

REVIEW

PhD in Economics, Associate Professor, Associate Professor of the Department of Management named after Professor L.I. Mykhailova

Sumy National Agrarian University

Liudmyla Mohylna

for Zhao Hejun dissertation on the topic:

«Innovative system for personnel management in Chinese vocational education institutions»,

presented for obtaining the scientific degree of Doctor of Philosophy in the specialty 073 – Management

1. Relevance of the topic of the dissertation. With the continuous development of China's economy, industrial upgrading and economic restructuring are accelerating, and the demand for technical and skilled talents in various industries is becoming increasingly urgent. The important position and role of vocational education are becoming increasingly prominent. To carry out systematic innovation in personnel management in Chinese vocational education institutions, we need to learn from effective personnel systems abroad, adapt to local conditions, continuously strengthen organizational system construction, smooth talent flow channels, innovate the training methods for the teaching staff, innovate personnel management concepts in vocational education institutions, update incentive methods, and achieve effective breakthroughs in personnel management models, in order to achieve new changes in the personnel management system, Maximize the value of talents and assist vocational education institutions in better serving the construction and development of the economy. Therefore, it is necessary to innovate the personnel management system of vocational education institutions in China, propose scientific, reasonable, and feasible management plans, in order to promote the continuous improvement of vocational education quality and provide high-quality and sustainable skilled human resource protection for economic and social development.

2. Connection of work with scientific programs, topics, plans. The dissertation was carried out following the directions of research work of the Department of Management of the Sumy National Agrarian University: «Development of management in the context of international integration processes» 2019-2023 (state registration number 0119U001336), in which the author evaluated the foreign experience of personnel management of the vocational educational institution and examined the main development trends.

3. Scientific novelty of the obtained results. The validity and reliability of the scientific statements, conclusions, and recommendations formulated by the Ph.D. student are beyond doubt and are confirmed by the following: the scientific basis of the dissertation is derived from the work of domestic and foreign researchers in the field of personnel management; as a result of the resolution of several tasks, the use of a sufficient number of research methods, and the use of a reasonable information base, the validity of the provisions, conclusions, and results are assured; the new results obtained are an organic complement to the existing scientific developments in this field; the reliability of the scientific provisions, conclusions, and results of the

dissertation has also been tested and proven to be reliable at scientific and practical conferences of varying levels; the results of the research and proposals have been published in Ukrainian and foreign specialist publications, two of which have been indexed in the international databases Scopus and Web of Science.

The author has demonstrated the relevance and selection of research topics at a sufficient scientific level, and has identified research objectives, tasks, objects, and themes. Appropriate reasoning is accompanied by research methods used in work. The aim of the dissertation research to improve the theoretical and systematic innovation of personnel management in Chinese vocational education institutions and to propose practical and feasible suggestions has been fully realized.

In the scientific achievements of this article, the research on the competency of vocational education institution managers is highly noteworthy. This study constructs an innovative model and divides 60 different competency performances into MC1 to MC6. Through questionnaire surveys and interviews, the problems in the competency of Chinese vocational education institution managers in six different dimensions are summarized, and strategies to improve the competency of managers are proposed accordingly.

At the same time, the author has innovated the evaluation method for the construction level of teaching staff in vocational education institutions, which is more scientific and operational. The dissertation designs 15 three-level indicators based on four dimensions: optimization of teacher structure, teacher assessment system, dual teacher model, professional construction and teaching reform.

Based on the characteristics of different regions in China, the dissertation discusses three different strategies for personnel management system innovation based on strategic human resource management, personnel management system innovation based on improving service levels, and personnel management system innovation based on excellent performance management mode.

This provides a research foundation for constructing the personnel management innovation system of vocational education institutions in China. Starting from the current situation of personnel management in Chinese vocational education institutions, it is proposed that Chinese vocational education institutions should establish a "people-oriented" management concept, with motivating people's behavior and mobilizing their enthusiasm as the foundation, further innovating personnel management systems, optimizing personnel management structures, continuously strengthening the informatization construction of personnel management, striving to improve the comprehensive ability of personnel management staff, and paying attention to improving the quality of performance evaluation work. And on this basis, personalized salary design will be added to continuously improve personnel management efficiency.

These research results have enriched the connotation of personnel management in vocational education institutions, providing reference and solutions for solving practical problems in personnel management in Chinese vocational education institutions.

4. Practical and theoretical significance of the obtained results research. The practical significance of the results achieved is beyond doubt. From a scientific and

practical perspective, the research results of this article are the most meaningful: combining theoretical and empirical analysis to identify the factors that affect the personnel management of vocational education institutions in China, establishing a conceptual model of the competency of vocational education institution managers, innovating the assessment system for the construction of vocational education teacher teams, and using scientific principles to evaluate the effectiveness of vocational education institution management. The scientific and practical significance of the dissertation lies in proposing a set of scientific and reasonable regulations and conclusions to address the scientific issues of personnel management in vocational education institutions. The main provisions of this article include developing strategies and practical suggestions for the heads of vocational education administrative departments and institutions to use in improving personnel management.

5. The main results obtained personally by the author. A detailed study of the content of the dissertation confirms that in Zhao Hejun work, the scientific statements, research results, recommendations, and conclusions are sufficiently substantiated, reliable and obtained personally by the author.

Zhao Hejun's dissertation consists of an introduction, three sections, conclusions, a volume of references, and appendices, which are laid out on 206 pages of the main text, including 15 tables, and 46 figures. The list of used literary sources contains 164 items on 18 pages and three appendices.

The *introduction* of the dissertation contains all structural elements, including the purpose, task, object and subject, research methods, the approbation of the results of the dissertation, as well as the individual contributions of the author in the scientific works published in co-authorship.

In *the first chapter* of the dissertation, the author focuses on the theory and methodological principles of modern vocational education personnel management, and explores the systematic methods and innovations of human resource management in vocational education institutions. Summarized the connotation and development of vocational education, which should be the main task of vocational education institutions for a considerable period of time in the future. By drawing on the experiences of developed countries in the world of vocational education such as Switzerland, Germany, Australia, and France, the dissertation summarizes the innovation and development strategies of Chinese vocational education concepts, and proposes systematic methods and innovative methods for personnel management in vocational education institutions. The author also combines fuzzy mathematics and Analytic Hierarchy Process (AHP), based on the principles of fuzzy mathematics, uses fuzzy operation rules to quantify fuzzy factors, innovatively uses fuzzy mathematics methods for comprehensive evaluation of teacher team construction, and designs relevant indicator systems. The hierarchical structure model of AHP is used to construct, and the judgment matrix is constructed using the reciprocal scaling method. Then, the square root method was used to calculate the eigenvectors of the judgment matrix, providing a new method for assigning weights. This system covers multiple aspects such as academic ability, teaching effectiveness, sustainable development, incentive system, admission system, and training. It achieves the

effective development, reasonable allocation, and full utilization of teacher resources, promotes the unity of individual needs of teachers and the development goals of vocational education institutions in the personnel management process of vocational education institutions, promotes their common development, and achieves win-win results.

In *the second chapter* of the dissertation, Zhao Hejun first studied the current situation and development trends of personnel management in Chinese vocational education institutions, pointed out the main institutional models and management systems adopted by personnel management in Chinese vocational education institutions, and based on the research results, proposed the main problems in personnel management at present and clarified the development trend. Based on the above research, it is pointed out that the development of vocational education in China needs to achieve a high degree of coupling between education and human capital investment. Through the cultivation of skilled talents, it ensures the effective implementation of economic development strategies, promotes the continuous improvement of the soft environment for China's economic development, accelerates the optimization and upgrading of China's industrial structure, realizes innovation driven, and proposes scientific and practical strategies for China's vocational education to adapt to social and economic development. According to the requirements of this strategy, an empirical study was conducted on the competence of managers of Chinese vocational education institutions through a questionnaire survey. It was proposed that the competence of managers of Chinese vocational education institutions consists of six parts: analytical and inductive ability, decision-making and planning ability, communication and organization ability, leadership and demonstration ability, evaluation and charisma ability, and core competitive ability. A structural model of the competence of managers of vocational education institutions was constructed. Summarized the existing problems and proposed strategies to enhance the competence of vocational education institution managers.

In *the third chapter* of the dissertation, the innovative experience of personnel management systems in foreign vocational education institutions such as Europe, America, and Japan was first summarized. Based on China's national conditions, it was summarized that the construction of personnel management systems in vocational education institutions in China needs to be tailored to local conditions, further improve organizational system construction, smooth talent flow channels, innovate the training methods for teaching staff, and focus on innovative incentive methods. Only by effectively breaking through existing management models and achieving new changes, can we maximize the value of talents and assist vocational education institutions in better development strategies. The dissertation also proposes that innovation in the personnel management system of vocational education institutions in China must be tailored to local conditions, and innovation must conform to the characteristics of their respective industries, economies, and regions. Three different strategies are discussed, namely, innovation in the personnel management system based on strategic human resource management, innovation in the personnel management system based on improving service levels, and innovation in the personnel management system based on excellent performance management

models. Through the analysis of the current situation and existing problems, it is summarized that the interactive development of vocational education and economy in China must adhere to the principle of people-oriented development, the principle of balancing public welfare and economy, the principle of integrating localization and internationalization, the principle of clear rights and responsibilities, and the principle of multiple checks and balances. Furthermore, innovative proposals are proposed to improve the level of collaborative governance among multiple subjects, adhere to government guidance on vocational education governance, and enhance the effectiveness of industry organization guidance the guiding principle of promoting the full play of the role of enterprise entities and strengthening the independent execution ability of vocational education institutions. Zhao Hejun also analyzed the feasibility, system functions, and management processes of building modern information based personnel management model for vocational education institutions, and explored a plan to achieve the informatization of the personnel management system for modern vocational education institutions.

In the *conclusions* of the dissertation, the main provisions that specify the content of the research carried out and the results obtained are summarised according to the tasks and the general purpose of the study.

The *appendices* contain a questionnaire prepared by the author based on existing relevant research, as well as an outline of interviews with managers and teachers of vocational education institutions.

The dissertation was checked for the presence of textual borrowings. The results of the analysis of the plagiarism check report for the presence of textual borrowings (Strike plagiarism program) of the peer-reviewed dissertation allow us to note that Zhao Hejun dissertation on the topic « Innovative system for personnel management in Chinese vocational education institutions » is the result of independent research of the acquirer and does not contain elements of plagiarism and borrowing in accordance with the resolution of the Cabinet of Ministers of Ukraine from 12.01.2022 №. 44, paragraph 9, used ideas, results and texts of other authors have a link to the relevant source.

6. Completeness of presentation of the dissertation material in scientific publications. The dissertation materials passed the necessary approval during discussions at international conferences. The main results of the research are highlighted in 13 scientific papers, of which 7 are publications in scientific journals, including two publications indexed by Scopus and Web of Science, which additionally confirms the applicant's high level of scientific proposals. The published works fully cover the materials of the dissertation.

Scientific works reflecting the main scientific results of the dissertation:

1. Stoyanets, N., Zhao, H., & Li, G. (2020). Modernization of vocational education in the context of rural human resources development in China. *Agricultural and Resource Economics: International Scientific E-Journal*, 6(1), 76-90. <https://doi.org/10.51599/are.2020.06.01.06> (Scopus) (*the author conducted the conceptualization, data curation, formal analysis, and investigation, designed the methodology, and prepared the original draft*).

2. Xia, Y., Qu, D., Stoyanets, N., & Zhao, H. (2022). Policy evolution of personnel management in Chinese educational institutions: A comprehensive policy circle analysis. *Problems and Perspectives in Management*, 20(4), 544-559. [https://doi.org/10.21511/ppm.20\(4\).2022.41](https://doi.org/10.21511/ppm.20(4).2022.41) (Scopus) (*author conducted the data collection and collation, designed the methodology, and participated in original draft preparation*).

3. Zhao Hejun, Stoyanets N., Li Guohou (2021) Management, modernization and countermeasures of rural vocational and technical education *International scientific journal "Internauka". Series: "Economic Sciences"*. 2021. №2. <https://doi.org/10.25313/2520-2294-2021-2-6936> (*the author developed the methodology, conducted the literature collation, and prepared the original draft*).

4. Zhao, H., Stoyanets, N., Cui, L., & Li, G. (2022). Strategy of vocational education adapting to social and economic development. *Journal of Innovations and Sustainability*, 6(1), 03. <https://doi.org/10.51599/is.2022.06.01.03> (*the author developed the methodology, conducted the literature collation, and prepared the original draft*).

5. Zhao Hejun (2022). Study of assessment of the efficiency of quality management in vocational and technical education through industry integration *Науковий вісник Одеського національного економічного університету. Збірник наукових праць. № 9-10 (298-299), 2022* DOI:10.32680/2409-9260-2022-9-10-298-299-7-13

6. Nataliya Stoyanets; Zhao Hejun (2023). Methodological approaches to the management of vocational and technical education institutions on the background of informatization *Молодий вчений*, 1 (113), 40-44. <https://doi.org/10.32839/2304-5809/2023-1-113-9> (*the author developed the methodology, conducted the literature collation, and prepared the original draft*).

7. Zhao Hejun (2023). Implementation of an innovative index system in the management of vocational education institutions in CHINA. *Economy and Society*, 2023.№ 51. DOI: 10.32782/2524-0072/2023-51-46.

Scientific works certifying the approval of the dissertation materials:

8. Nataliya Stoyanets; Hejun Zhao; Guohou Li The design of mixet teaching mode of vocation education under the background of internet. *Proceedings of the 6th International Scientific Conference – ERAZ 2020 May 21, 2020, Belgrade, Serbia. P. 36-41. (the author developed the methodology, conducted the literature collation, and prepared the original draft.)* DOI: 10.31410/ERAZ.2020.223.

9. Hejun Zhao; Modern problem of china's vocational education. *Матеріали Всеукраїнської наукової конференції студентів і аспірантів, присвяченої Міжнародному дню студента (14-18 листопада 2022 р.)* Суми. 2022. С. 247-247.

10. Hejun Zhao; Strategies for the coordinated development of China's economy and vocational education. *Sustainable development in wartime ukraine and the world : Multidisciplinary conference for young researchers (November 25, 2022)*. Prague, Czech Republic, 2022. P. 46-48.

11. Hejun Zhao. The research on the development of rural vocational education in the future *Proceedings of the VII International Scientific-Practical Conference*

“*Modern Management: Trends, Problems and Prospects for Development*”, April 14, 2021. Alfred Nobel University, Dnipro (online) P. 294-296.

12. Hejun Z. Innovative systems of training and management of personnel of higher professional education. *XIX International Scientific Conference «Problems of management of enterprises in modern conditions»: Book of abstracts. 18-19 April 2023. K.: National University of Food Technologies, 2023. P. 144-146.*

Publications which additionally reflect the scientific results of the dissertation:

13. Hejun Zhao, Guohou Li Quality management measures of specialty construction planning of higher vocational education in china - internal diagnosis and improvement. [Monograph]. *Sustainable development of rural areas: institutional support and challenges of reform, P.75-82.* <https://doi.org/10.31435/rsglobal/003> (the author conducted the literature collation, designed the research framework, and prepared the original draft).

7. Discussion comments on the content of the dissertation.

The content of the dissertation submitted for review allows conclusions to be drawn about the scientific maturity of the applicant: his ability to identify current issues in the field and her willingness to solve them at a sufficiently high scientific level. In general, Zhao Hejun's dissertation is a completely independent study in terms of content and form. To assess the scientific and practical significance of the dissertation positively, it is necessary to point out some questionable provisions:

- Based on the important role of vocational education in national and regional economic development, it is necessary to provide a more detailed explanation of the crucial role of an efficient and scientific personnel management system in the survival and development of vocational education institutions.

- In the discussion of systematic methods and innovations in human resource management in vocational education institutions in subsection 1.3, the main theories of human resource management applied need more explanation.

- In subsection 2.1, it is necessary to strengthen the relationship between the current situation of personnel management in vocational education institutions in China and the overall operational status of vocational education institutions.

- In subsection 2.3, more analysis and discussion are needed on the current competency status of vocational education institution managers.

- In subsection 3.1, the matching relationship between the innovation of personnel management system based on strategic human resource management and regions with relatively backward economic levels in China needs further explanation.

However, the comments and wishes expressed do not detract from the overall high quality of the research. The analysis of the dissertation and the scientific papers leads to the conclusion that Zhao Hejun's dissertation on the topic of "Innovative system for personnel management in Chinese vocational education institutions" is a completed, independently conducted scientific work that has significant theoretical and applied significance. The dissertation accomplishes a specific scientific task of developing theoretical provisions and methodological principles, and formulating a practical model and recommendations to promote the effective personnel management of vocational educational institutions in China.

8. General conclusion. The dissertation work of Zhao Hejun is a completed

scientific study, conducted around a relevant topic, which fully reflects the essence of formulating new solutions to scientific problems obtained in the course of the research, in which the author improves the theoretical and methodological principles and develops practical recommendations for personnel management innovation of vocational educational institutions in China. The scientific results in the dissertation correspond to the specialty 073 «Management», for which the work is submitted for defense. The scientific significance of the results is undoubted and sufficient to recognize the completion of the research by all qualifying signs.

Zhao Hejun's dissertation on the topic «Innovative System for Personnel Management in Chinese Vocational Education Institutions», which was submitted for defense to the specialized academic council for obtaining the degree of Doctor of Philosophy in the field of knowledge - 07 Management and administration, specialty - 073 Management. According to its relevance, scientific-theoretical level, main results of justification, main provisions and results published in professional publications, novelty of the production and practical significance, it meets the requirements of the order of the Ministry of Education and Science of Ukraine № 40 from 12.01. 2017 «On approval of requirements for the preparation of a dissertation» and Resolution of the Cabinet of Ministers of Ukraine dated from 12.01. 2022 № 44 «On approval of the Procedure for awarding the degree of Doctor of Philosophy and cancellation of the decision of the one-time specialized academic council of a higher education institution, scientific institution on awarding the degree of Doctor of Philosophy» with changes introduced in accordance with Resolution of the Cabinet of Ministers № 341 from 21.03. 2022. The content of the dissertation corresponds to the passport of the specialty.

Reviewers:

PhD in Economics,

Associate Professor,

Associate Professor of the Department of

Management named after Professor L.I. Mykhailova,

Sumy National Agrarian University

Liudmyla MOHYLNA

