



METHODS FOR DEVELOPING STUDENTS' INTELLECTUAL ABILITIES IN HIGHER EDUCATION INSTITUTIONS

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***Abstract** This article analyzes contemporary approaches to developing students' intellectual abilities, their psychological and pedagogical foundations, innovative methods used in the educational process, and scholarly perspectives on fostering creative thinking and analytical competencies. The study aims to identify effective ways of enhancing students' intellectual potential and to develop recommendations for introducing these methods into pedagogical practice.*

***Keywords:** intellect, cognitive development, critical thinking, creative thinking, metacognition, student competence, educational technologies.*

One of the main goals of education in the twenty-first century is to develop high-level intellectual competencies in students and prepare them to become specialists who can think independently, approach tasks creatively, and make analytical decisions. A set of intellectual abilities comprises the quality of the processes through which students acquire, process, analyze, and apply knowledge in practice. Their effective development requires a specialized pedagogical approach.

At present, issues concerning the psychological mechanisms of intellectual development, scholarly views on the role of the learning environment, and support for cognitive processes through modern technologies are particularly relevant. The significance of this study lies in identifying scientifically grounded methods that contribute to the development of students' intellectual potential. Educational technologies appropriate for developing the intellectual and creative potential of future preschool educators can be considered at two levels: the level of the pedagogical process as a whole and the level of individual elements of the pedagogical process.

Problem-based learning, modular learning, contextual learning, and game-based learning are among the most widely used technologies aimed at developing students' intellectual and creative potential.

An analysis of specific theories and tools for assessing intelligence allows us to draw certain conclusions about the tendency that emerged in the late twentieth century to present theories of intelligence consistently alongside psychometric tools for testing them. In recent years, foreign studies have increasingly presented each new model of intelligence with substantial psychometric support, including one or more test batteries normed on sufficiently representative samples. In most studies, intelligence is interpreted as one of the most important factors contributing to success in activity.

The theoretical foundations for addressing the problem of developing intellectual abilities have been widely discussed in a number of psychological and pedagogical studies. Yu. A. Samarin, for example, emphasizes the importance of the methods and techniques of mental work for developing generalized mental skills and enabling the use of

knowledge in different situations (259, 75). P. L. Galperin, E. L. Kabanova-Meller, L. A. Menchinskaya, N. F. Talyzina, and others established a direct relationship between the way knowledge is acquired and the success with which it is applied in practice. They showed that the effectiveness of students' knowledge acquisition depends on the level of development of their skills in analysis, synthesis, abstraction, and generalization. The Swedish scholar I. Lindhart considers learning to be "the primary factor in mental development, which underlies the development of the whole person" (195, 13).

V. D. Shadrikov's concept of intelligence is consistently integrated not only with the structure of human abilities but, above all, with the structure of a person's inner world. The inner world, which is the subject of psychological inquiry, has a layered structure. It includes the characteristics of the individual (the body's functional systems), the individual as a subject of activity (operational characteristics), and the individual as a person (mental states, motivation, personal traits, and other features).

The development of a person's inner world takes place through activity, which constitutes a psychological functional system. It is based on individual mental functions that develop on the basis of the organism's physiological functional systems. The characteristics of these mental functions are human abilities, which have a systematic and integrated structure. More specifically, this refers to the above-mentioned abilities of the individual as a person, as a subject of activity, and as an individual. The abilities of the subject of activity, which develop through activity on the basis of physiological functional systems and human capacities,

constitute systematic psychological formations that ensure the achievement of the intended results of activity.

The role of personal abilities lies in enabling the subject to manage processes of operationalization and intellectualization and to master individual abilities. With regard to the concepts of intelligence and intellectual abilities, it should be noted that, in V. D. Shadrikov's theory, intelligence is characterized as a systematic manifestation of an individual's cognitive abilities (the abilities of the subject).

Mental development

Mental development is a dynamic system that depends both on the acquisition of social experience and on the maturation of the organic basis, primarily the brain and nervous system. On the one hand, this basis creates the prerequisites necessary for development; on the other, it changes under the influence of activity. Mental development proceeds unevenly depending on a child's living conditions and upbringing. During spontaneous and unstructured development, its level may decline, indicating the effects of disruptions in mental processes. Therefore, diagnosing each child's level of mental development is highly relevant for psychologists working in the education system.

Indicators of mental development

The indicators of mental development considered by Russian psychologists depend on the content of the theoretical concepts of mental development they adopt. The following indicators are frequently identified:

- characteristics of mental processes, primarily thinking and memory;
- characteristics of learning activity;

- indicators of creative thinking.

None of the identified indicators of mental development, taken individually, fully reflects the characteristics of an individual's cognitive sphere at different stages of development.

The intellectual abilities of future preschool educators are the capacity to carry out mental processes based on knowledge in the humanities, psychology, pedagogy, and subject-specific fields, and to apply that knowledge when solving educational and professional problems. The intellectual abilities of future educators include the following:

I. Cognitive skills

Identifying concepts; establishing relationships between concepts; and identifying fundamental postulates and their consequences when solving educational and professional problems. If a future educator has developed cognitive skills, they can analyze and evaluate a pedagogical situation while addressing educational and professional problems, identify the problem, overcome factors contributing to its emergence, and determine ways to resolve it further.

II. Metacognitive abilities

Setting goals and subgoals for one's own intellectual activity; formulating questions; proposing and substantiating hypotheses; planning by establishing the sequence of one's actions; forecasting by considering the consequences of decisions and anticipating possible changes in a problem situation; structuring information; and synthesizing different cognitive positions through communication with others. If a future educator has developed metacognitive abilities, they can devise ways to solve educational and professional problems and

develop plans for selecting the content, forms of activity, and educational tools.

III. Intellectual skills

Using different methods to describe and analyze a particular phenomenon; applying heuristic methods; drawing on the characteristics of specific techniques during learning and cognitive activity; and independently evaluating the quality of individual “steps” in one’s own intellectual activity.

The development of future educators’ intellectual abilities takes place within the process of general professional training and is carried out in stages. The stages of future educators’ general professional training are orientation, theoretical and methodological preparation, and activity-based preparation.

At the orientation stage, all types of intellectual abilities are developed, with priority given to the development of future educators’ cognitive intellectual abilities. At the theoretical and methodological stage, all three types of intellectual abilities are developed, but priority is given to future educators’ metacognitive intellectual abilities.

At the activity-based stage, the development of all types of intellectual skills continues, with priority given to developing future educators’ mental abilities.

The intellectual abilities of future preschool educators are developed through solving various educational and professional problems in accordance with the logic of the stages of students’ general professional training:

First, at the orientation stage of general professional training, priority educational and professional tasks focus on updating intellectual

skills. These tasks are aimed at developing future educators' self-diagnostic skills in relation to their intellectual abilities; building a system of knowledge about intellectual abilities; and identifying strategies for developing these abilities.

At the second, theoretical and methodological stage of general professional training, priority educational and professional tasks focus on designing the process of intellectual development. These tasks aim to help students gain individual experience in using methods, forms of activity, tools, and techniques for developing intellectual abilities.

At the third, activity-based stage of general professional training, priority educational and professional tasks focus on modeling the process of developing intellectual skills. These tasks are intended to acquire and consolidate new knowledge and use learning activities that reflect the development of intellectual abilities. They also include tasks aimed at assessment and self-assessment, as well as self-monitoring the use of intellectual abilities when solving educational and professional problems.

The framework of criteria for diagnosing the development of future preschool educators' intellectual abilities includes subjective and activity-based criteria.

The indicators of the subjective criterion are motivational and reflective. The motivational indicator describes future educators' attitudes toward developing their intellectual abilities and determines their level of interest in studying the characteristics of these abilities and using them to solve educational and professional problems. The reflective indicator is demonstrated in a future educator's ability to analyze and

evaluate how they use their intellectual abilities when solving educational and professional problems.

The indicators of the performance criterion are cognitive and operational. The cognitive indicator characterizes future educators' knowledge of intellectual abilities and of methods for solving educational and professional problems by using these abilities. The operational indicator determines future educators' ability to use their intellectual abilities when solving educational and professional problems.

Foydalanilgan adabiyotlar ro'yxati

1. G'oziyev E. "Psixologiya". – Toshkent, 2010.
2. Saidahmedov N. "Yangi pedagogik texnologiyalar". – Toshkent, 2016.
3. O'ktam qizi Mamatkulova S. INCREASING THE PEDAGOGICAL AND PSYCHOLOGICAL COMPETENCE OF THE STUDENTS OF THE PRESCHOOL EDUCATIONAL ORGANIZATION //Results of National Scientific Research International Journal. – 2024. – T. 3. – №. 1. – C. 97-102.
4. Shakhnoza M. IMPROVING THE PEDAGOGICAL AND PSYCHOLOGICAL COMPETENCE OF FIRST-YEAR CHILDREN IN PRESCHOOL EDUCATION //European International Journal of Multidisciplinary Research and Management Studies. – 2022. – T. 2. – №. 05. – C. 121-124.
5. O'ktam qizi Mamatqulova S., Nurboyeva D. PEDAGOGICAL PSYCHOLOGICAL COMPETENCE OF FIRST-YEAR CHILDREN IN PRESCHOOL EDUCATION //TRENDS OF MODERN SCIENCE AND PRACTICE". – 2023. – T. 1. – №. 5. – C. 45-54.