THE CONCEPTUAL ESSENCE OF COGNITIVE ACTIVITY AND ITS PSYCHOLOGICAL-PEDAGOGICAL FOUNDATIONS

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Abstract. *This article analyzes the main factors influencing students' cognitive activity in the educational process. The study reveals the impact of motivation, the psychological environment, the teacher's pedagogical approach, and methodological tools on the development of cognitive activity. The practical application of interactive teaching methods such as brainstorming, concept mapping, debates, clustering, and case analysis is also examined. The research is based on modern pedagogical approaches and aims to develop students' independent thinking, reasoning, and problem-solving skills. The findings highlight the importance of organizing the educational environment in a way that stimulates cognitive development and encourages active learning.*

Keywords: *cognitive development, interactive methods, educational process, thinking, cognitive activity, motivation, independent learning, teacher's role, case analysis, debate, metacognitive skills, learning environment, facilitator.*

Introduction

Cognitive development is the process of forming a learner's ability to acquire knowledge, retain information, solve problems, think logically, and make decisions. In the modern knowledge-based economy, cognitive competencies are considered essential for successful socialization and professional development. Therefore, identifying the factors that stimulate cognitive development and determining effective pedagogical methods for enhancing cognitive activity has become an important task in contemporary education.

In the 21st century, human capital, intellectual potential, and digital knowledge are recognized as key drivers of social development. Under these conditions, the main task of the education system is to ensure the comprehensive development of an individual's intellectual and cognitive abilities. The systematic formation and development of cognitive activity, which represents the highest level of human thinking, has become a significant area of research in modern pedagogy.

The Decree of the President of the Republic of Uzbekistan dated October 8, 2019 (PF-5847) "On approving the Concept for the Development of the Higher Education System until 2030" emphasizes the importance of introducing international educational standards, improving the quality of the learning process, and gradually shifting from a purely theoretical model of education to a system focused on developing practical skills.

In addition, the Law of the Republic of Uzbekistan "On Education" highlights the principle of continuity in education, which refers to the interconnected and logically consistent sequence of educational processes aimed at meeting individuals' lifelong learning needs. Within the framework of continuous education, strengthening the integration of education, science, and production is considered one of the priority tasks.

Recent reforms in the education system also emphasize the development of cognitive, social, emotional, and physical competencies. The Resolution of the Cabinet of Ministers (No.157, March 27, 2024) on improving the procedures for developing and implementing state educational standards stresses the importance of developing learners' cognitive abilities as a key component of educational quality.

Despite these reforms, the existing pedagogical practice still lacks methodological consistency in developing students' cognitive abilities. As a result, students' skills in logical reasoning, problem-solving, attention, and memory development may remain insufficient. Therefore, improving pedagogical methods aimed at developing cognitive activity based on the principles of continuity and consistency remains a relevant scientific problem.

Methodology

The research is based on theoretical analysis of psychological and pedagogical literature, comparative analysis of scientific approaches to cognitive activity, and generalization of modern pedagogical practices. The study examined scientific works devoted to the development of cognitive activity, including the research of scholars such as I.A. Zimnaya, I.I. Ilyasov, I. Lingart, and D.B. Elkonin. In addition, the theoretical foundations of cognitive development proposed by modern educational psychologists were analyzed. The research also considered interactive teaching methods widely used in modern pedagogy, including:

- brainstorming
- concept mapping
- debate
- clustering
- case-study analysis

These methods were analyzed in terms of their role in activating students' cognitive processes and enhancing independent thinking skills.

Results

The analysis shows that cognitive activity represents a complex mental process that includes perception, attention, memory, thinking, imagination, and speech. Cognitive activity can be defined as the ability of individuals to perceive, process, store, and apply information. It ensures the development of intellectual abilities such as analytical thinking, critical reasoning, and creative problem solving. According to psychological studies, cognitive activity possesses several important characteristics:

1. It is primarily aimed at mastering educational material and solving learning problems.
2. It involves the acquisition of generalized methods of knowledge and actions.
3. It integrates several types of mental and practical activities such as perception, memorization, analysis, comparison, classification, and practical problem solving.
4. It influences the development of learners' individual psychological traits including character, abilities, thinking, memory, emotions, and behavior.
5. It contributes to the individual's self-development and intellectual growth.

D.B. Elkonin also emphasizes that learning activity has a social nature. It involves the assimilation of scientific, cultural, and spiritual achievements of humanity and is organized within formal educational institutions such as schools, colleges, and universities. The research also highlights the importance of learning motivation. Students' internal interest and curiosity significantly enhance cognitive activity and improve learning outcomes. Furthermore, the use of

interactive teaching methods stimulates active participation in the learning process. Such methods encourage students to analyze information, express their opinions, and collaborate in solving complex problems.

Discussion. Modern pedagogical research emphasizes that the development of cognitive activity depends not only on teaching content but also on the organization of the learning environment. Scholars such as E.I. Mashbits argue that managing learning activity involves activating internal cognitive mechanisms rather than simply organizing external instruction. According to his theory, students' ability to plan, monitor, and evaluate their own learning process plays a crucial role in cognitive development.

Similarly, L.M. Fridman states that cognitive activity can be effectively stimulated through problem-based learning. When students are placed in situations that require independent thinking and investigation, they become more motivated to seek knowledge. Another important factor influencing cognitive activity is the use of information technologies in education. Digital tools encourage analytical thinking, algorithmic reasoning, and problem-solving skills, which are essential competencies in the modern knowledge society. Therefore, the integration of interactive teaching methods, problem-based learning, and digital technologies can significantly improve the effectiveness of cognitive development in the educational process.

Conclusion

The analysis of psychological and pedagogical literature demonstrates that cognitive activity plays a crucial role in the intellectual development of learners. The effective organization of the educational process requires the identification of factors that stimulate cognitive development and the implementation of appropriate pedagogical methods. The study shows that motivation, a supportive psychological environment, the teacher's pedagogical approach, and the use of interactive teaching methods significantly influence students' cognitive activity.

Applying interactive learning strategies such as brainstorming, debate, concept mapping, clustering, and case analysis promotes independent thinking, logical reasoning, and problem-solving skills. These methods create opportunities for students to actively participate in the learning process and develop higher-order cognitive abilities. Therefore, educators should organize the learning environment in a way that supports cognitive development and encourages active engagement in the learning process. Improving teaching methodologies based on the principles of continuity and consistency will enhance the quality of education and contribute to the development of competent and creative specialists.

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