



# **METHODS OF DEVELOPING CRITICAL THINKING SKILLS IN STUDENTS**

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## **Abstract**

Critical thinking is considered one of the most essential competencies in modern education. It enables students to analyze information, evaluate arguments, solve problems effectively, and make reasoned decisions. In the context of rapid technological development and information overload, the ability to think critically becomes even more important. This article examines the concept of critical thinking, its importance in the educational process, and effective methods for developing critical thinking skills in students. The study highlights practical pedagogical strategies such as questioning techniques, problem-based learning, collaborative learning, reflective activities, and the use of digital tools. These methods help students become independent learners and active participants in the learning process.

**Keywords:** critical thinking, education, teaching methods, problem-solving, student-centered learning, cognitive skills

## **Introduction**

In the XXI century, education is no longer limited to memorizing facts and information. Modern education systems emphasize the development of higher-order thinking skills, especially critical thinking. According to UNESCO, critical thinking is a fundamental skill that enables individuals to participate effectively in society and make informed decisions. Critical thinking allows students to question assumptions, evaluate evidence, and develop logical conclusions.

Critical thinking was strongly influenced by the work of Benjamin Bloom, who developed a taxonomy of cognitive skills, highlighting analysis, evaluation, and synthesis as higher levels of thinking. Developing these skills requires the use of



specific teaching methods that promote active learning and intellectual engagement.

Critical thinking plays a key role in students' academic and personal development. It helps students:

- ✓ Analyze and interpret information
- ✓ Solve complex problems
- ✓ Make independent decisions
- ✓ Develop creativity and innovation
- ✓ Improve communication skills

The modern labor market also requires employees who can think critically and adapt to new challenges. According to OECD, critical thinking is one of the core competencies necessary for success in the global economy.

Methods of Developing Critical Thinking Skills:

- *Questioning Techniques*. One of the most effective methods is the use of open-ended questions. Teachers should ask questions that encourage students to explain, analyze, and justify their answers.

Examples include:

- Why do you think this happened?
- What evidence supports your opinion?
- How would you solve this problem differently?

This method develops analytical thinking and encourages deeper understanding.

- *Problem-Based Learning (PBL)*. Problem-based learning involves presenting students with real-life problems that require investigation and solution. Students must analyze the situation, identify possible solutions, and evaluate outcomes.

Benefits include:

- Development of problem-solving skills
- Increased student engagement
- Improvement of independent thinking

- *Collaborative Learning*. Group work and discussions allow students to share ideas, evaluate different perspectives, and defend their opinions. This process strengthens reasoning and argumentation skills.

Examples include:

- Group discussions
- Debates



➤ Team projects

Collaborative learning helps students learn from each other and develop social and cognitive skills.

- Reflective Thinking Activities. Reflection helps students analyze their own learning process. Teachers can use:

➤ Learning journals

➤ Reflection essays

➤ Self-assessment tasks

Reflection encourages students to evaluate their strengths and weaknesses and improve their thinking process.

- Use of Case Studies. Case studies present real or simulated situations that require analysis and decision-making. Students examine facts, identify problems, and propose solutions.

This method develops:

➤ Analytical skills

➤ Decision-making ability

➤ Logical reasoning

- Use of Technology and Digital Tools. Digital tools such as educational platforms, simulations, and interactive applications can enhance critical thinking. These tools allow students to explore information, evaluate sources, and solve problems independently.

Examples include:

➤ Online research tasks

➤ Interactive simulations

➤ Educational games

Technology increases student motivation and promotes active learning.

Teachers play a crucial role in developing critical thinking. They should:

✓ Encourage questioning and curiosity

✓ Create a supportive learning environment

✓ Use student-centered teaching methods

✓ Provide constructive feedback



**Table-1. Sample Lesson Plan for Developing Critical Thinking Skills**

<p>Subject: English Language Grade: 7th grade Topic: Environmental Problems Duration: 45 minutes Objectives: By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"><li>➤ Analyze environmental problems</li><li>➤ Express their opinions with reasons</li><li>➤ Evaluate possible solutions</li><li>➤ Develop critical thinking skills</li></ul> <p>Materials:</p> <ul style="list-style-type: none"><li>✓ Pictures of environmental problems</li><li>✓ Whiteboard and markers</li><li>✓ Worksheets</li><li>✓ Projector</li></ul>
<p>Lesson Procedure:</p> <p>Stage 1: Warm-up (5 minutes) Teacher shows pictures of polluted cities, forests, and rivers. Students answer questions: What do you see? Is this a problem? Why? Critical thinking element: observation and interpretation</p>
<p>Stage 2: Discussion (10 minutes) Students work in pairs and discuss questions: What causes environmental problems? Who is responsible? What can people do? Critical thinking element: analysis and reasoning</p>
<p>Stage 3: Problem-solving activity (15 minutes) Students are divided into groups. Each group receives a situation: "A city has serious air pollution problems." Students must: Identify causes Suggest solutions Explain why their solution is effective Critical thinking element: problem-solving and evaluation</p>
<p>Stage 4: Presentation (10 minutes) Each group presents their ideas. Other students ask questions. Critical thinking element: argumentation and evaluation</p>



Stage 5: Reflection (5 minutes)

Students answer reflection questions:

What did you learn today?

Which solution is the best? Why?

Critical thinking element: reflection and self-evaluation

**Table-2. Sample Critical Thinking Questions**

<b>Analysis questions:</b>	What is the main idea of the text? What evidence supports this idea?
<b>Evaluation questions:</b>	Do you agree with the author? Why? Which solution is the most effective?
<b>Creative thinking questions:</b>	What would happen if this problem continues? Can you suggest another solution?

**Table-3. Student Self-Assessment Form**

<b>STUDENTS ANSWER THE FOLLOWING QUESTIONS:</b>	Did I express my opinion clearly? Did I give reasons for my opinion? Did I listen to others carefully? Did I think about different solutions? What can I improve next time?
<b>SELF-ASSESSMENT SCALE:</b>	Excellent Good Average Needs improvement

The tables included in this article provide practical materials and tools for developing critical thinking skills in students. They are designed to assist teachers in implementing the methods discussed in the main text.

Table-1: this table presents a complete lesson plan aimed at fostering critical thinking in students. It includes specific objectives, materials, and step-by-step activities such as warm-up, discussion, problem-solving, group presentations, and reflection. Each stage incorporates critical thinking elements like analysis, reasoning, problem-solving, argumentation, and self-evaluation.

Table-2: this table provides examples of questions that can stimulate students' analytical, evaluative, and creative thinking. These questions can be adapted for different subjects and grade levels to encourage students to explain their reasoning, evaluate solutions, and propose alternatives.



Table-3: this form allows students to reflect on their own learning and thinking process. It encourages self-evaluation of their opinions, reasoning, listening skills, solution development, and areas for improvement. Self-assessment promotes awareness and responsibility in the learning process.

Overall, these tables provide practical guidance for teachers to integrate critical thinking development into classroom activities effectively, supporting both academic and personal growth of students.

### **Conclusion**

Critical thinking is an essential skill for students in modern education. It enables students to analyze information, solve problems, and make informed decisions. The use of effective teaching methods such as questioning techniques, problem-based learning, collaborative learning, reflective activities, and digital tools can significantly improve students' critical thinking skills. Developing these skills prepares students for academic success and future professional challenges. Therefore, educators should integrate critical thinking development into everyday teaching practice.

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