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PEDAGOGICAL AND PSYCHOLOGICAL FOUNDATIONS AND DIDACTIC POSSIBILITIES FOR THE DEVELOPMENT OF CRITICAL THINKING SKILLS IN PRIMARY SCHOOL STUDENTS

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Abstract

This article analyzes the pedagogical and psychological foundations of developing critical thinking skills in primary school students, as well as their didactic possibilities in the educational process. The study highlights the essence of critical thinking, its role in the intellectual development of students, and the mechanisms of its formation through modern educational methods. Also, the possibilities of developing critical thinking through interactive methods, problem-based learning, and innovative pedagogical technologies in the process of primary education were analyzed on a scientific basis.

Keywords: Critical thinking, primary education, pedagogical foundations, psychological factors, didactic possibilities, problem-based learning, interactive methods, innovative education.



Introduction

In the modern education system, the development of students' competencies in independent thinking, the ability to analyze problem situations, and drawing reasoned conclusions is one of the priority tasks. In the context of globalization, a sharp increase in the flow of information, and the acceleration of societal development, the educational process should be aimed not only at conveying knowledge but also at forming independent thinking, a critical approach, and creative thinking in students. In this regard, the development of students'

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intellectual potential in the education system, educating them as individuals capable of independent decision-making and analytical thinking, is recognized as one of the urgent pedagogical tasks. Especially, the primary education stage is an important period in which a person's cognitive processes, thinking, worldview, and attitude towards educational activity are formed. During this period, students' cognitive activity, interest in learning, and desire for independent thinking develop. Therefore, the development of students' thinking in the process of primary education, the activation of their thinking activity, and the formation of critical thinking skills are among the urgent scientific and practical problems facing pedagogical and psychological sciences. Critical thinking is interpreted as a complex cognitive activity of the student, manifested in the processes of analyzing information, comparing, evaluating, arguing, and making independent decisions. This process serves the development of students' logical thinking, reflexive thinking, and analytical abilities. Through critical thinking, the student does not simply accept existing knowledge, but analyzes it, evaluates it, and, if necessary, draws new conclusions. This allows students to deeply understand knowledge, apply it in real-life situations, and form a creative approach. From a pedagogical point of view, critical thinking develops students' ability to show activity in educational activities, independent research, and the ability to justify their opinion. At the same time, this process plays an important role in the formation of students' communicative skills, the development of a culture of working in a team, and the improvement of skills in analyzing different points of view.

Today, the introduction of a competency-based approach into the education system makes the development of critical thinking in students an even more important task. The competency-based approach implies not only the acquisition of theoretical knowledge by students, but also the development of their ability to apply it in practical activities, analyze problem situations, and make effective decisions. Therefore, in the modern educational process, the development of students' critical thinking skills through interactive methods, problem-based learning, project activities, and innovative pedagogical technologies is considered one of the important pedagogical directions. From this point of view,

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the study of the pedagogical and psychological foundations of the development of students' critical thinking skills in the process of primary education, the analysis of the theoretical and methodological aspects of this process, and the identification of its didactic possibilities are of great scientific and practical importance. This research substantiates the need to identify effective pedagogical conditions for the development of critical thinking in the process of primary education and the introduction of innovative approaches into the educational process.

The problem of critical thinking in pedagogical and psychological sciences has been studied by many scientists and is one of the scientific directions inextricably linked with the development of individual thinking and the improvement of cognitive processes. Critical thinking represents a person's ability to analyze information, evaluate it, draw logical conclusions, and make informed decisions by comparing different points of view. Therefore, this process is recognized not only as an important component of cognitive activity, but also as an important factor in the intellectual development of the individual. Scientific views on the development of thinking and the psychological characteristics of cognitive processes serve as an important theoretical basis for understanding children's thinking. Psychological research shows that the thinking of primary school students is mainly concrete-practical in nature, and they acquire knowledge by observing, imagining, analyzing, and comparing phenomena of the environment. At this age, students' thinking is gradually enriched with elements of abstract thinking, and this process is directly related to the content and organization of learning activities.

In psychology, it is emphasized that cognitive processes - attention, memory, thinking, imagination, and speech - develop interconnectedly. In particular, the process of thinking plays an important role in activating the cognitive activity of students. From this point of view, critical thinking serves to analyze students' existing knowledge, apply it in new situations, and form an independent approach to various problem situations. This allows, along with the cognitive development of students, to develop their independent thinking and creative abilities. The development of students' thinking activity at the primary education

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level is one of the main goals of the educational process. Therefore, for the development of critical thinking skills in students, it is important to create problem situations in the educational process, ask questions that stimulate students' thinking activity, use elements of discussion and discussion, and use tasks aimed at independent thinking. Such pedagogical approaches help students to understand knowledge more deeply, compare different opinions, and draw well-founded conclusions.

From a pedagogical point of view, critical thinking is interpreted as a process associated with the conscious assimilation of knowledge by students, their ability to apply it in practical activities, and the creation of new ideas. This process serves the development of students' analytical thinking, logical thinking, and a reflexive approach. At the same time, critical thinking plays an important role in the formation of students' communicative competencies, the ability to justify their opinion, and the development of an analytical approach to different points of view. From this point of view, the development of critical thinking is inextricably linked with the content, methods, and forms of organization of the educational process. The use of interactive methods, problem-based learning technologies, forms of group work, and creative tasks in the educational process serves to activate the thinking activity of students. As a result, students not only acquire knowledge, but also acquire the skills to analyze, evaluate, and apply it in new situations.

The development of critical thinking skills in primary school students is closely related to a number of pedagogical and psychological factors, and this process is effectively organized by taking into account the content of the educational environment, teaching methods, and the individual characteristics of students. First of all, it is important to take into account the age and individual psychological characteristics of students, since the thinking process in primary school children is mainly concrete-practical in nature, and they acquire knowledge through observation, comparison, and analysis. Therefore, creating a positive pedagogical environment in the educational process that allows students to express their opinions freely, encouraging them to think independently, and involving them in the discussion of various opinions is one

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of the important conditions for the development of critical thinking. In addition, the organization of the educational process based on problem situations serves to increase the thinking activity of students. Through problem questions, analytical tasks, and creative tasks, students review existing knowledge, analyze it, and strive to draw new conclusions. At the same time, stimulating students' independent activity, directing them to research, and the effective use of interactive teaching methods are manifested as an important pedagogical factor in the formation of critical thinking skills. From a psychological point of view, the process of critical thinking is based on the harmonious activity of cognitive processes such as attention, memory, thinking, and imagination. The development of these cognitive processes contributes to the formation of students' ability to perceive, analyze, compare, and evaluate information. Therefore, activating the cognitive activity of primary school students, developing their cognitive processes, and stimulating independent thinking have a positive impact on the effective formation of critical thinking skills. In the process of primary education, the effective use of various didactic methods and means in the development of students' critical thinking skills is of great importance. Through the meaningful and effective organization of the educational process, the thinking activity of students increases, they gain a deeper understanding of the educational material and acquire the skills of independent conclusions. In this regard, problem-based learning methods are an important didactic tool for activating the thinking process of students. Through problematic questions, analytical situations, and discussion-based tasks, students analyze existing knowledge, compare different solutions, and strive to draw well-founded conclusions.

Also, the use of interactive teaching methods gives an effective result in the development of students' critical thinking. Methods such as "Brainstorming," "Cluster," "Insert," "B-B-B table" help students to express their thoughts freely, justify their ideas, and actively assimilate new knowledge. Such methods actively involve students in the lesson process, developing their skills in exchanging ideas, analyzing, and summarizing. In addition, the use of group forms of education is also one of the important didactic opportunities for the

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development of critical thinking. In the process of collective activity, students compare their opinions with others, analyze different points of view, and draw general conclusions. This contributes to the development of students' communication culture, skills of collaborative work, and the ability for analytical thinking. At the same time, problem tasks and creative tasks develop students' skills in analysis, comparison, evaluation, and putting forward new ideas. Such assignments encourage students to search independently, increase their interest in learning, and further activate the thinking process. In general, the effective use of these didactic opportunities in the educational process serves not only to increase the level of students' knowledge, but also to develop their abilities for critical and creative thinking.

In conclusion, the development of critical thinking skills in primary school students is a key factor in enhancing the overall effectiveness and quality of education. At this stage, students are at a formative period of cognitive and emotional development, which makes it crucial to organize learning activities that are aligned with their age and psychological characteristics. The research demonstrates that the systematic use of problem-based learning methods, interactive approaches, collaborative tasks, and innovative pedagogical technologies significantly contributes to the cultivation of students' critical thinking abilities. Moreover, fostering these skills not only improves students' analytical and reflective capacities but also encourages independence, creativity, and active engagement in the learning process. Therefore, continuous improvement of didactic methods, the introduction of innovative teaching strategies, and strengthening the methodological training of teachers are essential measures to ensure that primary education effectively nurtures critical thinkers who can adapt to the challenges of the modern world.

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