The defense of the degree of Doctor of Philosophy (PhD) in the specialty 6D010200- «Pedagogy and methods of primary education», the dissertation work of Ulsana Borashovna Akhatayeva on the topic: «Preparation of future specialists for the development of research activities of primary school students»

#### ANNOTATION

**Relevance of the study.** Today, rapid changes in society require a modern person to have new qualities, such as self-expression and initiative, capable of thinking creatively. It is not difficult to understand that this, in turn, contributes not only to the development of specialists in higher education institutions, but also to the preservation of the intellectual potential of modern society. The state program for the development of education and science in the Republic of Kazakhstan for 2020-2025, adopted in the country, states: «increasing the global competitiveness of Kazakhstan's education and science, educating, and educating the individual on the basis of universal values». The source of implementation of these goals is the preparation of future specialists in higher education for the development of research activities of primary school students.

One of the requirements for the training of future specialists is the formation of a person who, along with the acquisition of knowledge that meets today's public demand, is able to enter into a creative search for knowledge of methods of application in life practice.

The state mandatory standard of higher education specifies competence – the ability to use the acquired knowledge, skills and abilities in the course of training in a practical way in professional activities. In the context of our research topic, it is necessary to focus on the issues of creative search in solving scientific research education, research of pedagogical experience, reflection, design, diagnostics, mastering all types of professional activities of students in higher educational institutions.

In the program of professional development of teachers, proposed by the Center for pedagogical excellence of AEO «Nazarbayev Intellectual Schools», the following defined «Skills necessary for the formation of students in the process of developing educational programs». Since students of today's University are future teachers, we believe that it is necessary to master the skills of research, critical thinking, creative application of knowledge, problem-solving skills that directly related to our work at the university.

In the course of the study, it found that the preparation of future specialists for the development of research activities of primary school students is not a specific object of research, but in general, the issues of training future primary school teachers, the development of their research competencies analyzed in different ways. The results of the study of theoretical works allowed us to know the characteristics of scientific directions of the problem of research activities in the field of psychology and pedagogical sciences. Psychological and pedagogical implications of the problem of training future primary school specialists: K.B. Zharykbayev, H.T. Sheryazdanova, A.Ermentayeva, M.K. Bapayeva, K.A. Abulkhanova, R. Koyanbayev, T.S. Sabyrov, A.E. Abylkasymova, A.K. Rysbayeva, B.T. Kenzhebekov, B.A. Turgunbayeva, A.S. Amirova, K.Zh. Buzaubakova, M.Z. Dzhanbubekova, K.M. Nagymzhanova, S.A. Nurzhanova, A.Sh. Baitokayeva, G.K. Baimukasheva, G.A. Baydan, B. Barsay, N.S. Katayev, N.F. Smorgunova, M.V. Dedlovskaya, E.G. Dikanova, A.K. Moshkalov, A. Syzdykbayeva, K. Muldabekova, A.S. Kasenova the purpose of the seminar is to familiarize students with the history of the Kazakh language.

The works of scientists who scientifically and philosophically studied research activities form the methodological foundations of our work.

Scientists of the East Aristotle, Al-Farabi, philosophers F. Bacon, R. Descartes, the basis of his scientific works were the methodology of research activities of J. Locke, I. Kant, S.L. Frank, D. Makkinon, A.F. Osborn, A.M. Seleznev, I. Taylor, E.G. Yudin, T. Gabitov, A. Nysanbayev, K. Abishov, D. Kishibekov, G.A. Kaktayeva, methodologists V.V. Kraevsky, A.M. Novikov.

The need to prove research activities through experience is given in the works of A. Baitursynov, M. Dulatov, M. Zhumabayev, Zh.Aimautov and others.

The development of students ' research by future specialists as an urgent problem of pedagogical science at all stages of society is still studied in the works of scientists in Kazakhstan, the CIS and foreign countries. In the CIS, scientists-psychologists A.N. Leontiyev, L.S. Rubinshtein, A.N. Poddyakov, I.A. Zimnyaya and E.A. Shashenkova, N.N. Stavrin, A.I. Savenkov, D.Berline, V.V. Davydov, N.V. Sychkova and P.Yu. Romanov, V.A. Petrovsky, V.V. Selivanov, V.P. Zinchenko, Kazakhstan psychologists Zh.I. Namazbayeva, S.M. Zhakupov, N. Toksanbayeva, M. Myrzatayeva and others.

Kazakh pedagogical scientists and methodologists-scientists Sh.T. Taubayeva, N.S. Amelina, Z.A. Isayeva, R.S. Rakhmetova, K. Aimagambetova, U.B. Zheksenbayeva, A.E. Zhumabayeva, Zh. Sardarova, B.N. Kadyrova, G.I. Uaysova, G.T. Sadvakas, S.S. Izmukhanbetova, A.B. Ibashova, A.M. Tekesbayeva, R.K. Karsybayeva, A.M. Zhubandykova, N.G. Daumov, N.T. Sartayeva, etc.

Thus, the set of search directions determined as a result of analytical research and generalization of scientific literature shows that over the centuries in pedagogy, the stages of the theoretical base have been accumulated, which allow us to form the pedagogical basis of research activities. During the analysis of the scientific and pedagogical literature, we were convinced that the problem of developing research activities of students in primary schools in Kazakhstan studied in different scientific, pedagogical and methodological ways.

From this point of view:

- The need for the development of research activities of Primary School students, which is dictated by the demand of modern society, and the problem of training future specialists who are ready to organize them in accordance with changes in the educational paradigm;

- it is revealed that there are contradictions between the need to organize research activities with schoolchildren in all subjects taught at the beginning and the

insufficient methodological support of training future specialists for the development of their activities.

The relevance of the research topic and the search for solutions to these contradictions determine the problem of research; determine the topic of the dissertation work *«Preparation of future specialists for the development of research activities of primary school students».* 

The purpose of the study is to determine the scientific-theoretical and methodological foundations and develop a methodology for preparing future specialists for the development of research activities of primary school students, experimentally prove its effectiveness, and provide scientific and methodological recommendations.

**Object of research:** the process of learning in a higher educational institution.

**Subject of the study:** preparation of future specialists for the development of research activities of Primary School students.

Scientific forecast of the study: if the theoretical and methodological foundations of training future specialists for the development of research activities of primary school students are defined, a structural and content model is developed and a methodology for preparing future specialists for the development of research activities of primary school students is developed, the effectiveness of training future specialists for the development of research activities that ensure the success of students in educational activities will increase, as a special program and methodology based on training of future specialists will be implemented.

# **Research objectives:**

1 To determine the theoretical foundations of the problem of training future primary school specialists in the higher education system;

2. Clarification of the essence of the concepts of «research», «research activity»;

3. To determine the study in psychological and pedagogical works of preparing future specialists for the development of research activities of primary school students;

4. Development of a structural and content model of training future specialists for the development of research activities of primary school students;

5. Development of a methodology for preparing future specialists for the development of research activities of primary school students and testing their effectiveness through experiments.

The leading idea of the study is that the preparation of future specialists for the development of research activities of primary school students is not only a search element of their personal quality, general professional training, but also the main factor that makes this process successful.

Theoretical and methodological foundations of the research: philosophical, psychological, pedagogical teachings, concepts about the formation of personality in activity, theory of gradual formation of mental activity; reflection; concepts of self-development; concept of personality-oriented learning, theoretical principles in

pedagogy and psychology about innovative technologies, scientific concepts about the formation of information competence, didactic laws and principles of learning.

**Sources of research:** works of philosophers, teachers and psychologists; documents (concepts, comprehensive programs, textbooks and teaching aids, electronic textbooks) submitted by higher and multi-level educational institutions of the Ministry of education and science of the Republic of Kazakhstan related to the educational process, scientific achievements and best practices of pedagogy; official materials and documents (the law of the Republic of Kazakhstan on education «The state program for the development of education of the Republic of Kazakhstan for 2020-2025»), regulatory documents of the Ministry of education and science of the Republic of Kazakhstan, accumulated world best practices on the organization of the educational process in the conditions of university education, as well as pedagogical and scientific experience of the author.

### **Research methods:**

- Theoretical methods: analysis, generalization, content analysis, structuring, associating, generalization, comparison, clarification, design of results of scientific and theoretical literature;

- empirical methods: mental experiment, survey, observation, diagnostics, pedagogical experiment, mathematical and statistical processing of statistical results, monitoring, examination.

**Research base:** experimental work carried out by students of the specialty 5B010200-«Pedagogy and methods of primary education» of the South Kazakhstan State Pedagogical University and the International Humanitarian and Technical University. 120 students took part in the experimental and experimental work, of which 61 students were taken as an experimental group and 59 students as a control group.

**In introduction** scientific apparatus of the research, relevance of the research, purpose, object, subject, scientific forecast, tasks, leading idea, theoretical and methodological foundations, sources of research, methods of research, base, main stages of research, practical significance, principles proposed for protection, validity and validity of the research result, reliability, approval, implementation of the research results in practice.

#### Main stages of the study:

At the first stage (2017-2018), in connection with the ongoing changes in the field of education, the relevance of the issue of training future specialists for the development of research activities of primary school students was determined. Foreign and domestic scientific-theoretical and methodological works on this issue selected the theoretical foundations of the study, the topic of the study and the scientific apparatus were determined.

At the second stage (2018-2019), in accordance with the scientific forecast of the study, the features of training future specialists in the higher education system for the development of research activities of primary school students were determined and a structural and content model was developed. A special course program and methodology for experimental research developed, which increases the effectiveness of the research topic.

At the third stage (2019-2020), a special course program aimed at preparing future specialists for the development of research activities of primary school students tested in experimental work on research bases, where the implementation of educational and cognitive research and research tasks in practice was established. The results obtained during the experimental experiment analyzed, statistically processed and formalized in the form of a dissertation.

## Scientific novelty and theoretical significance of the research:

1. The theoretical foundations of the problem of training future Primary School Specialists in the higher education system have been determined;

2. The essence of the concepts of "research" and "research activity" is clarified;

3. The study of the preparation of future specialists for the development of research activities of Primary School students in psychological and pedagogical works is determined;

4. A structural and content model of training future specialists for the development of research activities of Primary School students has been developed.

5. Educational and methodological complexes for preparing future specialists for the development of research activities of Primary School students have been developed.

#### Practical significance of the research work:

A methodological complex for preparing future specialists for the development of research activities of primary school students: a special course program for future specialists on the topic «Development of research activities of primary school students»; a diary-notebook «research algorithm» for primary school students. The results of the study used in the educational process in higher and secondary special pedagogical educational institutions, general secondary schools, and advanced training centers.

#### **Principles proposed for protection:**

1. The process of training future specialists in higher education institutions considered in the works of psychological and pedagogical research. Psychological training of future primary school teachers creates conditions for understanding that subjectivity is a complex dynamic system of interaction with society and the environment in the formation of essential characteristics and personality qualities. The educational and cognitive activity of future specialists distinguished by research search, including the ability to predict problems, solve problems. The problem of training specialists in the field of educational and cognitive research and research work, which develops students' activity, curiosity, and creative abilities, based on a theoretical and methodological basis. Research in this direction forms the theoretical basis of our research work.

2. Research activities require first design. Designing research activities is a long-term process; therefore, in order to prepare future specialists for the development of research activities of Primary School students, it is necessary to organize the knowledge and skills of students from a research point of view, to solve the theory in conjunction with practice, and to clarify the necessary skills. The theoretical basis of our research work is the concretized essence of the concepts of

«research», «research activity» in the psychological and pedagogical context and its nature.

3. Implement the development of research activities of primary school students in the learning process, develop the subject development of joint activities and relationships, i.e. develop the student's logical thinking, imagination, plan a new object of research, and consider its ways. The organization of research activities implies the regulation of the system of the learning process as a whole with certain characteristics, logical structure and the process of its implementation. The readiness of future specialists for the development of research activities of primary school students considered as part of their professional training, armed with psychological and pedagogical knowledge, which allows combining educational and research activities, and the theoretical justification taken as an indicator of the professional quality of a teacher of a new type.

4. Content analysis of scientific-theoretical and scientific-methodological literature in the preparation of future specialists for the development of research activities of primary school students, guided by the definition of bases, principles, methods, Components, criteria and indicators for the preparation of future specialists for the development of research activities, became the basis for the construction of its structural and content model. The criteria and components of the development of research activities of primary school students of future specialists reflect the basic structure of this training in close connection with each other.

5. Preparation of future specialists for the development of research activities of primary school students carried out in the pedagogical process of the university with the introduction of a methodological complex in practice, consisting of a program of a special course for future specialists «development of research activities of primary school students». A diary-notebook «research algorithm» for primary school students, a methodological manual «creative tasks on literary subjects in primary classes».

The validity of the research results ensured by the scientific and pedagogical foundations of the research, the differentiated application of pedagogical technologies considered in accordance with the subject of the research. The plan of experimental work, the use of mathematical and statistical methods of initial and final results obtained in accordance with the objectives of the research, the introduction of a special course in the practice of the university with the verification of the identified content facts and educational and research activities.

**Reliability, approval, implementation of the research results**: the main conclusions, theoretical and practical results of the research work discussed at international conferences and scientific publications. In the course of the study, 9 works were published. Including 1 publication included in the Scopus database, 3 articles in scientific publications recommended by the committee for control in the field of education and science of the Ministry of education and science of the Republic of Kazakhstan, 4 articles in the materials of the international scientific and practical conference organized in the Republic of Kazakhstan, 1 methodological manual.

**Structure of the dissertation:** the dissertation consists of an introduction, two sections, a conclusion, a list of references, and appendices. The total volume of the work printed on a computer on 173 pages. It decorated with 21 tables, 26 paintings. The list of references consists of 164 references.

The introduction describes the scientific apparatus of the research, the relevance of the topic, the purpose, subject, object, forecast and objectives of the research, the methodological basis, the leading idea, methods and stages of the research, scientific novelty, practical significance, principles proposed for protection, the validity of the research result, its approval, implementation in practice.

In the first chapter **«Theoretical foundations of training future specialists for the development of research activities of primary school students»**, the problem of training future primary school specialists is considered in scientific works, during the analysis of scientific works from a theoretical point of view, the theoretical foundations are determined, the essence of the concepts «research», «research activity» as a philosophical, psychological and pedagogical category is clarified, the psychological and pedagogical foundations of training future specialists for the development of research activities of primary school students are determined.

In the second chapter **«Modeling of the process of training future specialists for the development of research activities of primary school students»**, the current state of training for the development of research activities of primary school students in the process of training future specialists is analyzed, and a structural and content model is developed, which defines the components, criteria, indicators of training for the development of research activities of students in the process of teaching a university, which defines very high, high, medium, low, very low levels.

In the third chapter **«Experimental work on the preparation of future specialists for the development of research activities of primary school students**», diagnostics of the initial stage of training future specialists for the development of research activities of primary school students is carried out, a methodological complex is prepared: «The program of the special course» «development of research activities of primary school students», the content of the diary-notebook «research algorithm» for primary school students and the methodological manual «creative tasks on literary subjects in primary schools» «will be explained». The results of the experimental work carried out on the research issue and their results are presented.

**The conclusion** describes the conclusions obtained based on the results of the study. Scientific and methodological recommendations are given on the research issue.

The appendix contains methods for diagnosing the results of research used in scientific and practical-pedagogical experiments, the program of a special course, the content of teaching aids, the act of testing, and other materials not included in the dissertation.