

## CRITICAL THINKING TECHNOLOGY IN MATHEMATICS LESSONS

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**Annotation.** The formation of new teaching technologies within the framework of subject lessons stimulates the need for the creation of new software and methodological complexes aimed at a qualitative increase in the effectiveness of the lesson. This article tries to give information about using critical thinking technology and its role in mathematics lessons.

**Key words.** Approach, ability to analyze, independent thinking, solving such problems

Critical thinking—is the ability to analyze information using logic and a personality-psychological approach in order to apply the results obtained to both standard and non-standard situations, questions and problems. Opens to new ideas is inherent in this process.

- *Critical thinking - independent thinking;*
- *Information is the starting point, not the end point of critical thinking;*
- *Critical thinking begins with asking questions and clarifying the problems that need to be solved;*
- *Critical thinking is based on persuasive reasoning;*
- *Critical thinking is social thinking.*

This technology allows solving such problems as: educational motivation, information literacy, social competence.

This technology contributes not only to the assimilation of specific knowledge, but the socialization of the child, fostering a benevolent attitude towards people. When learning using this technology, knowledge is assimilated much better, since the technology is designed not for memorization, but for a thoughtful creative process of understanding the world, for posing a problem, searching for its solution.

*Methodological techniques* for the development of critical thinking, including group work, modeling of educational material, role-playing games, discussions, individual and group projects, contribute to the acquisition of knowledge, provide a deeper assimilation of the content, increase students' interest in the subject, develop social and individual skills.

*Critical Thinking Technology* includes three stages: challenge, reflection and thinking.

*The challenge stage* actualizes the existing knowledge of students, arouses interest in the topic. It is here that the goals of studying the material are determined.

*The stage of comprehending new material* (new information, idea, concept). This is where the main meaningful work of the student with the text takes place. Moreover, the "text" must be understood quite broadly: it can be reading new material in a textbook, understanding the condition of the problem, the teacher's speech.

*The stage of thinking or reflection.* Here the student comprehends the material studied and forms his personal opinion, attitude towards it.

All three stages must be observed in the lesson, as this reflects a complex thought process. This feature of the named technology significantly expands the boundaries of its applicability.

Functions of the three phases of technology for the development of critical thinking

Techniques for developing critical thinking:

Reception "*I know - I want to know - I learned*" (*k-w/k-l*).

The theme of the lesson: "*Addition, subtraction of ordinary fractions*"

+ =

- =

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\* How to add fractions with different denominators?; \* How to subtract fractions with different denominators?; \* Solving equations, problems containing fractions with different denominators; \* Concepts: lowest common denominator, complementary factors.

\* To add, subtract fractions with different denominators, you need to bring them to a common denominator.

\* Algorithm +, - fractions with different denominators.

This technique provides for an integrated approach to the study of the material.

Learning begins with the activation of already existing knowledge among students. In the first column "We know" we write down the ideas of the students that they offer.

In the second column "We want to know", we invite the students to enter their supporting thoughts and ideas that have arisen in the process of discussing the topic. Then, when reading a new text, students try to find answers to the questions posed. At the same time, a special requirement is that it is necessary to write down information, concepts and facts in your own words, without quoting the textbook. After studying the topic, the students correlate the information received with the one that they had at the beginning of the lesson.

**The list of used literature:**

1. Agapova N. V. Perspektivy razvitiya novykh tekhnologiy obucheniya. - M.: TK Velbi, 2005. - 247 p.
2. Manvelov S.G. Konstruirovaniye sovremennogo uroka. - M.: Prosveshcheniye, 2002.