



CONCLUSION

on the scientific novelty, theoretical and practical significance of the dissertation results

CHEN Ronghao on the subject:

**«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 and Pedagogical Sciences

Excerpt

from the minutes of the meeting of the professional seminar of the Department of
Educology and Pedagogy
of the West Ukrainian National University
dated December 23, 2025, minutes No. 5

PRESENT: Head of the Department of Educology and Pedagogy, Doctor of Pedagogical Sciences, Professor *Chaika V.M.*, Professor of the Department of Educology and Pedagogy, Doctor of Pedagogical Sciences, Professor *Rebukha L.Z.*, Deputy Dean of the Faculty of Social Sciences and Humanities, Associate Professor of the Department of Educology and Pedagogy, Candidate of Pedagogical Sciences, Associate Professor *Pysarchuk O. T.*, Professor of the Department of Information and Sociocultural Activities, Doctor of Pedagogical Sciences, Professor *Shcherbyak Yu.A.* (online), Associate Professor of the Department of Educology and Pedagogy, Candidate of Pedagogical Sciences, Associate Professor *Glavatska O.L.*, Associate Professor of the Department of Educology and Pedagogy, Candidate of Pedagogical Sciences, Associate Professor *Krychkivska O.V.*, Associate Professor of the Department of Psychology and Social Work, Candidate of Pedagogical Sciences, Associate Professor *Krupnik Z.I.* (online), Associate Professor of the Department of Foreign Languages and Information and Communication Technologies, Candidate of Pedagogical Sciences, Associate Professor *Kuziv M.Z.*, Associate Professor of the Department of Physical Rehabilitation and Sports, Candidate of Pedagogical Sciences, Associate Professor *Gakh R.V.*, Associate Professor of the Department of Educology and Pedagogy, Candidate of Economic Sciences, Associate Professor *Bilous I.I.*, Associate Professor of the Department of Educology and Pedagogy, Candidate of Economic Sciences, Associate Professor *Dem'yanuk A.V.*, Doctor of Philosophy (PhD), Associate Professor of the Department of Educology and Pedagogy *Ratushnyak N.O.*, Doctor of Philosophy (PhD), Senior Lecturer at the Department of Educology and Pedagogy *Shyshak A.M.*, Doctor of Philosophy (PhD), Senior Lecturer at the Department of Educology and Pedagogy *Rudensky R.E.*, Postgraduate Student *Li Li* (online), Postgraduate Student *Zhang Gege* (online), Postgraduate Student *Chen Ronghao* (online).

Among those present were three doctors of pedagogical sciences and eight candidates of pedagogical sciences – specialists in the field of the dissertation submitted for consideration.

The meeting was chaired by the head of the Department of Educology and Pedagogy, Doctor of Pedagogical Sciences, Professor Volodymyr Myroslavovych Chaika.

AGENDA:

Discussion of the dissertation research of postgraduate student Chen Ronghao on the topic «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 and Pedagogical Sciences, regarding its recommendation for defense..

LISTENED:

1. *Report by* Chen Ronghao based on his dissertation on «The 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 and Pedagogical Sciences.

In his report, Chen Ronghao revealed the main provisions of his dissertation, its scientific novelty, and the most significant theoretical and practical results of the research, which are presented for defense.

2. *Questions for the dissertation author.*

The participants of the meeting asked the speaker the following questions:

– Associate Professor of the Department of EP, Candidate of Pedagogical Sciences, Associate Professor *O.T. Pysarchuk*: *Question 1.* The analysis of contemporary psychological, pedagogical, scientific, and methodological literature on the formation of managerial competence in future teachers has enabled you to identify the key components of such professional training. What components have you identified? *Question 2.* A special place in the formation of managerial competence in higher education institutions is given to the construction of methodological foundations of professional training. What general didactic principles underlie the formation of managerial competence of future specialists?

– Associate Professor of the Department of Physical Education, Candidate of Pedagogical Sciences, Associate Professor *Krychkivska O.V.*: *Question 1.* What scientific approaches are most effective in the process of constructing methodological foundations for the formation of managerial competence in future physical education teachers? *Question 2.* You have defined the formation of managerial competence in future physical education teachers in educational institutions in the context of blended learning as a purposeful process. Explain why such formation is purposeful.

– Associate Professor of the Department of Foreign Languages and Information and Communication Technologies, Candidate of Pedagogical Sciences, Associate Professor *Kuziv M.Z.*: Why should future physical education teachers acquire managerial competence during their studies at higher education institutions?

– Associate Professor of the Department of Physical Education, PhD, Associate Professor *Ratusnyak N.O.*: *Question 1.* How does the process of developing management skills in future physical education teachers combine fundamental theoretical training with practice-oriented learning? *Question 2.* Each dissertation is characterized by the practical significance of the results obtained. What is the practical value of your research?

– Associate Professor of the Department of Physical Rehabilitation and Sports, Candidate of Pedagogical Sciences, Associate Professor *Gakh R.V.*: *Question 1.* Did you encounter any difficulties in the process of conducting the pedagogical experiment? If so, what were they? *Question 2.* The results of your research have been confirmed experimentally. Which higher education institutions served as your experimental base?

– Senior Lecturer, Department of Physical Education, PhD, Senior Lecturer *Rudenko R.E.*: *Question 1.* The pedagogical conditions you chose contributed to the formation of managerial competence in future physical education teachers. How did you choose them? *Question 2.* Did you obtain certain results in the course of your research? Where can they be used?

– Senior Lecturer, Department of Physical Education, Doctor of Philosophy (PhD), Senior Lecturer *Shyshak A.M.*: Is the testing of the results of the dissertation research necessary and, together with that, an important condition for a successful defense? I have a question. Where did you conduct such testing?

The dissertation author provided comprehensive, thorough, and complete answers to all questions asked, which demonstrates his high level of scientific maturity.

3. *Conclusion of the scientific supervisor*, Professor, Doctor of Pedagogical Sciences, Professor of the Department of Educology and Pedagogy, Rebukha Lilia Zinovievna (conclusion submitted).

Prof. Rebukha L.Z. noted that Chen Ronghao completed his qualifying scientific work while studying at the postgraduate school of the West Ukrainian National University (Department of Educology and Pedagogy). Prof. Rebukha L.Z. reported that the problem of developing managerial competence in future physical education specialists in higher education institutions in the context of blended learning has been little studied compared to the level of research on other professional competences.

At the same time, the relevance of the topic outlined in the dissertation is reinforced by the insufficient level of its theoretical and methodological justification and the identified contradictions in the training of specialists in the direction of acquiring managerial competence in higher education institutions. The social and educational challenges mentioned by Chen Ronghao regarding the training of teachers in the specialty 014.11 Secondary Education (Physical Education) and unresolved scientific problems have made the choice of the topic of the dissertation research «Formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions» relevant.

The achieved result of the research was made possible thanks to the scientifically sound structure of the dissertation. Thus, the first chapter of the dissertation provides the basic definitions of the research on the professional training of bachelors of physical education for professional activity, describes the managerial competence of future physical education teachers as a result of their professional training in higher education institutions in the context of blended learning, and characterizes the features of the formation of managerial competence in future physical education teachers through information and communication technologies. The second chapter outlines the components, criteria, indicators, and levels of the formation of the managerial competence of future physical education teachers, substantiates the pedagogical conditions and the structural-functional model of the formation of the managerial competence of future physical education specialists in higher education institutions in the context of blended learning. The third chapter reflects the state of development of managerial competence of future physical education specialists in the process of

professional training in higher education institutions. Particular attention is paid to the organization and methodology of the pedagogical experiment, the results of the study are described and analyzed in detail.

At the same time, familiarization with the content of the dissertation confirms the adequate level of scientific and practical validity of the issues identified in the study and the reliability of the scientific propositions put forward. In particular, through the analysis of scientific and scientific-methodological literary sources, it was possible to reveal the essential content and general characteristics of the concepts of «Physical Education» «higher education institutions», «blended learning», «future Physical Education teachers», «managerial competence formation», «educational process», «professional training», «management activity», «managerial competence», etc.

To process the experimental data obtained, the author calculated the average results of the managerial competence of future physical education teachers in all components and applied mathematical statistics methods (Fisher's F-test) to establish relationships between the numerical phenomena under study.

The information base for Chen Ronghao's research consisted of regulatory and legal acts, materials from teaching practice, scientific publications (monographs, dissertations, collections of abstracts from scientific and practical conferences, etc.) on the studied problem and related areas. The fairly large volume of literature studied and used in the dissertation research, as well as the methods of scientific cognition employed, contributed to the dissertation author's ability to solve the outlined tasks and obtain significant author's proposals.

An important argument for the completeness of the scientific research is a series of scientific publications on the topic of the dissertation and the testing of the results at international and regional scientific and practical conferences. The main provisions and conclusions formulated as a result of the research are reflected in 13 publications by the author, of which 6 reflect the main scientific results of the dissertation (all publications in scientific professional editions of Ukraine, category B), and 7 are of an approval nature. An analysis of the scientific articles and abstracts published by the applicant allows us to state that the scientific provisions, conclusions, and recommendations formulated in the dissertation are presented in a sufficiently comprehensive manner.

The scientific novelty of the results obtained lies in:

- the identification and theoretical and methodological justification of the pedagogical conditions for the formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions;
- the development of a structural and functional model for the formation of managerial competence in future physical education teachers as a set of strategic, conceptual and methodological, and criterion and diagnostic blocks;
- substantiation of the methodology for implementing pedagogical conditions in the teaching of professional training disciplines;
- creation of an author's program and elective course on the formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions.

The results of Chen Ronghao's research can be directly applied in the professional training of future teachers in higher education institutions; in the process of developing teaching and methodological support for academic disciplines by teachers; in the development of educational components for the development of managerial qualities and abilities of future physical education teachers, etc.

Thus, Chen Ronghao's dissertation on «The 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, is a complete scientific study that contains scientifically substantiated results on improving the formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions.

Since the dissertation meets the requirements of the current regulatory and legal documents of the Ministry of Education and Science of Ukraine in terms of content and form, it can be recommended for defense at a one-time specialized academic council for the award of a Doctor of Philosophy degree in the specialty 011 Educational and Pedagogical Sciences in the field of knowledge 01 Education/Pedagogy.

4. Reviewers' presentations:

4.1. Associate Professor of the Department of Educology and Pedagogy, Candidate of Pedagogical Sciences, Associate Professor *Oksana Vasylivna Krychkivska*.

Associate Professor O.V. Krychkivska noted that Chen Ronghao's dissertation «Formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions» addresses a topical issue and corresponds to current trends in the development of pedagogical science, which are focused on the formation of managerial and professional competencies of future physical education teachers as a component of their professional activity. At the same time, the topic of the dissertation research is fully disclosed, the work is properly formatted and meets the established requirements. The author has conducted a thorough analysis of domestic and foreign scientific sources on the issue of professional training of future physical education teachers, identified key contradictions that complicate the process of forming their managerial competence, and clearly outlined the scientific problem of the research.

The pedagogical conditions and structural-functional model of the formation of managerial competence proposed and theoretically substantiated by Chen Ronghao deserve special attention, as they are distinguished by their logical structure, integrity, and innovative nature. The dissertation research carefully refines and systematizes the conceptual and categorical apparatus, defines the criteria and indicators for assessing the level of formation of the relevant competence, and substantiates a set of interrelated theoretical approaches (competence-based, personality-oriented, system-activity, constructive, interdisciplinary, individual, problem-oriented, axiological, and acmeological).

The work provides substantive content for the professional training of teachers in higher education institutions in the formation of managerial competence in the context of establishing interdisciplinary links between subjects; a program for the formation of managerial competence has been developed, which includes an elective course «Managerial competence as an important component of professional development of a teacher», a system of exercises, mind maps, test tasks, etc., which have been implemented in the educational process of three Ukrainian higher education institutions, confirming the practical value and applied nature of the results obtained.

The dissertation author, Chen Ronghao, has fully proven the importance of developing the managerial competence of future physical education teachers in higher education institutions through blended learning.

The dissertation is distinguished by a thorough study of a significant array of domestic and foreign scientific and methodological literary sources on the issues of professional and managerial

training of future physical education teachers. At the same time, despite the generally high scientific level of the research, there are some comments and debatable points in the work that need clarification, in particular:

1. It would be advisable to supplement the presented structural and functional model of the formation of managerial competence with a more detailed description of the stages of its practical implementation in the educational process of higher education institutions.

2. In order to strengthen the practical orientation of the work, it is worth highlighting the possibilities of applying the proposed Program in various organizational models of blended learning in higher education institutions.

3. It seems justified to expand the empirical basis of the study, taking into account the different levels of digital readiness of teachers and students, which would allow for a more in-depth analysis of the effectiveness of the formation of managerial competence in higher education institutions in the context of blended learning.

Associate Professor O.V. Krychkivska noted that the above comments do not detract from the overall positive impression of Chen Ronghao's dissertation «Formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions», which makes it possible to recommend it for consideration by the Academic Council and further defense.

The following persons may be recommended as official opponents: Anatoliy Petrovich Konokha, Doctor of Pedagogical Sciences, Professor, Head of the Department of Theory and Methods of Physical Education and Sports at Zaporizhzhia National University; Serhii Vasylovych Humenyuk, Doctor of Pedagogical Sciences, Professor, Head of the Department of Theory and Methods of Olympic and Professional Sports at V. Hnatiuk Ternopil National Pedagogical University, who are experts in the subject of the dissertation research and have relevant publications.

4.2. Associate Professor of the Department of Educology and Pedagogy, Candidate of Pedagogical Sciences, Associate Professor *Oksana Tarasivna Pysarchuk*

The need to study the process of formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions is driven by growing public demand for competent specialists who are able to effectively organize the educational process, make informed managerial decisions, and use information and communication and digital technologies. Contemporary transformations in the educational environment, in particular the introduction of blended learning, significantly increase the requirements for the level of managerial and pedagogical training of physical education teachers. A high level of managerial competence contributes to the creation of a safe, health-promoting, and motivational educational environment, as well as to the improvement of the quality of physical education and educational activities. The relevance of the study is confirmed by the requirements of current regulatory and legal documents in the field of education and Physical Education, which focus on a competency-based approach to the professional training of teachers and define management skills and abilities as an important component of the general and professional competencies of future teachers. Therefore, the formation of managerial competence of future physical education teachers in higher education institutions is a necessary condition for their effective professional activity in modern educational conditions.

It is important that the postgraduate student has substantiated, at the theoretical and methodological level, the pedagogical conditions for the formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions and has developed and scientifically substantiated a structural and functional model for the formation of managerial competence, which covers strategic, conceptual-methodological, and criterion-diagnostic blocks. A methodology for introducing pedagogical conditions into the process of professional training and an author's program for the formation of managerial competence of students in higher education institutions in blended learning have been created and tested. The postgraduate student has improved the content and essence of the key concepts of the study, as well as substantiated the criteria and levels of formation of managerial competence of future physical education teachers.

Chen Ronghao's experimental work was conducted at the Ivan Ohienko Kamianets-Podilskyi National University, the Bohdan Khmelnytsky Melitopol State Pedagogical University, and the Uzhhorod National University, with the participation of 85 higher education students, which allowed the postgraduate student to confirm, using mathematical statistics methods (Fisher's F-test), the effectiveness of the process of forming the managerial competence of future physical education teachers in higher education institutions in a blended learning environment.

However, despite the adequate and generally high level of scientific research on the problem, the dissertation contains some provisions that may be the subject of scientific debate and require clarification, in particular:

1. The author convincingly substantiates the theoretical foundations of the process under study, but some issues of the practical implementation of management functions during physical education classes in a blended learning environment could be presented in more detail.

2. The proposed structural-functional model for the formation of managerial competence is logical and scientifically sound, but the problem of increasing the readiness of scientific and pedagogical workers to implement it in a blended learning environment requires additional attention.

Assoc. Prof. O.T. Pysarchuk noted that these comments do not diminish the positive impression of Chen Ronghao's research work «Formation of managerial competence in future physical education teachers in higher education institutions under blended learning conditions», which makes it possible to recommend it for consideration by the Academic Council and further defense in a one-time specialized academic council.

Assoc. Prof. O.T. Pysarchuk supported the proposal of Assoc. Prof. O.V. Krychivska regarding the official opponents she recommended (Doctor of Pedagogical Sciences, Professor A.P. Konokha and Doctor of Pedagogical Sciences, Professor S.V. Gumenyuk).

5. Presentations on the discussed work

The following individuals participated in the discussion of the dissertation:

- 5.1. Professor of the Department of Information and Sociocultural Activities, Doctor of Pedagogical Sciences, Professor *Yuriy Adamovich Shcherbyak*.

Prof. Y.A. Shcherbyak noted that the relevance of the topic of Chen Ronghao's dissertation research, «The Formation of Managerial Competence in Future Physical Education Teachers in Higher Education Institutions under Blended Learning Conditions», is beyond doubt, since in modern conditions, both in Ukraine and beyond its borders, the problem of ensuring the quality of professional training of future physical education teachers in higher education institutions in the

context of blended learning is becoming particularly relevant. Modern challenges have led to an increased need to develop the professional competencies of future teachers in the process of educational activity, since today, professional knowledge alone is not enough. A competent teacher must be comprehensively trained and able to perform their professional duties effectively. In this context, the formation of professional competencies related to management activities in higher education institutions, as well as the expansion of their future management experience, is of particular importance for the activities of physical education teachers. Familiarization with the dissertation research makes it possible to assert that it meets the requirements for this type of work. It should also be noted that the dissertation author has processed a large number of literary sources. Prof. Y.A. Shcherbyak noted the author's ability to use scientific research methods to solve the issues raised, as the work and presentation of the results demonstrate the candidate's comprehensive mastery of methods and pedagogical techniques, establishing the interrelationships between the pedagogical conditions for the formation of managerial competence of future physical education specialists, etc. The dissertation is written in English in accordance with scientific style, with references to primary sources. At the same time, a significant amount of illustrated material in the form of figures and tables complements the text and facilitates its perception. The work is performed at the appropriate level, is independent, systematic, complete scientific work, and has theoretical and practical value. The purpose of the study has been achieved, and the tasks set have been solved.

5.2. Associate Professor of the Department of Physical Rehabilitation and Sports, Candidate of Pedagogical Sciences, Associate Professor *Roman Vasylovych Gakh*.

Assoc. Prof. Gakh R.V. noted the relevance and prospects of the proposed research topic on the formation of managerial competence in physical education teachers in higher education institutions in the context of blended learning. He emphasized the distinction and validity of pedagogical conditions and the clear structure of the developed structural-functional model for the formation of this competence. The logic of scientific research chosen by the author and the most important results presented prove that the dissertation can be recommended for defense in a one-time specialized academic council in the specialty 011 Educational and Pedagogical Sciences in the field of knowledge 01 Education/Pedagogy.

5.3. Associate Professor of the Department of Foreign Languages and Information and Communication Technologies, Candidate of Pedagogical Sciences, Associate Professor *Kuziv Maria Zinovievna*.

Assoc. Prof. Kuziv M.Z., in her speech, noted that the submitted work is a complete scientific study, performed at the appropriate theoretical and methodological levels. The dissertation provides well-founded and reliable results that are scientifically novel and practically significant, logically presented and argued. The content of the work fully corresponds to the research topic, the set goals and objectives, as well as the current level of development of pedagogical science. The work meets all the current requirements for scientific works of this type and can be recommended for defense in a single specialized academic council in the field of knowledge 01 Education/Pedagogy in the specialty 011 Educational and Pedagogical Sciences.

5.4. Associate Professor of the Department of Educology and Pedagogy, Ph.D., Associate Professor *Iryna Bilous*.

Assoc. Prof. Bilous I.I. noted that Chen Ronghao's dissertation on «The Formation of Managerial Competence in Future Physical Education Teachers in Higher Education Institutions under Blended Learning Conditions» is an independent, complete scientific research, which has produced new scientifically sound results that are scientifically novel and practically significant.

The concept and logic of scientific research chosen by the author ensured the consistent solution of the tasks set and made it possible to develop and scientifically substantiate the author's Program for the formation of managerial competence in physical education applicants in higher education institutions, which can be used in the educational process. An analysis of the content of the dissertation indicates the applicant's adequate level of theoretical preparation, the depth of the research topic, and the systematic nature of the presentation of the material, which is the result of a thorough study and critical analysis of a significant array of domestic and foreign scientific sources. The results obtained are reliable, logically argued, and consistent with the purpose and objectives of the research. In view of the above, Chen Ronghao's dissertation meets the requirements of the current regulatory and legal acts of the Ministry of Education and Science of Ukraine for dissertations of this level, namely specialty 011 Educational and Pedagogical Sciences in the field of knowledge 01 Education/Pedagogy, and can be recommended for defense in a one-time specialized academic council.

All speakers pointed out that the following individuals could be recommended as official opponents: Anatoliy Petrovich Konokha, Doctor of Pedagogical Sciences, Professor, Head of the Department of Theory and Methods of Physical Education and Sports at Zaporizhia National University, and Serhiy Vasylovych Humenyuk, Doctor of Pedagogical Sciences, Professor, Head of the Department of Theory and Methods of Olympic and Professional Sports at V. Hnatiuk Ternopil National Pedagogical University, as competent specialists in the subject area of the dissertation research, as confirmed by the availability of relevant scientific publications.

Based on the results of the discussion, those present at the meeting

DECIDED:

to accept the conclusion on the dissertation work of the dissertation author Chen Ronghao on the topic «Formation of managerial competence of future physical education teachers in higher education institutions under blended learning conditions» as one that meets the requirements for writing dissertations of this level, and to propose that the Academic Council of the university approve the conclusion of the professional seminar.

CONCLUSION

on the scientific novelty, theoretical and practical significance of the dissertation results

Chen Ronghao on «Formation of the managerial competence in future physical education teachers in higher education institutions under blended learning conditions»

Substantiation of the choice of research topic and its connection with the university's research plans

The roadmap for improving the managerial competence of future physical education teachers is provided by the State National Program «Education» («Ukraine in the 21st Century»), «Strategy for the Development of Higher Education in Ukraine for 2022-2032», the Laws of Ukraine «On Higher Education», «On Education», «On Physical Education and Sports», and other regulatory documents that describe the directions of education reform and indicate the importance of developing competencies in specialists (including managerial ones). The Draft Standard of Higher Education of Ukraine for the specialty 014.11 Secondary Education (Physical Education) serves as a guide for improving the managerial competencies of future physical education teachers, defining mandatory general competencies (such as the ability to act socially, responsibly, and consciously, make informed decisions, motivate people and move towards a common goal, and identify, set and solve problems) and professional competencies, which are manifested in the abilities of physical education teachers to assess and monitor the learning outcomes of students in general secondary education institutions, organize a safe educational environment, use health-saving technologies during the educational process, plan and organize the educational process using various types and forms of educational and cognitive activities, and predict the educational results of general secondary education students. These competencies reflect current trends in management training (in the direction of improving management knowledge, skills, and abilities) for future physical education teachers.

It is important that a significant result of the research was the formation of a high level of managerial competence in future physical education teachers, which essentially increases the effectiveness of the educational process and contributes to the comprehensive solution of pedagogical problems.

The dissertation research was carried out in accordance with the research plan of the West Ukrainian National University and within the framework of the contractual research topic of the Department of Educology and Pedagogy «Professional growth of an educator in an educational institution: fundamental, theoretical, technological, and practice-oriented aspects» (state registration number 0121U110855), within which the methodology for the professional growth of specialists in the field of education was analyzed, refined, and improved.

Purpose, objectives, and research methods. Object and subject of research

The aim of the study is to develop, theoretically substantiate, and experimentally verify the effectiveness of certain pedagogical conditions and the effectiveness of a structural-functional model for developing the managerial competence of future physical education teachers in higher education institutions in a blended learning environment.

The implementation of the research objective is ensured by the completion of specific tasks:

- to analyze the specific features, basic conceptual provisions, and modern scientific approaches to the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning;

- to clarify the components, criteria, indicators, and levels of the formation of managerial competence of future physical education teachers in higher education institutions and determine their essential pedagogical significance;

- to identify and theoretically substantiate pedagogical conditions and create an effective structural and functional model for the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning;

- experimentally verify the effectiveness of the substantiated pedagogical conditions and the structural and functional model for the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning.

The object of the study is the professional training of future physical education teachers in higher education institutions in a blended learning environment.

The subject of the study is the pedagogical conditions and structural-functional model for developing the managerial competence of future physical education teachers in higher education institutions in a blended learning environment.

Scientific provisions developed personally by the dissertation author and their novelty

The dissertation research proposes a new approach to solving the scientific problem, which consists in generalizing theoretical provisions and developing scientifically grounded practical results aimed at improving the process of forming the managerial competence of future physical education teachers in higher education institutions. The scientific novelty of the results obtained consists of the following provisions:

for the first time:

- the *pedagogical conditions* for the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning (creation of a motivational and value-based educational environment; focusing professional training disciplines on managerial activities; using professionally-oriented situations in the training process; stimulating self-education activities);

- a *structural-functional model* for the formation of managerial competence in future physical education teachers in higher education institutions in a blended learning environment has been developed and scientifically substantiated as a set of strategic, conceptual-methodological, and criterion-diagnostic blocks that take into account the dynamically changing requirements for the formation of managerial competence;

- a *methodology* for the implementation of pedagogical conditions in the teaching of professional training disciplines and the conduct of extracurricular classes, as well as an author's program for the formation of managerial competence in physical education students, has been created and substantiated.

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», and «blended learning»;

- criteria (personal, knowledge, activity, and reflective) and levels (high (perfect), sufficient (optimal), satisfactory (productive), low (basic)) of the formation of managerial competence of future physical education teachers in higher education institutions in the context of blended learning.

Further development has been achieved in:

- the content of professional training within the framework of the formation of managerial competence in future physical education teachers in higher education institutions, and the range of

forms and methods for the formation of this competence in higher education students in a blended learning environment has been expanded.

The validity and reliability of scientific propositions, conclusions, and recommendations defended

The scientific propositions, conclusions, and recommendations presented in the dissertation are duly substantiated, published in professional scientific periodicals, and tested at scientific and practical international and national conferences. The high degree of theoretical validity and reliability of the scientific results is confirmed by the systematic use of a modern theoretical and methodological research base, the comprehensiveness and completeness of the information material processed, as well as the correspondence of the results to the tasks, objectives, and object of the research.

Practical significance of the work

The practical significance of the results obtained in the dissertation lies in the possibility of applying the main results and methodological developments in the educational and professional activities of future physical education teachers (the author's Program for the formation of managerial competence of future physical education teachers in higher education institutions in the conditions of blended learning has been developed and introduced into the educational process by making changes to the content of separate topics of the academic disciplines «Pedagogy» and «Theory and Methods of Physical Education» (specialty 014.11 Secondary Education (Physical Education), bachelor's level) with the simultaneous strengthening of interdisciplinary links between them; author's elective course «Managerial Competence as an Important Component of Professional Development of a Teacher», which is implemented and realized within the framework of independent work of bachelor's degree students in physical education at higher education institutions; a set of mind maps for informational support in studying the discipline «Pedagogy» with the aim of clearly schematizing intra-disciplinary and interdisciplinary connections).

Completeness of the dissertation materials in publications and the author's personal contribution to them

All scientific results, conclusions, and proposals presented in the dissertation and defended were obtained by the author personally. Of the scientific works published in co-authorship, only those ideas and provisions that are the result of the applicant's personal work were used in the dissertation. The main provisions of the dissertation are presented in 13 publications by the author (11 of which are sole authorship), of which 6 reflect the main scientific results of the dissertation (all publications are in scientific professional journals of Ukraine, category «B»), and 7 are of an experimental nature.

The total volume of published works is 4.75 author's sheets, of which 4.55 author's sheets belong to the author personally, including: scientific works highlighting the main results of scientific research on the topic of the dissertation – 3.82 author's sheets; scientific works that additionally reflect the scientific results of the dissertation – 0.73 author's sheets.

List of publications by the applicant on the topic of the dissertation

Scientific works in which the main scientific results of the dissertation are published

1. Chen, R. (2024). A Study of the Experience of Training Future Physical Education Specialists in China. *Pedagogical Sciences: Theory, History, Innovative Technologies*, 5(139), 446–455.

DOI: <https://doi.org/10.24139/2312-5993/2024.05/446-455>

2. Chen, R. (2024). Formation of the Future Physical Education and Sports Specialists' Managerial Qualities During the Period of Studying at the Higher Educational Institutions. *Innovative Pedagogy*, 5, 216–220.

DOI: <https://doi.org/10.32782/2663-6085/2024/75.41>

3. Rebukha, L. & Chen, R. (2024). Pedagogical Conditions for the Formation of Future Physical Education Specialists' Readiness for Managerial Activity in Blended Learning. *Pedagogical Discourse*, 36, 77–83.

DOI: <https://doi.org/10.31475/ped.dys.2024.36.11>

4. Chen, R. (2025). Formation of managerial competency in future specialists in physical education and sports with the use of theoretical approaches to the blended form of training organization. *Academic notes. Series: Pedagogical Sciences*, 11, 152–156.

DOI: https://doi.org/10.59694/ped_sciences.2025.11.152

5. Chen, R. (2025). Managerial Competence Development of Future Physical Education Professionals through Hybrid Educational Environments. *Pedagogical Academy: Scientific Notes*, 18. (el. edition).

DOI: <https://doi.org/10.5281/zenodo.15352884>

6. Chen, R. (2025). Designing a Blended Curriculum for Developing Strategic Thinking in Future Physical Education Professionals. *Академічні візії*, 43. (ел. видання).

DOI: <https://doi.org/10.5281/zenodo.15352065>

Scientific works that confirm the testing of materials in the dissertation

1. Chen, R. (2022). Innovations in distance education. *Innovations in education: realities and prospects for development: materials of the III International Scientific-Practical Conference Ternopil* (pp. 91–92). WUNU.

2. Rebukha, L. & Chen, R. (2022). The theoretical basis for the professional ability of management experts in future educational institutions. *Innovations in education: realities and prospects for development: materials of the IV International Scientific-Practical Conference Ternopil* (pp. 72–73). WUNU.

3. Chen, R. (2023). Analysis of educational technology innovation under curriculum reform. *Innovations in education: realities and prospects for development: materials of the V International Scientific-Practical Conference Ternopil* (pp. 253–255). WUNU.

4. Chen, R. (2023). On the importance of humanistic education in physical education. *Innovations in education: realities and prospects for development: materials of the VI International Scientific-Practical Conference Ternopil* (pp. 270–274). WUNU.

5. Chen, R. (2024). Management Aspects in the Field of Physical Education and Sports. *Innovative approaches to the development of technologies and economics: materials of the scientific and practical conference. Svalyava* (pp. 370–372). WUNU.

6. Chen, R. (2024). Professional development of general practice teachers: experience at home and abroad. *Development of professional skills of a teacher in the conditions of a new socio-cultural reality: materials of the VII International Scientific-Practical Conference in Ternopil* (pp. 278–279). TOKIPPO.

7. Chen, R. (2024). Strategies for physical education experts to develop their leadership skills. *Innovative processes in the educational sphere of Ukraine and the countries of Central Europe: state, problems and prospects*, materials of the International Scientific and Practical Conference, Ternopil (pp. 112–113). WUNU.

Aprobation of dissertation results

The main scientific and research results of the dissertation were discussed and received positive reviews at seven international and regional scientific and practical conferences. In particular: at the international conferences «Innovations in Education: Realities and Prospects for Development» (Ternopil, 2022-2023), «Development of Professional Skills of Teachers in the Context of the New Sociocultural Reality» (Ternopil, 2024), «Innovative Processes in the Educational Sphere of Ukraine and Central European Countries: Status, Problems, and Prospects» (Ternopil, 2024); regional conferences «Innovative Approaches to the Development of Technology and Economy» (Svalyava, 2024).

Assessment of the language and style of the dissertation

The content of the dissertation fully corresponds to the research objectives, fully reveals the topic of the work and confirms its integrity and completeness. The text of the dissertation is written in academic English, distinguished by the author's style of presentation, and the material is presented competently using appropriate scientific and professional terminology.

Compliance of the dissertation with regulatory requirements and eligibility for defense

Considering the relevance of the dissertation topic, the validity of the results obtained, the scientific novelty, theoretical and practical significance of the dissertation, the completeness of the presentation of the dissertation materials in scientific publications, as well as the compliance of the dissertation with the requirements in accordance with the procedure established by the Resolution of the Cabinet of Ministers of Ukraine dated January 12, 2022 No. 44 and the approved «Procedure for awarding the degree of Doctor of Philosophy and revoking the decision of a single specialized academic council of a higher education institution, scientific institution on awarding the degree of Doctor of Philosophy», the professional seminar recommends the dissertation work of Chen Ronghao «Formation of managerial competence of future physical education teachers in higher education institutions in the conditions of blended learning», submitted for the degree of Doctor of Philosophy in the specialty 011 Educational and Pedagogical Sciences in the field of knowledge 01 Education/Pedagogy, be accepted for defense by a single specialized academic council.

As a result of reviewing Chen Ronghao's dissertation and the completeness of the publication of the main research results

It was decided:

1. To propose to the Academic Council to approve the following composition of the one-time specialized academic council:

To appoint as chair of the one-time specialized academic council:

Olga Mykhailivna Tsaryk, PhD in Education, professor at the Department of Foreign Languages and Information and Communication Technologies of the West Ukrainian National University.

Reviewers:

Oksana Tarasivna Pysarchuk, PhD in Education, Associate Professor, Deputy Dean of the Faculty of Social Sciences and Humanities, Associate Professor of the Department of Educology and Pedagogy at the West Ukrainian National University;

Oksana Vasylivna Krychivska, PhD in Education, Associate Professor, Department of Educology and Pedagogy, West Ukrainian National University.

Opponents:

Anatoliy Petrovych Konokh, PhD in Education, Professor, Head of the Department of Theory and Methods of Physical Education and Sports, Zaporizhia National University;

Serhii Vasylovych Humenyuk, PhD in Education, Professor, Department of Theory and Methods of Olympic and Professional Sports, V. Hnatiuk Ternopil National Pedagogical University.

2. Recommend that the newly formed ad hoc specialized academic council accept the dissertation for defense.

Chairing the meeting,

Doctor of Pedagogical Sciences, Professor,

Head of the Department of Educology and Pedagogy

West Ukrainian National University



Volodymyr CHAYKA