



CRITERIA FOR ASSESSING THE DEVELOPMENT OF COGNITIVE COMPETENCIES IN 5–6-YEAR-OLD CHILDREN BASED ON THE INTEGRATIVE APPROACH

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Abstract: *This article examines the theoretical and diagnostic nature of the concept of cognitive competence development from the perspective of the competency-based approach. Drawing on the scholarly perspectives of J. Raven, F. E. Weinert, A. V. Khutorskoy, I. A. Zimnyaya, V. I. Baydenko, and N. Chomsky, the study identifies the structural components of cognitive competence, the mechanisms underlying its development, and the criteria used for its assessment. Particular attention is devoted to the pedagogical potential of the integrative approach in developing the cognitive competencies of 5–6-year-old children within the preschool education system, based on the content of the “Ilk Qadam” State Curriculum of the Republic of Uzbekistan. The study substantiates that the integration of developmental domains, activity-based learning, a developmental educational environment, and the guiding role of the teacher constitute essential pedagogical conditions for fostering children’s abilities to observe, compare, analyze, solve problems, and draw independent conclusions.*

Keywords: *cognitive competence, competency-based approach, integrative approach, preschool education, children aged 5–6, diagnostics, “Ilk Qadam” State Curriculum.*

Аннотация: *В статье анализируется теоретическая и диагностическая сущность понятия «развитость познавательной компетентности» с позиций компетентностного подхода. На основе научных взглядов Дж. Равена, Ф. Э. Вайнерта, А. В. Хуторского, И. А. Зимней, В. И. Байденко и Н. Хомского раскрываются структурные компоненты познавательной*

компетентности, механизмы её развития и критерии оценки. Особое внимание уделяется педагогическим возможностям интегративного подхода в развитии познавательных компетенций детей 5–6 лет в системе дошкольного образования на основе содержания Государственной учебной программы Республики Узбекистан «Илк кадам». Обосновывается, что интеграция образовательных областей, деятельностный подход, развивающая предметно-пространственная среда и направляющая роль педагога являются важными педагогическими условиями формирования у детей умений наблюдать, сравнивать, анализировать, решать проблемные ситуации и самостоятельно делать выводы.

Ключевые слова: познавательная компетентность, компетентностный подход, интегративный подход, дошкольное образование, дети 5–6 лет, диагностика, Государственная учебная программа «Илк кадам».

Annotatsiya: Mazkur maqolada “bilish kompetensiyasi rivojlanganligi” tushunchasining nazariy va diagnostik mohiyati kompetensiyaviy yondashuv nuqtayi nazaridan tahlil qilingan. J. Raven, F. E. Weinert, A. V. Xutorskoy, I. A. Zimnyaya, V. I. Baydenko va N. Chomskylarning kompetensiya nazariyasiga oid ilmiy qarashlari asosida bilish kompetensiyasining tarkibiy tuzilmasi, rivojlanish mexanizmlari hamda uni baholash mezonlari yoritilgan. Shuningdek, maktabgacha ta’lim tizimida 5–6 yoshli bolalarning bilish kompetensiyalarini rivojlantirishda integrativ yondashuvning pedagogik imkoniyatlari O‘zbekiston Respublikasining “Ilk qadam” davlat o‘quv dasturi mazmuni asosida tahlil etilgan. Tadqiqotda rivojlanish sohalarining o‘zaro integratsiyasi, faoliyatga asoslangan ta’lim, rivojlantiruvchi muhit va pedagogning yo‘naltiruvchi roli bolaning kuzatish, taqqoslash, tahlil qilish, muammolarni hal etish va mustaqil xulosa chiqarish qobiliyatlarini rivojlantirishning muhim pedagogik shartlari sifatida asoslangan.

Kalit so‘zlar: bilish kompetensiyasi, kompetensiyaviy yondashuv, integrativ yondashuv, maktabgacha ta’lim, 5–6 yoshli bolalar, diagnostika, “Ilk qadam” davlat o‘quv dasturi.

The concept of “the development of cognitive competence” is regarded as one of the key categories of the competency-based approach in contemporary pedagogy and educational theory. In revealing the diagnostic nature of this concept, the scientific views of foreign scholars who have contributed to the development of competence theory serve as an important methodological foundation. Their conceptual approaches make it possible to determine the structural components of cognitive competence, the mechanisms of its development, and the criteria for its assessment.

J. Raven interprets competence as an integrated system of knowledge, skills, values, motivation, and individual qualities that enables an individual to perform a particular activity effectively. According to the scholar, the assessment of competence should not be limited to examining acquired knowledge; rather, it should also encompass an individual’s ability to make independent decisions in complex situations, solve problems, demonstrate initiative, and reflect on their own activities. Therefore, Raven identifies the results of real activities and the degree to which they are manifested as key criteria for diagnosing competence. This approach demonstrates the need to analyze cognitive and personal factors in an integrated manner when assessing the development of cognitive competence.

F. E. Weinert defines competence as an integrated system of an individual’s existing or acquired cognitive abilities and skills, together with motivational, volitional, and social readiness that enables their successful application in various situations. In his conceptual framework, competence is not static knowledge but a dynamic quality manifested in practical activity. Consequently, the diagnosis of cognitive competence development should assess not only the scope of knowledge but also the ability to apply knowledge in new and non-standard situations. Weinert puts forward effectiveness of activity as one of the principal criteria for assessing competence.

A. V. Khutorskoy distinguishes between the concepts of competence and competency. According to him, competence represents a set of social requirements

defined within the content of education, whereas competency refers to the degree to which an individual is able to successfully demonstrate and implement these requirements in real activity. The scholar emphasizes that the primary outcome of education is not the acquisition of ready-made knowledge, but the formation of competencies. From this perspective, diagnosing the development of cognitive competence should determine not only the learner's theoretical knowledge but also the extent to which such knowledge is manifested in practical activity.

I. A. Zimnyaya considers competence an integrative quality of the individual and notes that knowledge, skills, experience, motivation, values, and reflective activity are interconnected within its structure. In her conceptual framework, competence is interpreted not merely as an educational outcome but as a complex psychological and pedagogical phenomenon that ensures the individual's subsequent development. Therefore, when diagnosing the level of cognitive competence development, it is insufficient to assess knowledge alone; it is also necessary to determine the learner's ability to exercise self-control, analyze their own activities, and demonstrate readiness for independent learning.

V. I. Baydenko considers the competency-based approach to be a methodological foundation for assessing the quality of education. He regards competencies as a universal criterion for designing and evaluating educational outcomes. According to the scholar, the diagnosis of competencies requires the development of clear indicators, criteria, and level-based descriptions. This approach provides a theoretical basis for developing valid and reliable diagnostic tools for assessing the development of cognitive competence.

The concepts of "competence" and "performance" introduced into scientific discourse by N. Chomsky subsequently had a significant influence on the development of the theory of pedagogical competence. Chomsky characterizes competence as an individual's internal system of knowledge and performance as the manifestation of this knowledge in real activity. Although this theory was initially developed within the field of linguistics, its methodological ideas have also been

applied in pedagogical diagnostics, substantiating the necessity of assessing separately an individual's potential capabilities and their practical manifestation. From this perspective, the diagnosis of cognitive competence development should involve a comprehensive assessment of both the learner's cognitive potential and their ability to demonstrate this potential in practical activity.

A comparative analysis of the above-mentioned scientific perspectives demonstrates that all of these scholars interpret competence not as a simple accumulation of knowledge, but as an integrative quality that enables an individual to perform complex activities effectively. Accordingly, the diagnostic nature of cognitive competence development should not be limited to determining the level of knowledge; rather, it should involve a comprehensive assessment of the learner's ability to regulate cognitive processes, engage in critical and creative thinking, solve problems, reflect on their activities, and apply knowledge in new situations. This approach establishes the theoretical and methodological foundation for assessing cognitive competence and serves as a scientific basis for determining the effectiveness of competency-based education.

In the preschool education system, ensuring the comprehensive development of the child is regarded as one of the priority directions of contemporary pedagogy. Today, the content of preschool education is increasingly oriented not only toward providing children with specific knowledge but also toward developing competencies such as independent thinking, understanding the surrounding environment, solving problematic situations, organizing their own activities, and applying acquired knowledge in practical contexts. From this perspective, the "Ilk Qadam" State Curriculum, one of the key regulatory and educational documents defining the content of preschool education in the Republic of Uzbekistan, has been developed based on the methodological principles of an integrative approach, in which child development is interpreted as a holistic pedagogical process.

The principal conceptual idea of the "Ilk Qadam" State Curriculum is to place the child's personal development at the center, organize the educational process in

accordance with the child's age-related, psychological, and individual characteristics, and ensure the integration of different areas of development. Within this curriculum, the child is not viewed as a passive object of the educational process but as an active participant, researcher, and subject who acquires knowledge through personal experience. This is directly consistent with the fundamental philosophical and pedagogical principles of the integrative approach.

From the perspective of an integrative approach, the development of a preschool-aged child is regarded not as a sum of separate developmental areas, but as a holistic system of interconnected developmental processes. The “Ilk Qadam” State Curriculum also organizes child development around five major developmental areas. These include:

- physical development and the formation of a healthy lifestyle;
- socio-emotional development;
- speech, communication, reading, and writing skills;
- development of cognitive processes;
- creative development.

The organization of these developmental areas not as isolated components but as interconnected processes constitutes the core content of integrative education. This is because the cognitive activity of a 5–6-year-old child is not limited solely to the process of thinking. In the process of acquiring new knowledge, the child simultaneously observes, communicates, expresses emotions, engages in physical activity, thinks creatively, and acquires social experience.

The “Development of Cognitive Processes” area identified in the “Ilk Qadam” curriculum is specifically aimed at developing children's intellectual activity and envisages the development of cognitive competencies such as observation, comparison, classification, analysis, identification of cause-and-effect relationships, asking questions, and drawing independent conclusions. In developing these competencies, the integrative approach functions as a key methodological mechanism.

For example, when organizing an integrative activity on the topic of “Natural Phenomena,” the child does not merely acquire knowledge about nature. The child observes seasonal changes, expresses ideas based on observations, learns new vocabulary, compares natural objects, identifies quantitative characteristics, and expresses personal ideas through creative activities. Consequently, cognitive, linguistic, mathematical, social, and creative competencies are developed simultaneously during the same activity. This process ensures the integrated implementation of the developmental areas envisaged in the “Ilk Qadam” curriculum.

Another important idea promoted by the curriculum is the principle of child development through activity. According to this principle, children do not acquire knowledge in a ready-made form; rather, they independently construct and acquire knowledge through play, experimentation, observation, communication, and practical actions. In this regard, the activity-based content of the “Ilk Qadam” curriculum is closely aligned with the integrative approach. Integrated activities provide children with opportunities to apply different types of knowledge and skills in real-life situations.

For example, during an activity on the topic of “Properties of Water,” the child acquires knowledge of natural science by observing different states of water, develops mathematical concepts by measuring the quantity of water, develops linguistic competence by discussing the results of experiments, and develops visual and creative abilities by producing creative work related to the topic of water. Such integrative activity enables the child to perceive knowledge not as separate elements but as a coherent and interconnected system.

One of the important features of the “Ilk Qadam” State Curriculum is that the teacher is not viewed as the central source of knowledge, but rather as a subject who organizes, guides, and supports the child’s development. This approach corresponds to the learner-centered principle of integrative pedagogy. The teacher does not provide children with ready-made answers; instead, the teacher creates pedagogical

conditions that encourage independent thinking, questioning, exploration, and drawing conclusions.

Furthermore, the curriculum places considerable emphasis on the organization of a developmental environment, which represents another important manifestation of the integrative approach. Children's cognitive competencies are formed not only during specially organized educational activities but also throughout their everyday activities. Experimentation centers, creative activity zones, nature corners, and construction activities provide children with opportunities to act independently, conduct experiments, and test their knowledge in practice.

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