



THE IMPORTANCE OF BEING ABLE TO THINK CREATIVELY IN THE FORMATION OF PUPILS' THINKING IN AN INTERDISCIPLINARY ABSCISSIAL AND ORDINATE CONNECTION

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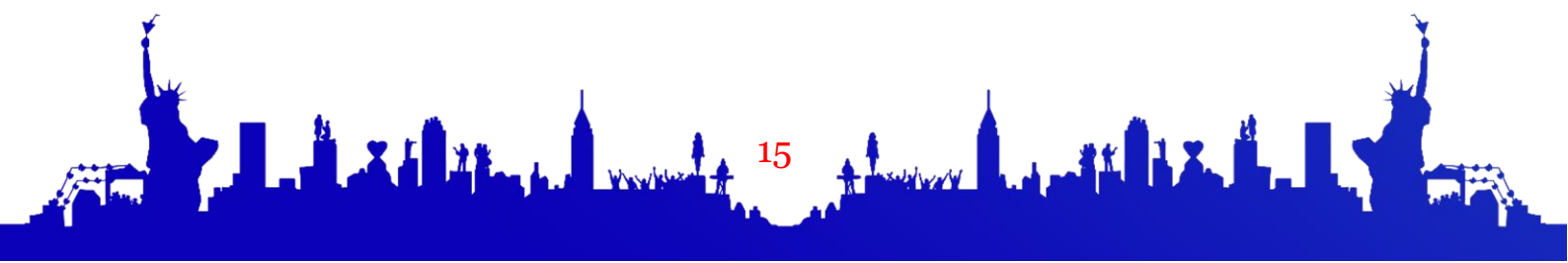
Annotation. The article explores the didactic foundations of the importance of being able to think creatively in the formation of pupils' thinking in interdisciplinary abscissial and ordinal communication.

Key words: creative thinking, logic, space, problem, ability, memory, abstraction, reasoning.

A pupil is not born with ready-made forms of logical creative thinking. The ability of logical creative thinking is formed in him throughout his life, and special conditions are necessary for its full development. In such an approach, special importance is given to imparting social experience, that is, teaching. D. B. Elkonin, while analyzing the educational activity of pupils, describes its essence as self-change by the pupil [8].

As a result of the research, it was found that in the formation of mathematical creative thinking by interdisciplinary abscissial and ordinate connection, primary school pupils take into account the high level of mental operations (analysis, synthesis, abstraction and generalization), economy and independence of creative thinking, and its flexibility. Based on these, the following conditions for the formation of the mathematical creative thinking of primary school pupils by interdisciplinary abscissial and ordinate connection were based: fullness of acquisition and acquisition of mathematical knowledge, skills, skills and competences; a wide range of acquired and acquired mathematical knowledge, skills, skills and competences; step-by-step acquisition and acquisition of complex mathematical concepts; formation of mathematical knowledge, skills, qualifications and competences; extension of the process of formation of skills, qualifications and competences in the phase of mathematical knowledge; step-by-step processing of each mathematical skill, skill, and competency.

In educational activity that develops theoretical mathematical imagination, it is shown as the integrity of the components of setting educational tasks, learning activities, self-control, and self-evaluation.





The educational task, unlike the practical one, provides an opportunity to explore the method of problem solving and includes a number of learning operations [3].

A.N. Leontev considers activity in a narrow sense as a process directed to the subject of immediate need [4].

Creative thinking is not only an activity, but a mental process that is continuously formed within it. With the help of a continuous formation process, a person uses and changes the relatively stable mental operations available to him, forms new intellectual operations and determines new features of problematic situations and issues [1]. That is why the issue of the regularity of the process of creative thinking, which is divided into separate links or acts (thought actions), is considered important.

M. Jumaev emphasized that aspects such as listening, reading, observing, measuring, calculating, feeling, perceiving, imagining, remembering, and thinking during various cognitive activities serve to form the imagination and creative thinking of primary school pupils [5].

The place and role of the issues of creative description in the formation of mathematical creative thinking in interdisciplinary abscissional and ordinal connection in primary school pupils. F. Qasimov recommends dividing the system of creative educational tasks in mathematics into the following principles [7]: 1) compatibility of creative educational tasks with the content of the educational material; 2) compatibility of creative educational tasks with the age, interest, and abilities of pupils; 3) the strength of creative tasks equal to the stages of the educational process; 4) interdependence of assignments; 5) complement each other of educational tasks; 6) the complexity of educational tasks.

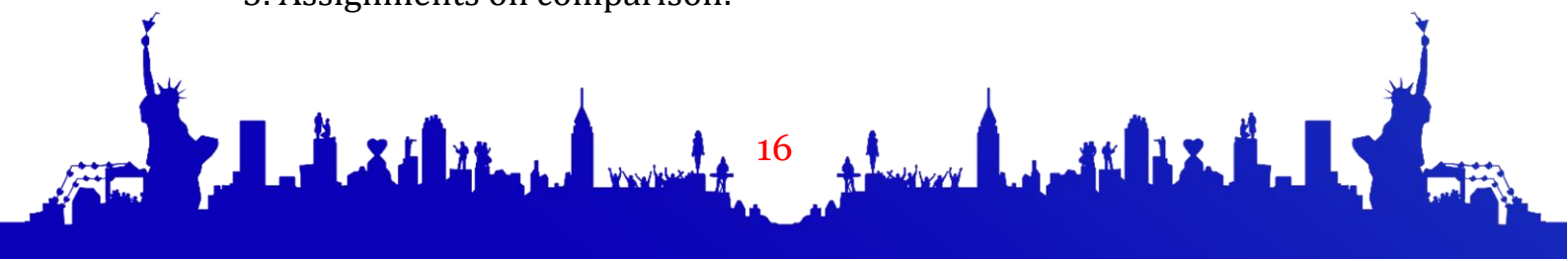
And M. Jumaev emphasizes the system of tasks of creative description expressed by F. Kasimov [5; 7] and they:

1. Tasks on creating examples and problems and changing them by teachers.

2. Tasks on dividing examples and problems into groups according to a sign:

- a) on dividing assignments into groups depending on the answer; b) about finding the regularity in the series of numbers; c) about finding the legality in the example being executed; g) problem-assignments of a combinatorial nature.

3. Assignments on comparison:





a) equality, about finding the numbers correctly for the inequality to be correct; b) about the correct choice of action signs ($>$, $<$, $=$) for equality, inequality to be correct; c) about appropriate use of parentheses for equality and inequality; g) number, on comparison of expressions; d) assignments on the correct choice of numbers, action signs, parentheses for equality, inequality to be correct.

4. Issues-assignments with missing and redundant information.

5. Tasks on solving problems in different ways.

6. Multiple-solution problem-tasks.

7. Problems with a non-standard solution.

8. Creative assignments in mathematical content:

a) about forming an idea about mathematical forms; b) on finding and separating mathematical figures; c) about changing mathematical shapes (about creating shapes from given figures; about dividing shapes into parts and creating new figures from these parts); d) on the classification of figures; e) computational problem-tasks.

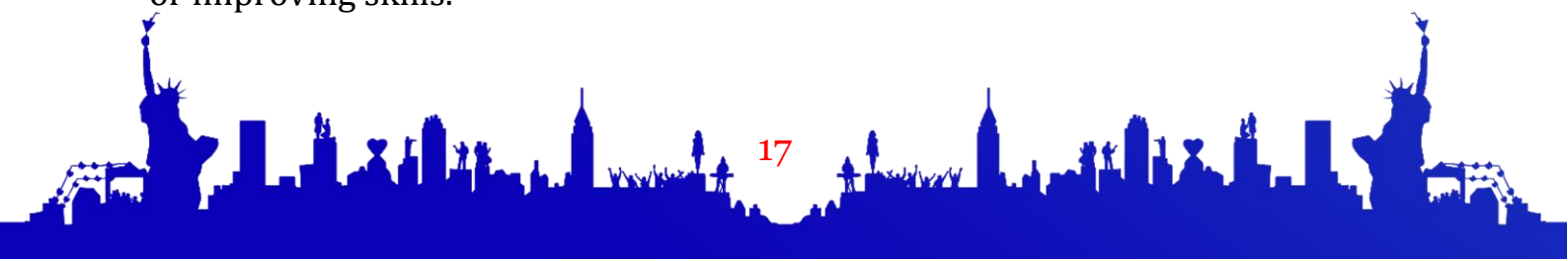
9. Problem-assignments in logical description.

10. Problem-tasks.

11. Emphasizes that expressions, equations, and tasks on creating inequalities and solving them serve as the main source for the development of thinking.

In the regulatory and legal documents on increasing the quality and efficiency of primary education, attention is paid to the formation of mathematical creative thinking of primary school pupils by interdisciplinary abscissional and ordinal connection, while observing the principles of humanitarianism, socialization, integration, democratization, individualization, differentiation of the educational process in their activities. It is aimed to achieve a developmental effect in teaching mathematics. It is also intended to form primary school pupils' readiness for learning based on an integrative and competent approach.

A number of research works are being carried out on the formation of creative thinking in primary school pupils by interdisciplinary abscissional and ordinate connection; it is noted that the activity of primary school pupils acquires a creative description by its nature; the preparation of primary school pupils in mathematics is aimed at creating new, previously unknown knowledge or improving skills.





Purposeful and systematic development of the noted important characteristics of mathematical ability in a specially created environment can be a factor that serves to form mathematical creative thinking of primary school pupils.

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