

REVIEW

of the Candidate of Pedagogical Sciences, Associate Professor

Oksana Vasylivna Krychkivska

on the dissertation research of Chen Ronghao

«Formation of Managerial Competence in Future Physical Education Teachers in Higher Education Institutions under Blended Learning Conditions»,

submitted for the degree of Doctor of Philosophy

in the field of knowledge 01 Education / Pedagogy

Specialty 011 Educational, Pedagogical Sciences,

Relevance of the dissertation research topic

In the context of the modernisation and digital transformation of higher education in Ukraine, the growing attention to competence-based and practice-oriented approaches in the training of teaching staff, as well as the active introduction of blended learning, the issue of developing the managerial competence of future physical education teachers is becoming particularly important. Today's physical education teacher is not only a specialist in the field of physical education, but also an organiser of the educational process, capable of planning, coordinating, controlling and managing pedagogical activities in a changing educational environment.

Ronghao Chen's dissertation research corresponds to current trends in the development of pedagogical science, which are focused on the formation of professional and managerial competencies of future physical education teachers as a component of their professional readiness. It is substantiated that the formation of a physical education specialist-manager in a higher education institution is an integral part of the educational process, where continuous learning enables the acquisition of practice-oriented managerial knowledge, skills and abilities. The managerial activity of future physical education teachers is considered as their personal ability to effectively use their own resources to achieve planned educational results. The main professional managerial qualities of a future teacher are defined as professional and managerial knowledge acquired in higher education institutions, their ability to organise and coordinate student learning, make effective decisions, communicate effectively, introduce management innovations into the educational process, develop management skills among applicants, and skills in using innovative and practical experience in their work, etc.

At the same time, the relevance of the topic is related to the fact that first pandemic restrictions and now the war in Ukraine have caused a change in learning models. The introduction of blended learning has ensured the safety and health of students, thus increasing the responsibility of teachers, as there is a growing need for educators who can instantly make informed management decisions in line with modern approaches to learning and the requirements for creating a proper health-saving educational environment.

The analysis of scientific literature, carried out by the dissertation author, emphasised the importance of focusing the training of students in blended learning environments on the formation of managerial competence and the development of sustainable motivation to acquire it in higher education institutions, which is not fully described in the scientific works of domestic and foreign scientists. Therefore, the problem concerning specialists in this field remains insufficiently explored.

The relevance of the research topic is substantiated by the author through the identification of a number of significant contradictions that exist in the training of students for managerial activities in traditional and blended learning environments, as confirmed by the regulatory and legal documents of Ukraine, as well as international and European integration educational provisions related to teacher training and digital learning. In this regard, higher education institutions are faced with the task of updating the content, forms, methods and pedagogical conditions of professional training aimed at developing the managerial competence of future physical education teachers.

Therefore, the research work of Chen Ronghao, dedicated to the problem of forming a teacher-leader in a higher education institution, is relevant, timely and socially significant, as it aims to reveal the essence of forming managerial competence in future physical education teachers in the conditions of blended learning in higher education institutions.

Connection of the work with scientific programmes, plans and topics

The dissertation research was carried out in accordance with the topic «Professional growth of an educator in an educational institution: fundamental, theoretical, technological and practice-oriented aspects» of the research work of the Department of Education and Pedagogy of the West Ukrainian National University (state registration number 0121U110855). The research topic was approved at a meeting of the Department of Education and Pedagogy (Minutes No. 6 of 19 December 2024).

The degree of validity of the scientific propositions, conclusions and recommendations formulated in the dissertation, their reliability

The reliability and validity of the scientific propositions and conclusions formulated in the dissertation are ensured by a comprehensive analysis of domestic and foreign scientific and scientific-methodological sources, a clearly defined conceptual and categorical apparatus, the use of a complex of theoretical, empirical and statistical research methods, logically organised pedagogical experiment conducted during 2021–2025, and the application of methods of mathematical statistics, in particular Fisher's criterion, to verify the effectiveness of the proposed pedagogical conditions and structural-functional model.

The author analysed a significant number of scientific sources (460 titles), which made it possible to thoroughly define the key concepts of the study, substantiate theoretical approaches (competence-based, personality-oriented, system-activity-based, constructive, interdisciplinary, etc.) and to determine the specifics of the formation of managerial competence of future physical education teachers in the conditions of blended learning.

The results of the dissertation research are reflected in 13 scientific publications by the author (of which 11 are sole authorship), including 6 articles published in Ukrainian professional scientific journals of category «B», as well as 7 publications of an experimental nature, presented in the materials of international and regional scientific and practical conferences, which indicates an adequate level of scientific confirmation of the research results.

The dissertation consists of abstracts, a list of symbols, an introduction, three chapters, conclusions for each chapter, general conclusions, a list of references and appendices. The total volume of the dissertation is 295 pages, of which the main text is presented on 187 pages. The work contains 11 figures and 25 tables.

Reliability of results and their scientific novelty

The most significant scientific results include the fact that the dissertation author has, for the first time, defined and theoretically substantiated the pedagogical conditions for the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning, developed a methodology for their implementation in the process of professional training, a structural and functional model for the formation of managerial competence of future physical education teachers has been developed as a set of strategic, conceptual and methodological, and criteria and diagnostic blocks that facilitate the tracking of the dynamics of the formation of managerial competence in higher education students, the components, criteria, indicators and levels of this formation in future teachers, created an author's Programme for the formation of managerial competence of future physical education teachers, systematised and generalised the experience of experimental higher education institutions in training future physical education teachers for managerial activities.

We are impressed by the fact that postgraduate student Chen Ronghao has improved the content and essence of the concepts of «physical education in the field of education», «future physical education teacher», «managerial competence», «professional training of future physical education teachers for managerial activities», «blended learning»; he has substantiated the criteria and levels of management competence of future physical education teachers in higher education institutions in the context of blended learning.

However, further development was achieved in terms of the content of professional training aimed at developing managerial competence in future physical education teachers; forms and methods of organizing training with the aim of developing this competence in higher education students through blended learning.

Practical significance of the results of the dissertation research

The practical significance of the research results lies in the development and implementation of the author's Programme for the formation of managerial competence of future physical education teachers in the educational process of higher education institutions involved in the experiment by updating the content of professional disciplines and strengthening interdisciplinary links between them, the author's elective course «Management Competence as an Important Component of Professional Development of a Teacher», a set of mind maps for studying the discipline «Pedagogy», the introduction of blended learning technologies and diagnostic tools for assessing the level of management competence in students.

The research materials have been implemented in the educational process of professional training of future physical education teachers at Kamianets-Podilskyi Ivan Ohienko National University (certificate of implementation dated 26 August 2025), Melitopol State Pedagogical University named after Bohdan Khmelnytsky (certificate of implementation dated 23 September 2025), State Higher Educational Institution «Uzhhorod National University» (certificate of implementation dated 25 September 2025).

Assessment of the content of the dissertation, its completeness as a whole and the identity of the main provisions of the dissertation

The first chapter, «Theoretical Foundations for the Formation of Management Competence in Future Physical Education Teachers,» reveals the theoretical

foundations for the formation of management competence in future physical education teachers, clarifies the conceptual and categorical apparatus of the study, justifies methodological approaches to professional training in a blended learning environment, and consistently substantiates the need to rethink the professional training of teachers in view of contemporary social and educational transformations that place new demands on specialists.

A significant achievement of the section is the clarification of the conceptual and categorical apparatus of the study and the disclosure of the content of basic definitions. Managerial competence is interpreted not as a mechanical set of knowledge, skills and abilities, but as a stable integrative quality of personality, which is formed during continuous professional development and ensures readiness for independent and responsible solution of organisational and managerial tasks within the current regulatory and legal framework. This approach allowed the postgraduate student to consider it as a complex system of interrelated motivational, cognitive, activity and value components. The professional training of future physical education teachers is presented as a multi-level structure oriented towards European educational standards and the integration of modern information and communication technologies. In this context, the formation of managerial competence is an integral part of the general model of professional education, ensuring the integrity and practical orientation of bachelor's degree training.

The section pays special attention to the specifics of developing management skills in a blended learning environment, which combines traditional and digital formats of educational interaction. The role of the teacher in filling academic disciplines with managerial content, using practice-oriented tasks and digital platforms, in particular Moodle, which allow modelling real professional situations and forming experience in making managerial decisions, is emphasised. The work emphasises the importance of the information and digital component of managerial competence, which ensures the effective use of ICT in professional activities.

The second section, «Justification of pedagogical conditions and a structural-functional model for the formation of managerial competence in future physical education teachers in a blended learning environment,» is devoted to the justification of pedagogical conditions and a structural-functional model for developing the managerial competence of future physical education teachers in higher education institutions in a blended learning environment, which demonstrates the transition from conceptual analysis to practice-oriented design of the educational process. The author consistently builds the study as a holistic system in which theoretical foundations are combined with technological mechanisms for implementation and diagnostic tools for evaluating results. This approach demonstrates the desire not only to describe the phenomenon of managerial competence, but also to create an effective model for its purposeful formation in the educational environment of a higher education institution. The chapter is distinguished by its clear structure, internal logic of presentation, and focus on the practical implementation of the proposed solutions.

A significant theoretical and methodological step is the identification of key structural components of managerial competence – motivational-value, cognitive, professional-activity and reflective-developmental. Their identification is consistent with the principles of the competency-based approach and reflects the multidimensional nature of the professional development of future teachers. These

components cover both internal personality characteristics – a system of values, motivation, the ability for self-analysis and self-improvement – and external manifestations of professionalism, which are revealed in knowledge, abilities, skills, and, consequently, in practical activities. Particular attention should be paid to the inclusion of a reflective and developmental component, which emphasises the idea of continuous professional growth and the ability of future teachers to critically reflect on their own experience. The system of criteria and levels of managerial competence proposed by the author ensures the methodological consistency of the model.

A significant achievement of the section is the substantiation of a set of pedagogical conditions that ensure the effectiveness of the formation of managerial competence in future physical education teachers in a blended learning environment. Chen Ronghao convincingly proves the need to create a motivational and value-based educational space that promotes an active, subjective position of higher education seekers, as well as the widespread use of practice-oriented forms of work that simulate real management situations. The combination of competency-based, systemic-activity, acmeological and other approaches demonstrates the multifaceted nature of the research.

The proposed structural-functional model, represented by strategic, conceptual-methodological and criterion-diagnostic blocks, demonstrates the integrity of the author's vision: it takes into account social demand, outlines the technology for implementing pedagogical conditions in the educational process of students and reflects the tools for measuring effectiveness. Taken together, this allows us to consider the second chapter as a theoretically sound and practically significant basis for the implementation of an effective system for training future physical education teachers for managerial activities in a blended learning environment.

The third chapter, «Experimental verification of the effectiveness of pedagogical conditions and a structural-functional model for the formation of managerial competence of future physical education teachers in blended learning in higher education institutions,» presents the organisation and results of a pedagogical experiment, analyses the effectiveness of the developed pedagogical conditions and model, and confirms their positive impact on the level of management competence formation. The main focus of the third chapter of the dissertation research is on the experimental verification of the effectiveness of the identified pedagogical conditions and the developed structural-functional model of forming the managerial competence of future physical education teachers in a blended learning environment. Its content has a clear practical orientation and reflects the transition from the theoretical and methodological justification of the problem to its empirical testing in the real educational process. The dissertation clearly outlines the logic of the research work, defines the goal, objectives, and stages of the experiment, which ensured the systematicity and scientific verifiability of the results obtained. The structure of the experiment includes theoretical research, descriptive, formative and final stages, which made it possible to consistently track the initial state of students' preparedness, implement the author's methodology and carry out a final comparison of the dynamics of changes.

During the study, the composition of the experimental and control groups was determined, a set of diagnostic methods was selected, and identical organisational conditions were ensured for the objectivity of the results. The reliability of the

experimental data was ensured by the use of a set of methods for collecting and analysing information: questionnaires, testing, pedagogical observation, expert assessment, analysis of the results of educational activities, and statistical processing of the data obtained during the experiment. A comparative analysis of the results of the ascertaining and formative sections showed a significant increase in the level of management competence in students of the experimental groups according to all defined criteria: motivational, cognitive, activity and reflective. An increase in the proportion of students with high and sufficient levels of preparedness and a corresponding decrease in low levels was recorded, confirming the effectiveness of the proposed diagnostic tools and the relatively high level of management competence in future physical education teachers in the experimental groups in a blended learning environment.

Style and language of the dissertation

The dissertation is written in a scientific, academically correct style, clearly structured, demonstrating internal consistency and completeness. Overall, the logical presentation of the main provisions of the dissertation research, which corresponds to the passport of specialty 011 Educational and Pedagogical Sciences, deserves a positive assessment, and the scientific work itself is a complete study.

Compliance with academic integrity requirements

An analysis of Chen Ronghao's dissertation research confirmed his compliance with the principles of academic integrity. No violations related to plagiarism, self-plagiarism, fabrication or falsification were found. The dissertation is an independent scientific study, and its main results are fully reflected in the author's scientific publications. In publications published in co-authorship (the article and abstracts were written in co-authorship with the scientific supervisor), the personal contribution of the dissertation author is clearly outlined, which is in line with academic transparency standards. The dissertation adheres to the ethics of citing scientific sources used in the text and the standard for formatting bibliographic references.

We confirm the high level of academic integrity of the dissertation research and the candidate himself.

Points for discussion and suggestions for improvement the content of the dissertation

At the same time, despite the generally high scientific level of Chen Ronghao's dissertation research, certain issues require clarification:

1. It would be advisable to expand the scope of the experimental part in the main text of the dissertation by transferring some of the theoretical findings to the appendices of the dissertation.

2. In our opinion, it would be advisable to expand the experimental sample, which would increase the representativeness and validity of the results obtained, as well as provide broader opportunities for their generalisation. Involving a larger number of participants would help reduce the influence of random factors, increase the statistical reliability of the conclusions, and allow for more accurate tracking of the identified trends.

3. It is advisable to conduct an in-depth analysis of the foreign-language literary sources used in the dissertation, which would allow for a more thorough analysis of the ways in which the managerial competence of future physical education teachers is formed abroad, as well as strengthen the theoretical basis of the research.

4. In order to strengthen the practical orientation of the work, it would be logical to consider ways of adapting the results obtained to improve the training of future specialists in other pedagogical specialities.

At the same time, the comments made are of a recommendatory nature and do not significantly affect the overall positive assessment of the dissertation and do not negate the scientific value of Chen Ronghao's dissertation research.

General conclusions

The dissertation «Formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning», submitted for the degree of Doctor of Philosophy in the specialty 011 Educational and Pedagogical Sciences, is a complete, and meets the requirements set forth in the «Procedure for awarding the degree of Doctor of Philosophy and repealing the decision of a one-time specialised academic council of a higher education institution or scientific institution on awarding the degree of Doctor of Philosophy» (Resolution of the Cabinet of Ministers of Ukraine No. 44 of 12 January 2022) and Order of the Ministry of Education and Science of Ukraine No. 40 of 12 January 2017 «On Approval of Requirements for the Formatting of Dissertations» (as amended on 12 July 2019), which provides grounds for awarding Chen Ronghao the degree of Doctor of Philosophy in the specialty 011 Educational and Pedagogical Sciences.

Reviewer:

Candidate of Pedagogical Sciences,
Associate Professor, Associate Professor
of the Department of Educology and Pedagogy
West Ukrainian National University

Oksana KRYCHKIVSKA

