

## **ABSTRACT**

dissertation for the degree of Doctor of Philosophy (PhD)  
in the specialty «6D010300-Pedagogy and Psychology»

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on the topic «Psychological and pedagogical conditions for the formation of professional competence of managers in the education system»

**General characteristic of the work.** The dissertation research is devoted to the development of professional competence of managers in the education system.

**Relevance of the study.** In the conditions of formation of global competencies in the education system and the rapid development of information technology, caused by large-scale global transformations, the importance of updating the content of education increases significantly. The specified processes determine the necessity of the purposeful formation of professional competencies in the sphere of education and science according to the modern demands of the labor market.

The fundamental principles of the state policy in the sphere of education are defined in the Law of the Republic of Kazakhstan «About Education». In particular, in the Article 44 of Chapter 2 «Management of the system of education» of this Law establishes that the management of educational organizations, in accordance with the legislation of the Republic of Kazakhstan, is carried out based on the principle of unity of command as one of the key principles.

As emphasized in the Concept for the development of higher education and science of the Republic of Kazakhstan for 2023–2029, approved by the government resolution of the Republic of Kazakhstan № 248, the priority tasks are updating the content of education and formation of global competencies. In accordance with modern socioeconomic requirements, particular importance is attached to the training of competitive, comprehensively developed, and professionally competent specialists.

The Head of State Kasym-Zhomart Tokayev noted the importance of development of global competencies, emphasizing: «In modern terms, 'high-quality human resources' are necessary, as qualified and conscientious people are the backbone of the national economy and the guarantee of the country's future» in the Address to the People of Kazakhstan of 2025, «Kazakhstan in the Era of Artificial Intelligence: actual issues and their solutions through radical digital transformation».

In the conditions of increasing competition in the global market of knowledge, technology and resources, society's demands for the quality of professional training of specialists in various fields are growing. Therefore, educational institutions are oriented on diversifying the range of services provided and implementation of flexible forms of education providing the compliance with contemporary socioeconomic demands. Priority direction of the system of professional education is the provision of Ensuring high-quality training for teaching staff.

Special significance purchases the development and implementation of effective mechanisms for training future managers, which involves not only the acquisition of fundamental theoretical knowledge but also the development of applied skills, professional competencies and personal qualities in demand in the context of the modernization of the education system. In this regard, the need to update the content and the structures of educational programs based on a competence based approach; capable to effective professional activity is becoming increasingly actual.

The gradual expansion of the academic and managerial autonomy of the universities and according to international practice, the transformation of private non-profit organizations, the formation of development strategies, the provision of effective services in the education market, increase of competitiveness, the adoption of modern technologies and the introduction of innovative methods of management of human resources are among the current issues nowadays.

Radical changes in the society require a restructuring of the global approach to humanistic values, which corresponds to the content of psychological and pedagogical and managerial competence in the sphere of education. The researches have shown that the number of scientific-theoretical and applied works increases in the modern science and practice in recent years that comprehensively analyze the concepts of «competence», «management» as well as the content and essence of the professional competence of managers in the education system.

#### **The level of scientific development of the research problem.**

The theoretical and methodological foundations of the formation professional competence are examined in the works of such foreign scientists as Nezahat Guhlu, F.E.Weinert, S.P.Brown, and J.Jones; in the researches of Kazakhstani scientists: S.Zh.Praliyev, B.A.Turgynbayeva, B.T.Kenzhebekov, G.Zh.Menlibekova, K.S.Kudaybergeneva, K.M.Berkimbayev, N.V.Mirza, E.Zh.Sarmurzin, and L.A.Shkutina; the development of the system of management and administration in the education system in the works of the following scientists such as T.M. Baimoldayev, A.A.Zhaytapova, Sh.M.Kalanova, B.A.Koishybayev, N.D.Khmel, K.Zh.Aganina and others.

The conceptual foundations of professional education are substantiated in the works of S.I.Arkhangel'sky, Yu.K.Babansky, V.P.Bespalko, B.S.Gershunsky, V.V.Kraevsky, M.N.Skatkin, N.D.Khmel, Sh.T.Taubayeva, N.N.Khan and other scientists; personal-active activity in the educational process is considered in the works of L.S.Vygotsky, P.Ya.Galperin, A.N.Leontiev, Zh.Y.Namazbayeva, S.M.Dzhakupov, N.B.Zhienbayeva, O.S.Sanghylybayev, E.K.Kalymbetov and other scientists.

The methodological foundations of education, the theory of management have been extensively researched in the works of scientists from near and the distant abroad: F.Rogers, T.Peters, F.W.Taylor, P.F.Drucker; V.A.Slastenin, N.V.Kuzmina, I.A.Zimnyaya, A.K.Markova, A.P.Tryapitsyna, Yu.A.Konarzhhevsky, A.Mayorov, M.M.Potashnik, T.I.Shamova, S.D.Yakusheva, and others.

The researches in the field of pedagogical management began to conduct in the 90<sup>th</sup> of the 20<sup>th</sup> century and found the reflection in the works of Kazakhstani scholars: the theory and practice of managing the pedagogical process in comprehensive schools in the works of T.O.Balykbaev, T.M.Baimoldayev, D.N.Kulibayeva, S.K.Islamgulova, K.Zh.Aganina, Z.A.Isayeva, Zh.B.Umirbekova; scientific and pedagogical foundations, pedagogical conditions, and features of managing higher education institutions in the works of A.S.Satybaldiyeva, L.N.Kim, K.A.Zhusupova, E.Sh.Kozybaev, B.K.Omarova; K.S.Kudaibergenova comprehensively studied «competence» from the point of view of the category of pedagogy.

The methodological foundations of improving the training of educational institution managers were studied by A.Tuksanbaev, G.Z.Adilgazinov, B.Sailybayev and A.Abishev.

The analysis of the problem of the formation the professional competence of managers in the education system revealed that certain psychological and pedagogical material has been had which can serve the basis for the content's development of the formation of the professional manager's competence in the education system. However, several aspects of this problem haven't found appropriate solution and therefore, there is the absence of necessary scientific substantiation of effective ways to form the professional competence of managers in the system of education in the conditions of the universities. At the same time, a number of contradictions remains unresolved:

- *between* the priorities of the state educational policy of the Republic of Kazakhstan, oriented toward improving the quality of management of educational institutions, development of management personnel and ensuring the competitiveness of national education system and the insufficient readiness of a significant part of education managers to implement these priorities in the context of digitalization, reform and institutional changes;

- *between* the accumulated massif of scientific research in the fields of pedagogy, management psychology and educational management, recognizing the multi-component nature of the professional competence of an education manager and the insufficient integrity of the theoretical and methodological approaches to its development, taking into account the socio-cultural, institutional and digital features of the education system of the Republic of Kazakhstan;

- *between* the objective necessity of the development of the education managers to the psychological readiness to manage human resources, changes, professional risks and stress factors in the context of digital transformation and the prevalence in the practice of their training and professional development of formalized managerial and administrative approaches that are limited in their focus on developing the personal, reflective and emotional-volitional components of professional competence;

- *between* the objective interdisciplinary nature of the professional competence of an education manager, which supposes the integration of pedagogical, psychological and managerial knowledge and skills and the insufficient development of the psychological and pedagogical conditions and

mechanisms of such integration in the system of training and developing management staff in the education system.

These mentioned contradictions defined the problems of theoretically substantiating the formation of managers' professional competence in the education system, identifying methods and ways to implement psychological and pedagogical conditions in practice and formed the problems of the research and became the basis for the selection of the dissertation topic, «Psychological and pedagogical conditions for the formation of professional competence of managers in the education system»

**The object of the dissertation's research** is the pedagogical process at a higher education institution.

**The subject of the dissertation's research** is the formation of the professional competence of managers in the education system.

**The purpose of the dissertation's research** is theoretical substantiate and model development of the formation of the professional competence of managers in the education system and its effectiveness testing.

**Research hypothesis:**if to implement developed by us the model of the formation of the professional competence of managers in the education system in the educational process at higher education institutions **that** the formation of the professional competence of managers in the education system will be effective, **as** it will contribute to the training of competitive specialist with a high level of professional competence.

To test this hypothesis the following **tasks** must be solved:

1. to clarify the concept of professional competence of managers in the education system;
2. to determine the psychological and pedagogical conditions for the formation of the professional competence of managers in the education system;
3. to develop the model of the formation of the professional competence of managers in the education system;
4. Experimentally to test the effectiveness of the developed model of the formation of the professional competence of managers in the education system.

**The central idea of the research** is that the formation of the professional competence of managers in the education system contributes to the enhancement of the professionalism of specialists in the broad sense of the word and enables to create interactions between teachers and the participants of the educational process on a qualitatively new level, which, in turn, will reflect in the implementation of the professional management in the education system.

**The methodological and theoretical foundations of the research** include psychological and pedagogical theories and concepts, methodological approaches (competence-based, student-centered, activity-based and systemic) and principles: general didactic (awareness and activity, scientific rigor, accessibility, systematic and consistency) and specific (continuity, succession, practice-oriented approach, and flexibility).

**The sources of the research** are official government materials and regulatory documents of the Republic of Kazakhstan in the field of education; psychological

and pedagogical scientific works by Kazakhstani and foreign scientists related to the research topic; educational websites, teaching and methodological and program documentation; periodicals; reference manuals and educational literature; as well as the author's practical work as a higher education teacher.

**Research Methods:**

- theoretical methods: analysis of philosophical, psychological, pedagogical, and reference literature on the research topic, analysis of previously completed dissertations and study of the university documentation.

- empirical – a combination of psychological and pedagogical methods: pedagogical experiment, testing, methodology, and the study and generalization of pedagogical experience;

- mathematical methods of statistical processing of experimental research results: student's t-test analysis, data visualization methods.

**Research stages and procedure of the research:** the research was conducted in three stages.

**The first stage (2017-2018)** was exploratory and theoretical. This stage included a methodological analysis of the history of competencies in the system of education, an analysis of the competencies of the research, the stages of the historical development of competence as a pedagogical category, classifications of management functions and structure of the education sphere, and the specifics of the formation of competence-based management. The main components of professional and pedagogical competence (specialized and professional competence, methodological competence, social and pedagogical competence, psychologically differentiated competence, and autopsychological competence) of higher education teachers were examined. The pedagogical conditions of the formation of the competencies of managers in the education system were studied in details and the model of the formation of professional competence of managers in the system of education system was developed.

**The second stage (2018-2020)** was experimental. The personality structure of a teacher-manager was developed, the characteristic was supported based on types of management and managerial competence, the essence of the concept of competence of a teacher-manager was defined. The results of pedagogical research were organized and the structure and the content of communicative competencies of the graduates of pedagogical specialties were clarified. Diagnostic methods for determining the level of development of a specialist's basic value model (surveys and questionnaires, types of tests, trainings, SWOT analysis, sociometry) were selected and the functions of the pedagogical competencies of managers were classified within the framework of professional competencies. Training programs were developed. A pedagogical experiment was organized and conducted, interim results were obtained.

**The third stage (2020-2021)** was the final analytical stage. The principles and results of the scientific research were formulated, methodological recommendations were provided, conclusions based on the results of theoretical and experimental work were drawn and recommendations for future researchers on the conducted research were outlined, defining the perspective of the problem.

The research results were presented as the dissertation in accordance with the requirements.

**Research Background:**the experimental work was conducted at the following universities: NCJC Karaganda University named after Academician E.A. Buketov (students of the education programs of the field «Pedagogical Sciences») and PI Karaganda Economic University of Kazpotrebsoyuz ( an innovative educational program «6B03102 - Psychology and Management in Education»).

**The scientific novelty and theoretical significance of the research is in the following:**

- clarified the essence of the concept of «professional competence of managers in the education system»;
- identified the psychological and pedagogical conditions of the formation of the professional competence of managers in the education system;
- developed the model of the formation of the professional competence of managers in the education system.

**The practical significance of the research** consists in the fact that with the direct participation of the PhD candidate were developed:

- a special course «Professional competence of the future teacher-managers»;
- a teaching and methodical manual «Competence and competencies in the education system»;
- a computer program «Competence and competencies in the education system» (author's certificate №7453);
- a social and psychological training program aimed at the formation of communicative competencies of managers.

The proposed materials have been successfully implemented in the educational and training process of the universities, as confirmed by implementation documents.

**The following provisions are submitted for defense:**

1. Professional competence of managers in the education system is a structural phenomenon characterized by the professionalism of management staff and including the development of motivational, cognitive, communicative and reflective components which is considered as an integrative quality of the individual, determined by a combination of conceptual knowledge in the psychological and pedagogical field, as well as a set of abilities that actively influence the process of development and self-development of the individual's socio-value characteristics.

2. Psychological and pedagogical conditions for the development of professional competence of managers in the education system: personal focus; continuous professional development; the development of pedagogical reflection; the creation of a psychologically favorable environment; the development of a communicative culture; the integration of management theory with real-life pedagogical practice, which are aimed at the development of the managerial, pedagogical and personal potential of education managers and contribute to the effective development of their professional competence.

3. The model of the formation of the professional competence of managers in the education system is the integrity of interconnected components: goals, objectives, methodological approaches (competency-based, systemic, personality-oriented, activity-based, axiological (value-based)), content, methods, means and forms of teaching and learning, as well as principles (the principle of purposefulness, the principle of communication, the principle of conformity, the principle of the unity of consciousness and activity, the principle of development). The result of implementing this model is the formation of professional competence that ensures the development of components characterizing the professionalism of management personnel, adapted to modern requirements (motivational, cognitive, communicative, reflective), which contributes to the training of managers with a high level of professional competence.

4. An educational and methodological complex that ensures the effectiveness of the formation of the professional competence of managers in the education system and consisting of: a special course "Professional competence of the future teacher-managers"; a teaching and methodical manual «Competence and competencies in the education system»; a social and psychological training program aimed at the formation of communicative competencies of managers in the education system.

5. The results of the empirical-experimental verification of the effectiveness of the developed model of the formation of the professional competence of managers in the education system confirmed the hypothesis of our research.

**The reliability and validity** of the research results and the conclusions are ensured by theoretical and methodological positions, using a set of pedagogical research methods adequate to the goal, objectives, content and results of the research.

**Validation and implementation of research results.** The content of the dissertation was reflected in 25 scientific papers, including:

2 - publications indexed in the Scopus database («Cypriot Journal of Educational Science», 2021 and 2022);

1- a teaching and methodical manual «Competence and competencies in the education system» (Latvia, 2019);

1 – an electronic computer program «Competence and competencies in the education system» (author's certificate №7453);

6 - articles in the scientific journals recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Higher Education of the Republic of Kazakhstan («Bulletin of ENU named after L.N.Gumilyov. Pedagogy. Psychology. Sociology», 2018; «Bulletin of KazNPU named after Abai», series «Pedagogical Sciences», 2019; reports of the Kazakh Academy of Education. General Pedagogy. Pedagogy and History of Education. Ethnopedagogy, 2018; reports of the Kazakh Academy of Education. General Pedagogy. Pedagogy and History of Education. Ethnopedagogy, 2020; «Bulletin of Karaganda University», Series «Pedagogy», 2022; Bulletin of L.N.Gumilyov Eurasian National University. Pedagogy. Psychology. Sociology Series, 2024);

6 - in the proceedings of national conferences (Karaganda, 2020, 2022, 2024); (Astana, 2021, 2021, 2023);

9 - in the proceedings of international scientific and practical conferences in neighboring (Omsk, 2017), (Moscow, 2019), (Central Asia, 2020), (Samara, 2021) and distant foreign countries (Czech Republic, 2017, 2021), (Denmark, 2018), (Poland, 2019), (Slovakia, 2020).

**The structure of dissertation research** is determined by the logic and sequence of the objectives. The dissertation consists of 186 pages: an introduction, two chapters, a conclusion, appendix, 16 pictures, 15 tables. The list of references includes 222 sources a list of references in the Russian, Kazakh and English languages.