

**Response
of the official opponent
Doctor of Economic Sciences, Professor,
Professor of Business Economics and Entrepreneurship
at Kyiv National Economic University named after Vadym Hetman
Shkoda Tetiana Nykodymivna
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.

China's GDP surged from 364.5 billion yuan in 1978 to 121020.7 billion yuan in 2022, a total increase of 332 times. The scale of vocational education has also rapidly increased from 880000 people in 1978 to 16.23 million people, making significant contributions to China's economic development and forming a virtuous cycle of interactive development between vocational education and the economy. Faced with the new needs of national economic development, it is imperative to enhance the personnel management ability and level of China's vocational education institutions, in order to promote innovative development of vocational education. The dissertation conducts a detailed study on the theory and methodological principles of modern vocational education personnel management, draws on the management experience of developed countries in foreign vocational education, and combines the current situation of personnel management in China's vocational education institutions. It constructs a strategy for innovative personnel management systems in China's vocational education institutions and proposes feasible solutions, thereby enhancing the overall strength and level of China's vocational education and better serving the country's economic construction and development. Zhao Hejun's the dissertation work has relevance and timeliness, aiming to improve theoretical and methodological principles, and provide practical suggestions for personnel management in vocational education institutions.

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. The degree of validity of the scientific statements, conclusions and recommendations formulated in the dissertation, their reliability and novelty. The scientific results obtained are based on theoretical and empirical studies and are reliable. The objectives set can correspond to the research topic, the object and subject of the research, and the scientific and methodological requirements.

The methodology of this work is based on dialectical and systematic methods to study the phenomenon and essence of personnel management in vocational education institutions. It studies the scientific works of top domestic and foreign scientists on the relationship and development between vocational education and economic development, especially those related to the theme of this article. The scientific conclusions and suggestions obtained from the study are based on the general scientific and economic methods of scientific knowledge. In the research process, the author used extensive and universal scientific research methods, combined with special research methods, to extensively study the regulations and cases of personnel management in Chinese vocational education institutions. Combined with their own field investigations and research, the author confirmed the scientific results obtained in this study. The analysis of the content of the dissertation indicates that its characteristic is to systematically deepen existing theoretical provisions and develop scientific and practical methodological suggestions for achieving the goals.

The scientific regulations, conclusions, and suggestions proposed in this dissertation are based on classical and modern management theories, as well as research by domestic and foreign scientists. From the perspective of theory and methods, they are scientifically reasonable and reliable. The scientific strategy developed by the author has been validated and confirmed by the relevant methods of personnel management in vocational education institutions.

In the dissertation, the object, subject, and purpose have a good logical

relationship. The research object is the personnel management process of Chinese vocational education institutions. The dissertation studies innovative theories, strategies, and methods of personnel management in vocational education institutions in China, which have strong scientific and practical significance.

The dissertation represents the independent scientific work of the author. The scientific results, conclusions, and proposals submitted for defense were obtained by the author personally.

The presented dissertation work of Zhao Hejun is logically structured and its content reveals well the subject of scientific research. The applicant is proficient in English and presents the material adequately and logically. The content of the work is consistent with its essence. There is an appropriate relationship between sections and subsections of the work, and all sections contain figures and tables. References to information resources are standardized. The results of the work were confirmed by the implementation certificates. The conclusions of the sections and general conclusions of the dissertation are logical and confirmed by the results of tests of international and all-Ukrainian scientific and practical conferences, publications of the professional edition of Ukrainian science, and international journals indexed in the scientific and metric databases Web of Science and Scopus.

All of the above enable us to state the adequacy of the validity and reliability of the main provisions, conclusions, and recommendations of the dissertation.

3. Scientific novelty of the obtained results The main terms and results of the dissertation research are disclosed by the author at conferences and seminars, among which the most important are 6th International Scientific Conference on Knowledge based Sustainable Development ERAZ 2020 (May 21, 2020, Belgrade), All-Ukrainian Scientific Conference of Students and Postgraduate Students (Sumy, Ukraine, November 14, 2022), Sustainable Development in Wartime Ukraine and the World: Multidisciplinary Conference for Young Researchers (November 25, 2022, Prague), the VII International Scientific and Practical Conference "Modern Management: Trends, Problems and Development Prospects" (Dnipro, Ukraine, April 14, 2021), the XIX International Scientific and Practical Conference "Problems of Enterprise Management

in modern conditions" (Kyiv, Ukraine, April 18-19, 2023).

The scientific novelty of the research results proposed in this study is a deepening of the personnel management theory of Chinese vocational education institutions, and proposes scientific, reasonable, and practical strategies and suggestions for the innovation of the personnel management system of Chinese vocational education institutions. This scientific achievement is real, and its main presentation of scientific novelty is as follows:

- This dissertation develops a structural model of the competency of managers in vocational education institutions, in order to achieve more targeted innovative management of vocational education institutions. This model analyzes 17 aspects of competency and forms a hierarchy of 6 different dimensions of competency. Unlike existing models, this model not only defines basic capabilities, but also defines excellent management capabilities for high-level management capabilities that can achieve sustainable development of vocational education, in order to achieve higher quality operation and development of vocational education institutions (2.3, p.127-130);

- Based on the hierarchical structure model of analytic hierarchy process, the scientific index weight is determined through the calculation of the comparative judgment matrix and the consistency test of the hierarchical sequence, and the evaluation method of the construction level of teachers in vocational education institutions is innovated (1.3, P.70-77);

- Based on the theoretical concepts and methodology of development, this dissertation innovates the personnel management strategies of Chinese vocational education institutions from the perspective of promoting high-speed, healthy, and sustainable development of China's national economy, in order to promote China's strategic realization of promoting economic and industrial development and maintaining economic growth through vocational education (3.2, P.177-203);

- Based on the competency structure model of vocational education institution managers, a competency survey questionnaire for vocational education institution managers was developed for six different dimensions. The questionnaire analyzed the

current situation of vocational education management in China, proposed improvement strategies for existing problems, and promoted the further development of vocational education (2.3, P.130-144);

- Improve the strategy of personnel management innovation system in vocational education institutions, implement classified policies based on the differences in industrial characteristics, economic structure, and regional characteristics in different regions, and innovate current economic development strategies (3.1, P.162-176);

- Summarized and analyzed the management concepts, imbalance in human resource ratio, and lack of innovation among the current management personnel of vocational education institutions. Based on the development trend of vocational education, countermeasures were proposed to improve the abilities and qualities of vocational education management personnel at three levels: national policies, management departments, and self-improvement (2.3, P.144-150);

- In response to the shortcomings of the current personnel management information system in vocational education institutions in China, a systematic analysis was conducted on feasibility, functionality, and management processes with the support of JAVAEE technology, Servlet, SSH framework, SQL SERVER database, and development environment. A new concept of personnel management in vocational education institutions based on modern information technology was proposed, providing a basis for building a more advanced and efficient vocational education personnel management system (3.3, P.203-220).

The innovation of the personnel management system in Chinese vocational education institutions will be conducive to breaking through the limitations of slow economic growth, enhancing the driving effect of vocational education on economic and social development, and bringing strong innovation drivers to the development of the Chinese economy. It is a useful reference and suggestion for promoting further improvement of the Chinese economy.

4. Theoretical and practical significance of the results of the dissertation.

The theoretical and practical value of the research results lies in the fact that, on the basis of qualitatively formed theoretical and methodological provisions, the

dissertation substantiated methodological recommendations and applied proposals, which not only enriched the scientific treasury with valuable additions, but are also relevant for implementation in the practical activities of colleges and professional education institutions, and can also be used in the educational process. Accordingly, the theoretical provisions, methodological and methodical developments, practical results of the dissertation research give reasons to conclude that the dissertation is characterized by a practical orientation, namely, innovations in the personnel management system in Chinese vocational education institutions will contribute to overcoming the limitations of slow economic growth, strengthening the driving influence of vocational education on economic and social development and attracting strong innovative driving forces to the development of the Chinese economy.

The results of the dissertation work can be used in the educational process when studying the disciplines «Personnel Management», «Administrative Management», «Personnel Management and Innovative Enterprise Development». At the same time, the research results can be used in conducting fundamental and applied research in the direction of socio-economic development of rural areas.

5. Completeness of presentation of the dissertation material in scientific publications.

The scientific provisions of the dissertation were published by the author in 13 scientific works, among them, there are 7 scientific works reflecting the main scientific achievements of the paper, 5 scientific works proving the approval of the paper materials, and 1 additional publication reflecting the scientific achievements of the paper. Among them, 2 are published in the scientific journal Scopus, and the number of publications is sufficient for the dissertation to be submitted for defense.

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 mixed teaching mode of vocational 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.c 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)

6. The degree of validity of scientific provisions.

The dissertation is characterized by a clear adherence to the structural and logical scheme of the research, the correspondence of the scientific results and the provisions issued for the protection of scientific novelty to the set goal and the specific task of the

research. The dissertation student used a sufficient number of information sources from open databases, regulatory and legal literature, statistical and analytical materials. The research results and the author's recommendations have been approved during the work of international conferences, as well as published in scientific publications, including publications indexed by Scopus and Web of Science. The above is evidence of a sufficient level of validity and reliability of the results of scientific research, conclusions and proposals.

7. The structure and content of the dissertation, its completeness and compliance with the established requirements for design.

The dissertation is a complete scientific work. Its manuscript contains a series of structural elements that meet the established requirements: abstract, introduction, three sections, conclusions, list of references, and appendices. The work laid out on 206 pages of the main text, includes 15 tables and 46 figures. The list of used literary sources contains 164 items on 18 pages. The dissertation uses structured tables, diverse figures, and graphical explanations to give a comprehensive view of the study as a well-structured and logical scientific work.

The first section discusses the theory and methodological principles of modern vocational education personnel management, and focuses on exploring the systematic methods and innovations of human resource management in vocational education institutions. It has been demonstrated that under market conditions, the development of vocational education institutions pays more attention to connotation based development. Countries around the world continuously improve the good environment for the development of vocational education, actively improve the certification mechanism for vocational education achievements, and rural vocational education will be fully valued and developed, promoting sustainable economic and social development. The exploration of internet-based vocational education teaching models will further accelerate the process of digital and information technology reform in global vocational education, with a greater emphasis on international cooperation and exchange. China promotes breakthrough development in vocational education by drawing on the experience of developed countries in the world such as Switzerland,

Germany, and Australia. By combining fuzzy mathematics with Analytic Hierarchy Process (AHP), a comprehensive evaluation of teacher team construction is innovatively carried out, and a relevant indicator system is designed. Based on a hierarchical hierarchical structure model, the weight assignment of the indicators is determined.

The second section analyzes the current situation of personnel management innovation in vocational education in China. The personnel management work of Chinese vocational education institutions is led by the Party committee of the institution. Personnel management closely follows the national requirements for the reform and development of higher vocational education institutions, and the personnel management work is full of vitality. In order to adapt to the rapidly changing economic and industrial situation and better promote the development of the national economy, the country has introduced a large number of policies and measures to support the development of vocational education, achieving a high coupling between education and human capital investment. This section also divides the competency of Chinese vocational education institution managers into six levels, analyzes the competency of Chinese vocational education institution managers through questionnaire research, and proposes improvement strategies for existing problems.

The third section focuses on discussing the strategies for building an innovative personnel management system in Chinese vocational education institutions. Firstly, the innovative experience of personnel management systems in foreign vocational education institutions was reviewed and summarized, and it was pointed out that the construction of personnel management systems in China's vocational education institutions 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. According to the characteristics of different regions in China, three different strategies were discussed: innovation in personnel management system based on strategic human resource management, innovation in personnel management system based on improving service level, and innovation in personnel management system based on excellent performance

management model. Innovatively proposed guiding principles for improving the level of collaborative governance among multiple entities, adhering to government guidance on vocational education governance, enhancing the effectiveness of industry organization guidance, promoting the full play of the role of enterprise entities, and strengthening the independent execution ability of vocational education institutions. And analyzed from three aspects: feasibility, system function, and management process, demonstrated the requirements of modern information vocational education institutions' personnel management system.

The conclusions drawn by the author based on the results of the study are valuable and meaningful and reveal the results of the research task.

Overall, the dissertation is complete, original, and logical, contains valuable theoretical and applied scientific provisions and presents systematic solutions as well as recommendations to the level of practical application.

8. Discussion comments on the content of the dissertation.

Although the reading of the dissertation and the author's publications left a positive impression, it is important to note some of its shortcomings and controversial provisions, namely:

1. China has focused on building a lifelong vocational skills training platform and continuously promoted the concept of lifelong development of vocational education and training, in order to cultivate more technical and skilled talents and support the development and construction of the social economy. China has emphasized the construction of a learning oriented society as an important development direction for talent cultivation in vocational education institutions in the future. However, China needs to pay more attention to details in the process of lifelong education and training for technical and skilled talents.

2. The author proposes that the innovation of personnel management in Chinese vocational education institutions will focus on establishing a "people-oriented" management concept, further optimizing the personnel management structure, innovating and reforming the personnel management system, vigorously improving the level of personnel management informatization construction, continuously improving

the comprehensive ability of personnel management staff, and further improving the work quality and efficiency of vocational education institutions through performance evaluation and personalized compensation. However, the management concept of "people-oriented" needs to clarify more advantages compared to the traditional "thing-oriented" management concept.

3. The author believe that the competence of managers of vocational education institutions in China can be divided into six levels: analysis and induction ability, decision-making and planning ability, communication and organization ability, leading demonstration ability, evaluation and inspiration ability and core competitiveness. However, it is necessary to further point out the internal connections and external manifestations between these abilities, and discuss the direct and indirect impacts of these abilities on management work.

4. It is proposed that innovation in the personnel management system of vocational education institutions in China must be tailored to local conditions, and innovation must be in line with their respective industrial, economic, and regional characteristics. According to the characteristics of different regions in China, this dissertation discusses three different strategies of personnel management system innovation based on strategic human resource management, personnel management system innovation based on improving service level, and personnel management system innovation based on excellent performance management mode. On this basis, it is necessary to provide a more detailed explanation of the standards and principles for different regions to adopt different innovation strategies.

It is important to note that all the remarks I have listed just reflect the scientific position and do not affect the overall positive assessment of the dissertation work.

9. 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 speciality 073 «Management», for which the work is submitted for defence. 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.

Official opponent:

**Doctor of Economics, Professor,
Professor of Business Economics
and Entrepreneurship Department,
Kyiv National Economic University
named after Vadym Hetman**



Засвідчую
Начальник відділу кадрів Київський національний економічний університет імені Вадима Гетьмана
<i>Shkoda Tetiana Nykodymivna</i>
_____ 20__ р.

Shkoda Tetiana Nykodymivna