

ABSTRACT

of Ontuganova Shynar Sheralievna's thesis on the topic: "Developing teaching of thinking and language of primary schoolchildren using logical techniques" for the degree of Philosophy Doctor (PhD) in the specialty "6D010200-Pedagogy and Methods of Primary Education"

Research topic: Developing teaching of thinking and language of primary schoolchildren using logical techniques

Aim of the study: to determine the theoretical and methodological foundations of developing teaching of thinking and language of primary schoolchildren using logical techniques, to develop and experimentally test the effectiveness of the methodological system.

Objectives of the study:

1. To determine the theoretical and methodological foundations for developing teaching of thinking and language of primary schoolchildren using logical techniques in the primary education system;

2. To clarify the essence of the concepts "logical techniques", "developing learning of thinking and language" and reveal their structure;

3. To develop a structural-content model for developing teaching of thinking and language of primary schoolchildren using logical techniques;

4. To develop and experimentally test the effectiveness of a methodological system for developing teaching of thinking and language of primary schoolchildren using logical techniques in the primary education system.

Methods of the study:

- *theoretical*: analysis of philosophical, psychological-pedagogical and scientific-methodical literature on the study problem, systematization, content analysis, association, critical analysis of scientific works reflecting a range of problems; modeling, theoretical refinement;

- *empirical*: diagnostics, questioning; conducting a pedagogical experiment, observing and sorting the results; their statistical and mathematical processing.

Main provisions:

- *Philosophical categories* for determining the internal content structure of developing teaching of thinking and language of primary schoolchildren using logical techniques: the logic of thinking, patterns of thinking, ways of understanding natural phenomena, the world in unity with consciousness, development with the fullness of knowledge, the premise of the human mind, the beginning of human development, ways of solving problems, attributes of the substances of nature, separation of lies from truth, spiritual enrichment of the world is provided as an amazing phenomenon, an independent, necessary concept, a system of signs, a means of communication; *psychological characteristics*: thinking is a mental process that illuminates the true world with all interconnections, relationships; language is an indicator of human consciousness, its psychology; complex, multifaceted changes in a person associated with the creation of new actions, images and concepts; *pedagogical significance*: material

that requires the use of logical techniques (thinking processes: analysis, collection, comparison, abstraction, generalization; forms of thinking: concept, judgment, mental conclusion) use in the learning process in primary school activates the basic qualities of the intellect of students (mind insight, speed thinking, independence, depth, etc.), intellectual skills and cognitive processes;

- "*Logical methods* - a structure that creates new knowledge based on previous knowledge through thinking"; "teaching language and thinking is a process of self-education in the relationship of the subject-subject, aimed at developing the child's abilities through the forms of thinking and speech;

- a systematic approach, an activity approach, a personality-oriented approach, a subjective approach, as well as the principle of the unity of theory and practice, the principle of systematic educational and cognitive activity, a scientific approach to educational material, the principle of taking into account age characteristics, developmental characteristics of students, demonstration principles lie in the methodological the basics of developing teaching of thinking and language of primary schoolchildren using logical techniques;

- the structural-content model of the developing teaching of thinking and language of primary schoolchildren using logical techniques forms a set of criteria and indicators formed from the motivational-target, content-activity, evaluative-reflexive components in close relationship and is built on the basis of the relationship of high, medium, low levels;

- the methodological system for developing teaching of thinking and language of primary schoolchildren using logical techniques: the program of the scientific and methodological seminar for primary school teachers "Application of elements of logic in primary education" in the amount of 24 hours; the program of the optional course "Logical Literacy" for grade 3 students and the teaching aid "Fundamentals of developing teaching of thinking and language of primary schoolchildren using logical techniques".

Characteristics of the main results of the study:

- The theoretical and methodological foundations of developing teaching of thinking and language of primary schoolchildren using logical techniques in the primary education system have been determined;

- The essence of the concepts of "logical methods", "developing teaching of thought and language" has been clarified and their structure has been revealed;

- A structural-content model has been developed for developing teaching of thinking and language of primary schoolchildren using logical techniques;

- The effectiveness of a methodological system for developing teaching of thinking and language of primary schoolchildren using logical techniques in the primary education system has been developed and experimentally tested, and scientific and methodological recommendations have been given.

The degree of novelty and significance of the results obtained:

- 1-result - new* - the theoretical and methodological foundations of developing teaching of thinking and language of primary schoolchildren using logical techniques in the system of primary education have been determined;

2-result - new - the essence of the concepts "logical techniques", "developing teaching of thinking and language" has been clarified and their structure has been revealed;

3-result - new - a structural-content model has been developed for developing teaching of thinking and language of primary schoolchildren using logical techniques;

4-result - new - a methodical system for developing teaching of thinking and language of primary schoolchildren using logical techniques has been developed: a program of a scientific and methodological seminar for primary school teachers has been developed, designed for 24 hours on the topic "Application of elements of logic in primary education"; the program "Logical literacy" was developed for students of the 3rd grade of primary school, the program of the optional course and the educational-methodological book "Fundamentals of developing teaching of thinking and language of primary schoolchildren using logical techniques" were prepared

Compliance with the directions of development of science or government programs: the Law of the Republic of Kazakhstan "On Education" set the task: "... enriching the thinking of the individual through the development of creative, spiritual and power capabilities, the formation of solid foundations of morality and a healthy lifestyle, the creation of conditions for the development of individuality ". The solution of these problems will allow us to set priorities in such activities as the formation of a competitive nation, national self-consciousness, a comprehensive, mentally developed, educated generation.

The state compulsory standard of primary education (order No. 604 of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018) states: "The goal of primary education is the ability to functionally and creatively apply knowledge, think critically about the harmonious formation and development of the student's personality, mastery of various ways of communication, including language skills, the ability to work with a group and the creation of an educational space conducive to the harmonious formation and development of the personality of the student, who owns the basics of a wide range of skills, such as individual work. In the implementation of these tasks, the development of thought and language in a young child generates programmatic subjective ideas in learning and serves as the basis for the development of a student's thought and language in the practice of primary education.

In connection with quality education in the National Development Plan of the Republic of Kazakhstan until 2025: "it is important to form students' thinking skills from a simple level (knowledge, understanding, application) to a high level (analysis, synthesis, evaluation)" - provides for the development of human capital for implementation of a new direction of development of the country. Consequently, the state needs to increase the level of effectiveness and development of mental activity in the education system. It is obvious that at the present stage of development of Kazakhstan, the interaction of science and education is the main driving force for increasing its efficiency and competitiveness. Thus, in this direction, there is a need for the content, structure of

education in various versions, new ideas based on science and experience, modern approaches.

Description of the contribution of the PhD student to the preparation of each publication:

According to the content of the thesis, 6 scientific articles and 1 educational-methodical book were published.

In a journal included in the Scopus database in the article "Determining logical teaching methods and techniques for primary schoolchildren's thought and language development" (Cypriot Journal of Educational Sciences; Current Issues, 17(4), 1051-1065. May 31, 2022/ Scopus Q3 <https://doi.org/10.18844/cjes.v17i4.7101> (Ontuganova S., Amangeldi J., & Lyazzatkul A.) discusses the effectiveness of using logical techniques in the process of teaching primary school. It is noted that the scientific worldview of primary schoolchildren is realized through teaching the development of their thinking and speech. The scientific worldview is formed not only on the basis of theoretical knowledge, but also as a result of consistent reasoning, correct thinking. Therefore, in the education system, including in primary education, it is important to develop the thinking and speech of students with the help of advanced learning technologies. In accordance with this, the article shows that the use of logical methods in teaching primary school students contributes to the development of their thinking and speech. The share of the PhD student in writing the article is 90%.

5 articles were published in publications recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan:

1. "Oqwşılardıń logıkalıq uǵımın qalıptastırwdıń amal-täsilderi" (scientific journal "Bulletin of Toraigyrov University" Pedagogy Series No. 3, 2020, pp. 388-397. Zhapbarov A.). The article actualizes the problem of finding new directions and new channels of education in Kazakh schools, discusses the most important ways of forming one of the forms of thinking "concept" among primary school students. The share of the PhD student in writing an article is 80%.

2. " Oqwşılardıń logıkalıq oylaw daǵdıların qalıptastırw jáne tapsırmalardıń mañızdılıǵına tal daw " (Scientific journal "Bulletin of the Academy of Pedagogical Sciences of Kazakhstan". (No. 6 (98), 2020, 75-87b, Zhapbarov A.) This article discusses the methodology for the features of the formation of skills games by enriching the vocabulary based on a logical concept. Education is widely involved in the process of renewal as the main institution for training new members of society and the accumulation of intellectual potential. In addition, the article analyzes from an experimental point of view of the research problem the textbook "Mathematics", corresponding to the state standard of primary education in connection with the renewal of the content of education. The share of the PhD student in writing articles is 80%.

3. "Dialogtıq oqıtıw arqılı bastawısh sıñıp oqwşılarınıń til meñgertw jáne oylaw daǵdıların damıtıw" (International Scientific Journal "Science and Life of Kazakhstan". Pedagogy Series No. 3 (38) 2020 Astana. 378-383 S. Zhapbarov A.)

The article analyzes new teaching methods, i.e. language acquisition, logic, idea and tasks that affect the development of knowledge and skills This article describes teaching students the ability to compare, describe educational material and draw mental conclusions based on the acquired knowledge, using elements of logic, relying on proper logical knowledge The share of the PhD student in writing articles is 80%.

1 article in scientific journals of the Republic of Kazakhstan

"Bastawış sınıp oqwşılarınıñ logikalıq oylaw daǵdıların qalıptastırw". (Scientific journal "Bulletin of the Kazakh National Women's Pedagogical University". Pedagogy Series No. 2, 31-41b, Almaty, 2021. Zhapbarov A.) The article presents only logically correct thinking and understanding of cause-and-effect relationships, interdependence, distinguishing origin and development path things around us. The process of logically correct thinking is analyzed, the student's ability to be skeptical, critical of his assumptions and thereby strive to deepen and expand his understanding of the world, existence, creation. Therefore, the article discusses the pedagogical prerequisites, skills and means of practical study of logical concepts to complete the system of tasks in the main subjects at the initial stage, as a way of developing logical thinking skills in primary schoolchildren. The share of the PhD student in writing articles is 90%.

1 article was published in the materials of the international scientific-practical conference of the far abroad.

"Teaching students to think using logical approaches". (Şanlıurfa'da düzenlenen 4. Uluslararası GAP Sosyal Bilimler Kongresi Halykaralyk ғылыми-tazhiribelik konferentsynda. - Republic of Turkey, 2019. 16-20 b. Zhapbarov A.) The article discusses the ways of applying logical approaches in teaching the development of thought and language in primary education. The share of the PhD student in writing articles is 90%.

Educational-methodological book -1.

In the teaching aid on the topic: "Fundamentals of developing teaching of thinking and language of primary schoolchildren using logical techniques" samples of theoretical concepts and logical tasks for primary classes are presented.

These publications represent the work done by the PhD student mostly individually, depending on the content of the thesis, in accordance with the results obtained.