INTERNATIONAL JOURNAL OF POLITICAL SCIENCES AND ECONOMICS
Impact Factor (research bib) - 9,78
https://ijmri.de/index.php/ijpse , German international journals company
ISSN 2751-9708

DEVELOPING CRITICAL COGNITION AND REFLECTIVE ACTIVITY IN CHILDREN

Hamidova Gulshoda Bakhromjon kizi

Master's Student, (FarDU)

O'rinova Feruza O'ljayevna

Professor, PhD (FarDU)

Abstract: The study analyzes the theoretical and methodological foundations of the development of critical thinking and reflective activity in children. The development of students' independent thinking, analysis, production and development of their own production competencies through the use of problem-based problems, interactive methods, STEAM technologies and reflection in the educational process is highlighted. The development serves to develop the pedagogical process, the cognitive activity of students and creative thinking. , The mechanisms for ensuring the quality of education based on innovations are described in detail.

Keywords: Critical thinking, Reflection, interactive method, development, problem situation.

In today's era, when great attention is being paid to the development of education in our country, fundamental changes are also taking place in the field of preschool education. Since scientists have proven with clear evidence that the preschool age is the most important stage in the formation of human thinking, raising children of this age to be well-rounded individuals is considered an important task. In particular, as President Sh. Mirziyoyev stated: "In fact, the role and importance of the preschool education system, which is considered the most fundamental link in the upbringing of our children, cannot be measured by anything. Precisely the attention given to preschool education creates a solid foundation for the country's future development." As proof of these words, many reforms have been implemented in this field.

Critical thinking is defined as the process of making data-based decisions by identifying assumptions (hypotheses) and different points of view and verifying their validity. Critical thinking is an important skill that helps students solve personal or social problems. Students need thinking skills to understand concepts, test assumptions, and draw conclusions. The process of critical thinking is not merely expressing opinions or synthesizing information; it requires individuals to provide well-grounded and logical arguments. As emphasized, it is not enough for students to acquire critical thinking skills; they must also know how to use these skills effectively. Critical thinking skills encourage students to think independently and to solve problems they encounter at school as well as in their daily lives. According to these views, critical thinking skills are very important; however, the current situation shows that the reality is not as expected. The critical thinking skills of Indonesian students are still relatively low.

In highlighting the practical significance of modern education today, STEAM technologies have become one of the most important trends in education systems worldwide. The STEAM approach helps children independently solve real-life problems in the future. Today, STEAM education is developing as one of the main directions in global education. This approach is based on integrating five disciplines into a single educational system. An important condition of such

education is its continuity and the development of children's communication skills within a group. Working in groups allows them to generate ideas, share them, and discuss them. When organizing creative activities, educators should pay special attention to solving problem-based tasks, analyzing problematic situations, and creating creative products of an educational nature.

The growing demand for human capital in the world has led to the perception of the categories of "intellect and logic" as essential indicators that regulate cultural, educational, and socio-economic relations and serve as necessary measures for evaluating young people's activities. In leading educational institutions around the world, effective mechanisms are being implemented to develop learners' independent thinking abilities by teaching natural sciences, integrating interactive educational technologies, and introducing virtual and experimental projects to enhance students' intellectual capacity and worldview. As the President of our country, Shavkat Mirziyoyev, stated: "If teaching methods in schools do not change, neither the quality of education nor the educational environment will change."

Reflective education can be closely connected with STEAM practices. Through reflection, students develop and acquire strategic competencies, skills, attitudes, and emotions related to their future activities, as well as the initial forms of personal identity. Reflective learning strengthens self-awareness, helps identify connections between different scientific fields, and contributes to understanding social and community processes. These form the basis for integrating art and science. Reflection, for example, focuses on analyzing, formulating, and contextualizing hypotheses during experiments to address scientific questions, as well as recognizing and analyzing personal responsibility in the process of active experimentation. Reflective practices also emphasize behavioral, emotional, and social principles in order to increase students' engagement in the learning process. Reflection can create favorable conditions for defining personal learning pathways, effectively acquiring knowledge, and developing specific competencies.

It should be noted that STEAM approaches help encourage individual and group reflection in order to foster personal development and civic competencies, as well as support making important decisions in complex situations encountered in environmental education.

The term critical thinking in the international terminology system is derived from the Greek concept of "critical" thinking. The word kritikos originates from a polysemous root meaning "criticism," "evaluation," and "examination." In this context, the concept of "criticism" does not imply blaming in everyday life, but rather refers to intellectual ability and includes meanings such as "evaluation," "identification," "judgment," and "the ability to distinguish." The intellectual foundations and etymology of critical thinking date back to ancient times. Approximately 2,500 years ago, ideas close to this concept can be found in Socrates' teaching practices and philosophical views. Socrates invented a new method of questioning that revealed the weakness of people's inability to rationally justify their confidence in knowledge, and this method also involved Socratic irony. As emphasized, it is not sufficient for students merely to acquire critical thinking skills; they must also know how to use these skills effectively. Critical thinking skills encourage students to think independently and solve problems they encounter both at school and in their everyday lives.

Reflective practices stimulate learner-centered thinking about how students can increase their participation in their own learning process, leading to deeper learning outcomes. It is widely

recognized that learning outcomes and skill acquisition are positively influenced by reflective practice. Reflective learning — a component of reflection — directly affects the transformation of actions, feelings, emotions, and empathy during experiential activities. Reflection begins with examining one's own activities, ideas, beliefs, and emotions, while also taking into account the processes and mechanisms of various environmental and social contexts. According to widely accepted views, when students ask questions, identify problems, develop solutions, and create actions, activities, and goals, they develop higher-order cognitive processes and enhance self-awareness. In environmental and social contexts, reflective learning contributes positively to the quality of education by leading to careful guidance and optimization of learning activities.

In conclusion, the development of critical cognition and reflective activity in children requires a continuous and systematic pedagogical process. When the methodological recommendations developed in this direction are implemented in practice, the quality of education improves, children's creative and intellectual potential increases, and their preparedness for independent life in the future is strengthened.

References

1.Zohidov, B.T. (2020). Methodology of Organizing Reflective Activity in Education. Tashkent.

2.Facione, P.A. (1990). Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction. California.

3.Paul, R., & Elder, L. (2014). Critical Thinking: Tools for Taking Charge of Your Learning and Your Life. New Jersey: Prentice Hall.

4.Jo'raev, R.X., & Zunnunov, A. (2017). Pedagogical Technologies. Tashkent: Sharq Publishing House.

5.President of the Republic of Uzbekistan. (2020). Law on Education. Tashkent.