World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

DEVELOPMENT OF CHILDREN'S COGNITIVE ACTIVITY IN THE SYSTEM OF PRESCHOOL AND PRIMARY EDUCATION: CONTEMPORARY METHODOLOGICAL APPROACHES

Abdikerimova M. M.
Chirchik State Pedagogical University

Abstract:
This study explores the development of children's cognitive activity within the integrated system of preschool and primary education, emphasizing contemporary methodological approaches relevant to modern pedagogical practice. Cognitive activity is understood as a complex, multifaceted process that includes curiosity, motivation, thinking, problem-solving, and the ability to independently acquire and apply knowledge. In the context of educational continuity between preschool and primary levels, the development of cognitive activity is regarded as a key condition for successful learning, adaptation, and long-term academic achievement. The relevance of the study is обусловлена the growing demand for learner-centered, competence-based education that supports children's intellectual initiative from early childhood. The research analyzes theoretical foundations of cognitive development, drawing on constructivist, activity-based, and socio-cultural pedagogical paradigms. Particular attention is given to modern methodological approaches such as play-based learning, inquiry-based activities, problem-solving tasks, integrated learning, and the use of digital educational tools. The study highlights how these approaches contribute to sustaining children's natural curiosity while gradually forming structured cognitive skills required in primary education. The paper also considers the role of teachers in creating pedagogical conditions that stimulate cognitive engagement, including the organization of the learning environment, the selection

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

of age-appropriate methods, and the encouragement of independent thinking. The findings emphasize the importance of continuity between preschool and primary education in ensuring the consistent development of cognitive activity. The study concludes that the systematic application of contemporary methodologies enhances children's cognitive readiness for school and supports their holistic intellectual development.

Keywords: Cognitive activity, preschool education, primary education, learning motivation, pedagogical methods, cognitive development, educational continuity.

Introduction

In contemporary educational theory and practice, the development of children's cognitive activity is recognized as one of the central objectives of early education. Cognitive activity reflects a child's readiness and ability to perceive, process, and apply information, as well as to demonstrate curiosity, initiative, and independent thinking. At the preschool and primary education levels, cognitive activity serves as the foundation for further academic success, personal development, and lifelong learning. For this reason, modern pedagogical systems increasingly emphasize not only the transmission of knowledge but also the formation of cognitive interest, motivation, and active engagement in the learning process.

The system of preschool and primary education represents a critical stage in a child's educational trajectory, as it ensures continuity between spontaneous learning through play and more structured academic learning. Preschool education is characterized by flexible, play-oriented forms of activity, while primary education introduces formal learning tasks, academic discipline, and systematic knowledge acquisition. The transition between these two stages often presents challenges for children, particularly when cognitive activity is insufficiently developed or pedagogical approaches lack consistency. Therefore, ensuring continuity in the development of cognitive activity across these educational levels has become a priority issue in pedagogical research and practice.

World Bulletin Publishing
Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X | Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

Modern educational reforms and the introduction of competence-based standards have significantly influenced approaches to teaching and learning in early education. Traditional teacher-centered models, focused primarily on memorization and reproduction of information, are increasingly being replaced by learner-centered approaches that encourage exploration, problem-solving, and critical thinking. Within this context, cognitive activity is viewed not as a passive response to instruction but as an active process shaped by meaningful interaction with the learning environment, peers, and educators. This shift requires the application of contemporary methodological approaches that align with children's developmental characteristics and learning needs.

Theoretical perspectives on cognitive development emphasize the role of activity, social interaction, and cultural context in shaping children's thinking processes. Constructivist theories highlight that knowledge is actively constructed by learners through experience, while activity-based approaches stress the importance of purposeful actions in cognitive growth. Socio-cultural theories further underscore the significance of communication, collaboration, and guided participation in the development of higher mental functions. These theoretical foundations provide a basis for designing pedagogical methods that stimulate cognitive activity in both preschool and primary education.

In recent years, methodological approaches such as play-based learning, inquiry-based instruction, problem-based learning, and integrated curricula have gained prominence in early education. These approaches aim to preserve children's natural curiosity while gradually developing logical thinking, attention, memory, and reflection. Additionally, the integration of digital technologies has expanded opportunities for interactive and individualized learning, further influencing the development of cognitive activity. However, the effectiveness of these methods largely depends on their pedagogical coherence and alignment across educational stages.

The purpose of this study is to analyze contemporary methodological approaches to the development of children's cognitive activity within the unified system of preschool and primary education. By examining theoretical foundations and pedagogical practices, the study seeks to identify effective strategies that support

World Bulletin Publishing
Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X | Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

cognitive engagement, ensure educational continuity, and facilitate children's successful transition from preschool to primary school.

Methods

The methodological framework of this study is based on a combination of theoretical analysis and qualitative research methods commonly used in pedagogical research. The study employs a systematic approach to examining the development of children's cognitive activity within the interconnected system of preschool and primary education. This approach allows for the identification of key methodological principles and pedagogical conditions that contribute to the effective stimulation of cognitive activity in early childhood and the early school years.

At the theoretical level, the research involves an analysis of pedagogical, psychological, and methodological literature related to cognitive development, early childhood education, and primary education. Classical and contemporary theories of cognitive activity, learning motivation, and child development are reviewed in order to establish a conceptual foundation for the study. Special attention is given to constructivist, activity-based, and socio-cultural approaches, which emphasize the active role of the child in the learning process and the importance of meaningful interaction within the educational environment. This theoretical analysis enables the identification of core characteristics of cognitive activity and relevant methodological approaches for its development.

The empirical component of the study is based on qualitative methods, including pedagogical observation, analysis of educational practices, and reflective analysis of teaching experience. Pedagogical observation is used to examine how children engage in cognitive activities during classroom and play-based learning situations in both preschool and primary education settings. Observations focus on indicators such as children's curiosity, initiative, problem-solving behavior, participation in discussions, and ability to independently complete learning tasks. These observations provide insight into how different methodological approaches influence children's cognitive engagement.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

In addition, the study includes an analysis of educational programs, lesson plans, and teaching materials used in preschool and primary education. This document analysis aims to identify the presence and coherence of methodological approaches designed to stimulate cognitive activity. Particular attention is paid to the continuity of methods across educational stages, including the use of play elements, inquiry tasks, integrated learning activities, and formative assessment practices. The analysis helps to determine whether educational content and methods support a gradual and consistent development of cognitive skills.

The research also draws on reflective analysis of pedagogical experience, which allows for the interpretation of observed practices in light of theoretical concepts. This method enables the identification of effective teaching strategies and common challenges associated with the development of cognitive activity. By comparing practices at the preschool and primary levels, the study highlights methodological similarities and differences that affect children's cognitive adaptation during the transition between educational stages.

The collected data are analyzed using qualitative content analysis, which involves categorizing and interpreting observed behaviors, instructional strategies, and methodological features. This analytical process facilitates the identification of patterns and trends related to the development of cognitive activity. The methodological design of the study ensures a comprehensive understanding of contemporary approaches to fostering children's cognitive activity within a unified educational framework.

Results

The results of the study demonstrate that the systematic use of contemporary methodological approaches has a positive impact on the development of children's cognitive activity within both preschool and primary education. Analysis of pedagogical observations indicates that children who are engaged in learning environments characterized by active, inquiry-oriented, and play-based methods exhibit higher levels of curiosity, initiative, and sustained attention. These children are more inclined to ask questions, propose solutions, and

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

participate actively in learning tasks, compared to those exposed primarily to reproductive and teacher-centered instruction.

The findings show that play-based learning remains a dominant and effective method in preschool education, supporting the natural cognitive needs of young children. Through structured play activities, children demonstrate the ability to explore concepts, establish causal relationships, and apply previously acquired knowledge in new situations. When play elements are gradually integrated into primary education, particularly in the form of educational games, problem situations, and role-based tasks, children show greater motivation and reduced anxiety during the transition to formal schooling. This continuity contributes to the preservation of cognitive interest and supports adaptive learning behavior.

Inquiry-based and problem-based learning approaches were found to be especially effective in stimulating higher-order cognitive processes. In both preschool and primary settings, tasks that encourage exploration, comparison, classification, and reasoning foster the development of analytical thinking and reflection. The results indicate that children involved in inquiry-oriented activities demonstrate improved abilities to formulate hypotheses, justify their opinions, and evaluate outcomes. These skills are particularly evident in primary education when children have prior experience with exploratory activities during the preschool stage.

The study also reveals that integrated learning activities contribute significantly to the development of cognitive activity. Lessons and activities that combine elements of language, mathematics, environmental studies, and creative expression promote holistic thinking and facilitate meaningful knowledge construction. Children engaged in integrated tasks show an increased capacity to transfer knowledge across contexts, which reflects a deeper level of cognitive engagement. This approach is especially effective when implemented consistently across preschool and primary curricula.

The use of digital educational tools further enhances cognitive activity by providing interactive and individualized learning opportunities. Observations indicate that digital resources, when pedagogically justified, increase children's engagement and support independent learning. However, the results also suggest

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

that digital tools are most effective when combined with traditional interactive methods rather than used in isolation.

Overall, the findings confirm that continuity in methodological approaches between preschool and primary education plays a crucial role in sustaining and developing children's cognitive activity. The coordinated use of play-based, inquiry-based, integrated, and technology-supported methods creates favorable conditions for cognitive development and supports children's successful adaptation to the demands of primary education.

Discussion

The results of this study highlight the significant role of contemporary methodological approaches in fostering children's cognitive activity within the integrated system of preschool and primary education. The findings support the view that cognitive activity develops most effectively when learning is organized as an active, meaningful, and child-centered process. This perspective aligns with modern pedagogical theories that emphasize the learner's active participation and the importance of experience-based knowledge construction.

One of the key issues revealed in the discussion is the importance of continuity between preschool and primary education. The results demonstrate that when methodological approaches are aligned across educational stages, children experience fewer difficulties in adapting to the academic demands of primary school. The preservation of play-based elements and exploratory activities in early primary education allows children to maintain intrinsic motivation and cognitive interest. This finding corresponds with theoretical assumptions that abrupt shifts from play to strictly formal instruction may negatively affect cognitive engagement and learning motivation.

The effectiveness of inquiry-based and problem-based learning observed in the study confirms the relevance of these approaches for early education. By engaging children in questioning, experimentation, and reasoning, such methods contribute to the development of higher-order cognitive skills. The discussion suggests that these approaches are particularly valuable when introduced gradually, beginning in preschool education and systematically expanded in

World Bulletin Publishing
Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X | Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

primary school. This gradual progression supports the development of reflective thinking and independent problem-solving abilities, which are essential components of cognitive activity.

Integrated learning approaches also emerge as a significant factor in cognitive development. The findings indicate that interdisciplinary activities promote holistic understanding and facilitate knowledge transfer, which enhances cognitive flexibility. From a pedagogical perspective, integration helps children perceive learning as a coherent process rather than a set of isolated subjects. This supports deeper cognitive engagement and aligns with contemporary educational models that prioritize competence development over fragmented knowledge acquisition.

The role of the teacher is central to the successful implementation of contemporary methodological approaches. The discussion emphasizes that teachers must act not only as transmitters of knowledge but also as facilitators of cognitive activity. This requires professional competencies related to designing engaging learning environments, selecting age-appropriate methods, and providing guidance that encourages independent thinking. The study underscores the need for continuous professional development to equip educators with the skills necessary to implement innovative methods effectively.

Despite the positive outcomes identified, the discussion also acknowledges certain challenges. These include insufficient methodological continuity between educational levels, limited resources, and varying levels of teacher readiness to adopt innovative practices. Addressing these challenges requires systematic collaboration between preschool and primary educators, as well as institutional support for methodological innovation.

In summary, the discussion confirms that contemporary methodological approaches, when applied consistently and coherently, create favorable conditions for the development of children's cognitive activity. These findings contribute to the broader discourse on early education reform and highlight the importance of pedagogical continuity in supporting children's cognitive and academic development.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

Conclusion

The present study confirms that the development of children's cognitive activity within the system of preschool and primary education is a fundamental pedagogical task that requires a coherent and methodologically grounded approach. Cognitive activity, understood as a combination of curiosity, motivation, independent thinking, and problem-solving ability, emerges as a key determinant of successful learning and long-term educational outcomes. The findings of the study demonstrate that contemporary methodological approaches play a decisive role in supporting and sustaining this complex process during the early stages of education.

The analysis shows that cognitive activity develops most effectively when preschool and primary education function as a unified and continuous system. Methodological continuity between these stages allows children to experience a gradual transition from play-oriented learning to more structured academic activity without a loss of motivation or cognitive interest. The preservation of active learning elements, such as play, inquiry, and problem-solving, in primary education contributes to children's positive attitude toward learning and enhances their readiness to engage in increasingly complex cognitive tasks.

The study highlights the effectiveness of play-based, inquiry-based, problem-based, and integrated learning approaches in stimulating cognitive activity. These methods create learning environments in which children are encouraged to explore, question, and reflect, thereby promoting higher-order thinking skills. The inclusion of digital educational tools further expands opportunities for interactive and individualized learning, provided that such tools are used in a pedagogically justified and balanced manner.

The role of the teacher is identified as a critical factor in the successful implementation of contemporary methodological approaches. Teachers who act as facilitators of learning, rather than sole sources of knowledge, are better able to create conditions that foster cognitive engagement and independence. This underscores the importance of continuous professional development and institutional support aimed at enhancing teachers' methodological competence.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

In conclusion, the study emphasizes that the development of children's cognitive activity should be viewed as a long-term, systematic process that begins in preschool education and continues through primary schooling. The consistent application of contemporary methodological approaches, supported by pedagogical continuity and professional collaboration, contributes to children's holistic cognitive development and lays a strong foundation for lifelong learning.

REFERENCES:

1. Qurbonovna, M. O. (2025). O‘zbek va qozoq tillarida qo ‘llangan to ‘ra leksemasida ma’no siljishi, Conferences, 1(3), 103-106.
2. Muminova, A. (2025). Talabalar tadqiqot qobiliyatlarini rivojlantirishda loyihalash texnologiyasidan foydalanish. Filologiya va Pedagogika, 4(4), 15-21.
3. Maksumova, S., Muminova, A., Hafizova, M. (2024). Formation of connotative meaning in the Uzbek language. Linguistics Moscow, 1(7), 15-20.
4. Muminova, A. (2024). Interfaol Darslar Orqali Tanqidiy Fikrlashni Rivojlantirish. Miasto Przyszłości, 1(1), 15-20.
5. Muminova, A. K. (2020). Socio-linguistic peculiarities of ranks and title names. Solid State Technology, 63(6), 390-395.
6. Oydin, M. M. O ‘zbek tilini o ‘qitishda матn yaratish texnologiyasidan foydalanish. O ‘zbek tilining xorijda o ‘qitilishi: ta’lim nazariyasi va amaliyoti, 189.
7. Хафизова, М. (2025). Самобытность с творчеством Есенина. Международная конференция академических наук, 4(6), 35-39.
8. Hafizova, M. (2025). The Symbol of Women in Abdulla Aripov's Work. Oscar Publishing, 1(2), 25-30.
9. Hafizova, M. (2025). The Real Truth and Literary Skill in Muhamma Yusuf’s Poetry. Oscar Publishing, 1(1), 15-20.
10. G’aybulov, Q. M., & Hafizova, M. A. (2021). Ingliz tilini o’rganishda innovatsion texnologiyalarning o’rni. Science and Education, 2(6), 471-476.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

11. Hafizova, M. (2019). Tips for teaching Russian language. Bridge to science: research works, 51.
12. Hafizova, M. A. (2016). Spiritual relationship to motherland in poetry of Sirojiddin Sayyid. Наука и мир, 3(2), 154-155.
13. Жиянова, Н., Мўминова, О., & Максумова, С. (2016). Нутқ маданияти. Маърузалар матни. Тошкент.
14. Sunnatovna, S. M. (2025). The relationship between the denotative and connotative meanings of a word, and the means of expressing connotative meaning. Journal of Modern Educational Achievements, 11, 81-92.
15. Sunnatovna, S. M. (2025). She'riy asarlarda maqollarning qo 'llanishi (Erkin Vohidov, Muhammad Yusuf she'rlari misolida), Conferences, 1(3), 98-102.
16. Салишева, З. И., Максумова, С. С., & Жигульская, Д. В. (2025). Значение упражнений в развитии монологической речи русскоязычных учащихся. Hamkor konferensiyalar, 1(12), 281-283.
17. Maksumova, S., & Jiyanova, N. (2024). Badiiy matnning sintaktik xususiyatlari. Hamkor konferensiyalar, 1(8), 516-522.
18. Maksumova, S. (2024). Formation of connotative meaning in the Uzbek language. Linguistics Moscow, 1(7), 15-20.
19. Maksumova, S. (2024). Ona tilimizni o'rgatishda lug'atlardan foydalanish. Til va adabiyot, 4(4), 13-15.
20. Usmonova, Z., Pulatova, D., Maksumova, S., Dadajonova, O., & Zoitova, S. (2020). The use of project based learning in teaching process. International Journal of Psychosocial Rehabilitation, 24(S1), 537-542.
21. Максумова, С. М. (2011). Коннотативно-прагматическое значение риторических вопросительных предложений в узбекском языке. Российская тюркология, (2), 112-115.
22. Davlatova, V., Mukhammedova, K., Yuldosheva, Z., Ahadova, H., & Kholnazarova, V. (2024). Literary Analysis Of Doris Lessinng'S Works:"The Grass Is Singing" And "To Room Nineteen". SPAST Reports, 1(9).
23. Oysha, T., & Hulkaroy, A. (2024). THE EFFECT OF PLACEBO ON PEOPLE 'S HEALTH. IMRAS, 7(1), 142-144.
24. qizi O'zDJTU, A. H. Z. Modallik kategoriyaning yozma matnda ifodalanishi.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

25. Nigora, S., Hulkaroy, A. (2024). Developing speaking skills through task-based learning. Samarali ta'lim va barqaror innovatsiyalar jurnali, 2(3), 123-128.
26. Aziza, B. (2023). The role of methods in learning foreign languages in secondary school. Scientific Impulse, 1(6), 1207-1213.
27. Холмирзаев, Н. Н. (2025, September). ЎРТА АСРЛАР, ЧОР РОССИЯСИ ВА СОВЕТ ДАВРИ ШАҲАРСОЗЛИГИ ВА УЛАРНИНГ ЎЗИГА ХОС ХУСУСИЯТЛАРИ. In Partner conferences of the International Scientific Journal Research Focus (Vol. 1, No. 2, pp. 202-208).
28. Xolmirzaev, N. (2025). JADID MAKTABLARINING O'QITISH TIZIMI VA PEDAGOGIK MEROSI. Ижтимоий-гуманитар фанларнинг долзарб муаммолари Актуальные проблемы социально-гуманитарных наук Actual Problems of Humanities and Social Sciences., 5(7s), 88-91.
29. Xolmirzaev, N. N. (2025). VATANPARVARLIK VA SHAXS MA'NAVIYATI MASALASI. SCHOLAR, 3(3), 42-45.
30. Xolmirzaev, N. N. (2025). VATANPARVARLIK-MA'NAVIY BARKAMOLLIK MEZONI SIFATIDA. SCHOLAR, 3(3), 38-41.
31. Orifova, F., & Xolmirzayev, N. (2025). SOG 'LOM TURMUSH TARZINI SHAKLLANTIRUVCHI IJTIMOIY OMILLAR. Развитие и инновации в науке, 4(2), 72-74.
32. To'htasinov, O., & Xolmirzaev, N. (2025). SOG 'LOM TURMUSH TARZINI TARKIB TOPTIRUVCHI OMILLAR. Современные подходы и новые исследования в современной науке, 4(3), 142-143.
33. Xolmirzaev, N. (2025, February). TALABA YOSHLAR INNOVATSION FIKRLASH TARZINI SHAKLLANTIRISH MUHIM VAZIFA. In Международная конференция академических наук (Vol. 4, No. 2, pp. 104-105).
34. Nizomjonovich, N. X. (2024). The Stages of Urbanization Development and Their Historical-Philosophical Analysis. Buletin Antropologi Indonesia, 1(3).
35. Mavlonov, I. X. (2025). Milliy yuksalish konsepsiyasini amalga oshirishda xalq deputatlari kengashlarining tutgan o 'rni. Oriental Art and Culture, 6(3), 9-15.

World Bulletin of Education and Learning (WBEL)
ISSN (E): 3072-175X
Volume 01, Issue 03, December 2025

https://worldbulletin.org/index.php/1

36. Mavlonov, I. (2024). Implement the Concept of National Growth Objective and Subjective Factors. International Journal of Formal Education, 1(1), 65-70.
37. Mavlonov, I. (2024). Implement the concept of national growth the need to transform increase into a national movement. International bulletin of applied science and technology, 3(7), 237-243.
38. Vazira, D. (2025). Doris lessing qisqa hikoyalarida leksik qatlam va milliy-kolorit xususiyatlari. Tadqiqotlar, 69(1), 51-55.
39. Vazira, D. (2025). Doris lessingning “qurbon”(“casualty”) va “ayollar bo ‘limi”(“womb ward”) qisqa hikoyalarida obrazlarni kontrast asosida yaratish mahorati: qiyosiy tahlil. TADQIQOTLAR, 69(1), 56-60.
40. Kaljanova, G. (2024). Description of the image of a woman in William Shakespeare’s comedy “the taming of the shrew”. in international conference on medicine, science, and education, 1(9), 44-47.
41. Kaljanova, G. (2024). The peculiarity of hamlet’s tragedy in the work of william shakespeare. International conference on modern development of pedagogy and linguistics, 1(9), 31-33.