in pedagogical literature. School mathematical problems can be divided into algorithmic problems, whose solution is uniquely determined by some algorithm, semi-algorithmic and semi-heuristic problems, whose solution is ambiguously determined by some scheme containing both algorithmic and heuristic instructions, and heuristic problems, whose solution is not guaranteed by a finite set of instructions. Not only

critical thought, but also intuition, is needed in this situation. To teach schoolchildren how to solve problems involving mathematics material, we primarily use semi-algorithmic and heuristic problems. This helps one to build both formal logical and intuitive thought elements. It is important to teach all students how to solve specific problems on their own in order to teach them how to solve problems.

Methodists stress the importance of "including such an aspect as the formation of methods of pupils' learning activities in the learning process in all components of the methodological framework of teaching mathematics." They classify learning activity methods into four categories: general learning methods, general methods of learning activities in mathematics, special methods of learning activities for specific mathematical disciplines, and private teaching methods. When teaching students how to solve problems with geometric material, it's important to emphasize the importance of looking for a solution.

The key issue that mathematics teachers face when teaching geometry to seventh-grade students is that the students not only have no prior experience with proof construction, but also have no internal need for proof and do not recognize its importance. However, the issue of instilling in students an inner need for evidence should be addressed over time, and this work should begin as early as possible, not only in classes, but also in the solving of specially selected systems of problems. As previously stated, it is critical to begin developing logical thought as early as possible, and on a variety of materials. Since solving problems with geometric material does not necessitate a deep understanding of geometry, they can be solved by a fifth-grade student.

IN THE CONCLUSION

peculiarities of the logical training teachers are: organic relationship of logical training with other areas of professional and pedagogical training of pupils, its integral nature; the bilateral nature of the process of logical training; consideration of development features of junior pupils.The layout of a real lesson does not exclude logical reasoning, but it is important to actively include the subject content of the training material in its creation. Junior schoolchildren's critical thought and educational - logical abilities can be continued outside of the classroom.

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