

# Problematic teaching style in the development of argumentation and logical thinking in students

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**Abstract:** In the process of modern education, it is important to develop students' abilities for independent thinking, logical thinking and argumentation. In achieving these goals, the problematic teaching style is recognized as an effective tool. This article analyzes the theoretical foundations of the problematic teaching method, its role in the formation of argumentation and logical thinking in students, as well as its practical application.

**Keywords:** Argumentation, problem teaching method, logical thinking, discussion, observation method, integration.

**Introduction:** Today, there is a growing demand for innovative pedagogical technologies in the educational system around the world. In particular, new forms of teaching, such as the problematic teaching method, are seen as an effective tool for students to master their knowledge more deeply and form logical thinking skills in them. However, teachers have various problems with the full use of this method. This in turn can negatively affect the effectiveness of Education. Therefore, scientific research, analyses and practical experiments on the introduction of problematic teaching methodology in the educational process are necessary.

Problematic teaching style is effective in developing argumentation and logical thinking in students. Problem situations activate the thinking process of students, encouraging them to seek and analyze evidence to solve the problem. This in turn forms the ability to argue. Also, in the process of analyzing and solving problem situations, students develop logical thinking skills.

The problematic teaching style emerged in pedagogy in the middle of the 20th century, aimed at activating the cognitive activity of students. The basic principles of this style include:

- Creating a problem situation this teacher will

expose students to a problem situation during the course of the lesson, which will motivate them to think independently.

- And problem formation, students analyze a problem situation, determine its essence and formulate the problem.
- When looking for ways to solve a problem, students put forward various assumptions to solve the problem and analyze them.
- They examine, summarize and draw conclusions about the results obtained in the process of checking and summarizing the results.
- These stages serve to develop students' independent thinking and logical thinking.

Argumentation is the process of reasoning and defending one's own opinion, in which arguments and logical conclusions are made. Logical thinking, on the other hand, is the ability to analyze phenomena and processes, identify and generalize their causal connections. The development of these abilities in the educational process plays an important role in the formation of the scientific worldview of students.

Argumentation is the ability of an individual to base and defend their thoughts, while logical thinking implies adherence to logical laws in the process of thinking. These abilities play an important role in developing

student critical thinking. The problematic teaching style helps students to gain deeper theoretical knowledge. Through PBL, knowledge is strengthened by practice in the process of solving real-life problems. When applying the problem teaching method in the course of the lesson, the teacher presents the students with problem situations and encourages them to independently find solutions. In the process, students develop the skills to analyze the problem, consider different points of view, and draw reasoned conclusions.

Advantages and disadvantages of the problem teaching method: this technique develops students' abilities for independent thinking, creative approach and problem solving. However, its implementation requires time and resources, and also requires a high level of training from the teacher.

To improve the effectiveness of problem teaching, teachers need to create problem situations, taking into account the interests and needs of students. It is also important to apply different techniques and techniques to develop students' independent thinking and creative abilities. The peculiarities of problem teaching are the focus on the development of independent thinking and creative abilities of students, the provision of interactivity and active participation in the learning process, as well as the creation of problem situations taking into account the interests and needs of students.

These days, one can learn about the world from the Internet in addition to written and spoken media. Students must choose this vast amount of knowledge according to their needs. Critical thinking is the capacity to choose and evaluate pertinent information. Understanding the crucial function, critical thinking becomes a necessary skill in both academic and professional contexts. To succeed in classes at the tertiary level of study, students must hone their critical thinking abilities. Students who practice critical thinking are better equipped to evaluate, critique, and support ideas; reason both inductively and deductively; and arrive at factual or critical conclusions based on reliable deductions from clear declarations of knowledge or opinion.

The problematic teaching style is also important in philosophy, which serves to foster logical thinking and critical thinking in students. This technique is widely used in foreign experience, with great emphasis on the formation of independent thinking of students. For example, The Problem-Based Learning (PBL) method is widely used in teaching philosophy in the U.S. education system. In this method, students are given problems that do not have a clear solution beforehand, and they develop a solution by discussing these issues

independently or collectively. Philosophy classes at universities such as Harvard and MIT are conducted interactively, and students engage in debate over real-life issues.

In the Finnish education system, however, philosophy is often taught on the basis of a phenomenological teaching approach. In this approach, problems are analyzed based on real-life context. For example, in the study of ethical decision-making or social justice issues, students are presented with various situations where they are taught to base their views. In this, philosophical thinking is developed not only on the basis of theoretical concepts, but also by solving practical issues.

In the Japanese experience, however, the "Lesson Study" method plays an important role. In this way, teachers help students think deeply by observing, analyzing, and improving classes. When a problematic educational method is used in philosophy lessons, students analyze various answers to a particular philosophical question and assess their logical robustness. For example, "is human freedom limited?", students study and discuss the approaches of various philosophical currents.

In Uzbekistan, however, significant changes are being made to introduce a problematic teaching method in philosophy. In particular, problematic educational methods are widely introduced in presidential schools and specialized educational institutions. In philosophy classes, various theoretical and practical issues are given so that students can independently research and develop critical thinking. Discussion clubs are organized in schools, in which students are taught to analyze a certain philosophical problem in the form of controversy. For example, "can Reality be a relative concept?" on topics such as, readers defend different positions and try to substantiate their arguments.

Since the science of philosophy is often associated with complex, abstract concepts and theories, visual materials such as schemes, diagrams, timelines, maps and infographics help to express these concepts in a clear and understandable form. For example, the use of logical flow diagrams or conceptual maps in teaching topics such as Aristotle's syllogisms or Descartes' concept of methodological skepticism allows students to understand these ideas on a visual basis.

In the process of problematic teaching, when philosophical arguments and discussions are held, it is possible to clearly show the structure of arguments using visual materials. For example, representing the differences between John Locke's and Immanuel Kant's theories of cognition using tables or diagrams allows readers to consider and analyze the logical structure of

both theories.

In addition, the use of graphs in the study of historical philosophical currents, in which the timelines of the development of philosophy or the interaction of philosophical schools are reflected, allows students to systematically consider information. For example, the connection between Western and Eastern philosophy, or the visual materials described in the process of development of Marxism and existentialism, help students to better understand the subject.

## CONCLUSION

In conclusion, the problematic teaching style is an effective tool in the development of argumentation and logical thinking in students. The use of this method in the course of the lesson increases the ability of students to think independently, directs them to solve problems and forms their creative abilities. Therefore, it is recommended that teachers widely use the problematic teaching method in the educational process. The problematic teaching method is especially important in philosophy, which serves to develop students' logical thinking. The style is widely used in countries such as the United States, Finland and Japan, and Uzbekistan is also undergoing reforms in this direction.

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