

### Analysis of the Deep Cooperation Model between Higher Vocational Colleges and Enterprises Under the "Belt and Road" Initiative

Linghao Zhang\*

Shihezi Vocational Technical College of Engineering, Shihezi 832000, Xinjiang, China

\*Author to whom correspondence should be addressed.

**Copyright:** © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: With the proposal and implementation of the "Belt and Road" initiative, economic development requires the drive of a large number of talents and real industries. Local governments along the route also encourage universities and enterprises to carry out high-level school-enterprise cooperation to promote the effective sharing of education and economy, thus ensuring the development of the regional economy. In order to better adapt to relevant national policies, promote regional economic development, and supply high-quality and skilled talents to society, higher vocational colleges should strengthen education reform, introduce the school-enterprise cooperation mechanism, achieve the deep integration between schools and enterprises, and promote regional economic development. Based on this, this paper analyzes and studies the deep cooperation model between higher vocational colleges and enterprises under the "Belt and Road" initiative for reference.

**Keywords:** "Belt and Road"; Higher vocational colleges; Deep school-enterprise cooperation; Cooperation mechanism; Deep integration

Online publication: July 15, 2025

### 1. Introduction

The "Belt and Road" is an important initiative for the country to further enhance its level of opening-up and achieve common development with countries along the route. Higher vocational education is an important part of higher education, which can cultivate more highly-skilled talents for society and enterprises and provide technical and resource support and guarantee. In this context, higher vocational education should conform to the trend of the times and carry out educational work based on national development strategies, establish close connections with countries along the "Belt and Road", promote education reform, and advance the development of education internationalization. In this context, deepening school-enterprise cooperation is an inevitable choice for achieving long-term development. Schools and enterprises should seize the development opportunities, innovate the cooperation and development model, and promote the long-term development of both sides.

# 2. Significance of deep school-enterprise cooperation in higher vocational colleges under the "Belt and Road" initiative

The "Belt and Road" initiative aims to promote economic cooperation and development among countries and regions along the route. Under the deep school-enterprise cooperation model in higher vocational colleges, higher vocational colleges can provide intellectual support and talent reserves for enterprises. The specific significance is as follows:

### **2.1. Responding to policy calls**

The "National Vocational Education Reform Implementation Plan" clearly points out the important value of school-enterprise cooperation. The country's emphasis on it has also been continuously increasing, affirming the specific significance of school-enterprise collaboration, proposing an important talent-training mechanism, and constructing an integrated multi-party docking mechanism. The introduction of the policy also indicates the direction for educational work, which is helpful for schools and enterprises to build a close cooperative relationship and cultivate innovative talents with strong quality and ability. Higher vocational colleges' strengthening of school-enterprise cooperation construction can respond to national policy calls, improve the quality of education, and further promote the overall development of the region<sup>[1]</sup>.

#### **2.2.** Cultivating international talents

At present, many higher vocational colleges have begun to strengthen talent-training work and focus on the cultivation of international students, continuously increasing the enrollment of international students and further expanding the number of international students coming to China. Moreover, higher vocational colleges should also actively participate in international education organization cooperation activities to cultivate talents with an international perspective in the new era. Therefore, higher vocational colleges should strengthen communication with enterprises, establish corresponding cooperation mechanisms, improve the quality and effectiveness of education, and highlight the value of education<sup>[2]</sup>.

### 2.3. Improving international competitiveness

The "Belt and Road" initiative helps China establish good trade relations with countries along the route, promoting regional economic development and achieving industrial structure upgrading. In order to improve the core competitiveness of Chinese enterprises, highlight their advantageous value, and make them adapt to the requirements of international development, enterprises should pay attention to talent introduction. Therefore, enterprises can strengthen in-depth cooperation with colleges and universities to cultivate high-quality and high-skilled talents, better promote industrial innovation and development, enable enterprises to obtain good benefits, and promote the normal development of the regional economy<sup>[3]</sup>.

### 2.4. Broadening development space

For students, the talent-training mechanism of school-enterprise cooperation has important application value and is helpful for their future study and development. Deepening the cooperation between higher vocational colleges and enterprises helps encourage students to participate in practical learning, acquire more knowledge, and master key skills. Therefore, school-enterprise cooperation has advantages that other teaching methods cannot match, helping students solve practical problems in the learning process and improving their problem-solving ability<sup>[4]</sup>.

## **3.** Key factors affecting the school-enterprise cooperation in higher vocational colleges under the "Belt and Road" Initiative

#### 3.1. Factors of local government policies and economic environment

The industrial development in the region where higher vocational colleges are located affects the quality of schoolenterprise cooperation. In the process of school-enterprise cooperation, the government is an important promoter. The systems and policies introduced by the government can provide help and support for school-enterprise cooperation, promote the development of colleges and industries, and cultivate high-quality talents in the new era. However, the regional economic construction situation also affects education and teaching work. The regional economic structure influences the setting of teaching majors in local colleges. Local policies also directly affect the basic concepts of colleges, which is helpful for better strengthening and improving educational work. At the same time, it also affects the development of enterprises, improving the overall efficiency of enterprises with talent as the support<sup>[5]</sup>.

#### **3.2.** Factors of the school-running strength of higher vocational colleges themselves

For higher vocational colleges, elements such as talent training and scientific research capabilities directly affect the school-running situation of the colleges. With the implementation of the "Belt and Road" initiative, colleges along the route have strengthened their own construction and gradually improved the quality of school-running. In this process, many colleges have established long-term cooperative relationships with enterprises. During the cooperation process, the scientific research capabilities and teaching levels of colleges will also be continuously improved. Higher vocational colleges have become an important base for cultivating high-quality talents, which can supply a large number of high-quality talents to enterprises. Enterprises also need to cultivate high-quality talents in the new era, according to the scientific research functions of higher vocational colleges to better deepen the in-depth school-enterprise cooperation<sup>[6]</sup>.

#### **3.3.** Restrictive factors of the operation of the top-level system

The cooperation between higher vocational colleges and enterprises is not one-way. It requires the coordination of both sides to achieve two-way communication and development. Their decisions and actions are carried out based on the characteristics of local economic and industrial development, and government policies also directly affect their cooperation. Under the background of the "Belt and Road", many higher vocational colleges show superficial characteristics in the process of school-enterprise cooperation, which is not conducive to the effective development of school-enterprise cooperation. However, these problems are caused by the imperfect top-level system design. In the face of such problems, enterprises should handle the coordination relationship from a global perspective to promote the development of school-enterprise cooperation<sup>[7]</sup>.

# 4. The deep school-enterprise cooperation model in higher vocational colleges under the "Belt and Road" initiative

Under the background of the "Belt and Road" initiative, the deep school-enterprise cooperation in higher vocational colleges faces new opportunities and challenges, and it is urgent to build an innovative cooperation model. On the one hand, during the "going-global" process of industrial enterprises, there is a great demand for a large number of technical and skilled talents suitable for overseas development needs. However, the development of vocational education in countries along the route lags behind, and it is difficult to supply qualified labor forces.

On the other hand, higher vocational colleges shoulder the important task of cultivating international technical talents and need to enhance the pertinence and effectiveness of talent training through in-depth cooperation with enterprises<sup>[8]</sup>. Therefore, higher vocational colleges should strengthen in-depth cooperation with enterprises and build a deep-cooperation model from the following aspects.

### 4.1. Enhancing the policy guidance of local governments and building a development platform

Continuing to carry out educational work under the "Belt and Road" initiative and ensuring the deep integration of schools and enterprises is helpful for promoting regional economic construction and cultivating talents with strong skills and qualities. Therefore, the governments of regions along the "Belt and Road" should, based on the development situation of their own regions and in combination with the development needs of the industry, introduce corresponding institutional policies to encourage enterprises and higher vocational colleges to strengthen cooperation and clarify the responsibilities of both sides. The government can set up corresponding guarantee mechanisms from the perspectives of politics, economy, and culture to promote the long-term development of enterprises. Moreover, enterprises also need to establish a perfect fund-guarantee mechanism, provide more financial and technical support to colleges, offer more preferential policies, build a perfect development platform, break away from traditional development limitations, give full play to the advantages of school-enterprise cooperation, and further promote the development of regional industries<sup>[9]</sup>.

### 4.2. Improving the development strength of higher vocational colleges and ensuring the progress of work

The school-running quality and scientific research capabilities of higher vocational colleges will have a certain impact on school-enterprise cooperation. Therefore, higher vocational colleges should pay attention to making up for deficiencies, ensure the joint improvement of school-running quality and professional abilities of talents, enhance the attractiveness of higher vocational colleges, and better meet the development needs of enterprises in the new era. Under the background of the "Belt and Road", higher vocational colleges should effectively utilize national and local educational resources, optimize the construction of the teaching staff, make breakthrough progress, and strive for more support and recognition. Under the "Belt and Road" initiative, higher vocational colleges should, through in-depth cooperation with enterprises, cultivate talents with strong professional qualities and innovative qualities in the new era<sup>[10, 11]</sup>.

### **4.3.** Promoting the in-depth development of school-enterprise integration and introducing advanced achievements

In the current era background, higher vocational colleges should seize the development opportunity of the "Belt and Road" and formulate a perfect talent-training mechanism according to the talent needs of enterprises to further ensure that schools and enterprises can obtain more benefits. Enterprises are also the main beneficiaries of deepening school-enterprise cooperation. Enterprises should, in combination with the development characteristics and trends of the industry, invest more resources in the field of talent development, further cultivate high-quality talents, and ensure the cooperation between colleges and enterprises. In the specific practice process, higher vocational colleges also need to introduce real teaching cases according to the characteristics of majors, establish a close connection between corporate culture and school culture, better realize their mutual integration, and promote the development of educational work. Moreover, higher vocational colleges should strengthen the cultivation of students' comprehensive quality and ability, formulate corresponding development goals according to the construction situation of the "Belt and Road", build a corresponding curriculum system, and strengthen the construction of the teaching staff. Under the premise of in-depth school-enterprise cooperation, higher vocational colleges should also pay attention to the development of industry-education-research work, introduce advanced educational concepts and achievements, and better promote technological innovation. During this period, enterprises also need to continuously achieve technological innovation in the process of operation and development, expand the technology and process of enterprise operation and management, and better ensure the sharing of achievements between higher vocational colleges and enterprises<sup>[12]</sup>.

### 4.4. Strengthening teaching practice based on the development characteristics of local enterprises

The purpose of school-enterprise cooperation in higher vocational colleges is to promote regional development and obtain economic benefits. In this case, higher vocational colleges should always set corresponding teaching majors according to the industries in the region, select appropriate teaching content, and optimize teaching methods to ensure the progress of teaching work. Higher vocational colleges should follow the requirements of regional policies, continuously optimize teaching work, further improve the school-enterprise cooperation mechanism, and promote high-quality economic development.

At present, the teaching content of some higher vocational colleges does not match the actual needs of enterprises, and teaching practice is formalistic, with little emphasis on practical teaching, which makes it difficult to fully meet the actual development needs of enterprises. This is because when setting majors and constructing disciplines, higher vocational colleges fail to invite enterprises to participate and do not set up the teaching system in combination with the needs of enterprises. In the process of cooperation with enterprises, some higher vocational colleges also fail to fully recognize the value of school-enterprise cooperation in cultivating international talents and the characteristics of comprehensive education, which is not conducive to the development of students' vocational abilities and innovative awareness. Therefore, in order to better meet the actual needs of enterprises, higher vocational colleges should strengthen major construction, create a compound-talent training model, improve the competitiveness of enterprises, and better promote regional economic development<sup>[13, 14]</sup>.

#### 4.5. Enhancing graduates' professional identity and improving their sense of responsibility

At present, many graduates have a professional identity crisis after employment. Therefore, higher vocational colleges should help students establish professional identity, enhance their personal sense of honor, and strengthen their personal sense of responsibility through methods such as student surveys, corporate propaganda, and academic exchanges. Higher vocational colleges should conduct surveys on students' employment intentions on and off campus, analyze students' ideas, and formulate a talent-training plan that meets students' intentions and the school-running characteristics of their own colleges, further expanding the scope of internships. At the same time, higher vocational colleges should invite enterprises to give lectures on campus, integrate corporate culture, cross-cultural elements, etc. into the "Belt and Road" initiative, strengthen students' understanding of corporate transnational construction, maximize their familiarity, and better integrate into corporate life. Enterprises also need to fully cooperate with higher vocational colleges in carrying out activities such as art performances, and through material and spiritual rewards, further improve students' work enthusiasm, encourage them to actively participate

in corporate work, enhance their experience during internships, and strengthen their learning of knowledge<sup>[15]</sup>.

### 5. Conclusion

To sum up, under the background of the "Belt and Road" Initiative, the school-enterprise cooperation of higher vocational colleges along the route has achieved certain results. However, due to the limitations of external environment and their own development, the depth of school-enterprise cooperation is insufficient. In order to better eliminate the negative impacts, higher vocational colleges, local governments, and individual students should be deeply involved, carry out cooperation and innovation under the premise of the industry-education-research cooperation mechanism, and lay a solid foundation for the implementation of the "Belt and Road" work. It is believed that in the future, efforts will continue to be made to build an international vocational education exchange platform, attract the participation of colleges and enterprises from countries along the route, share educational and industrial resources, and promote the deep school-enterprise cooperation in higher vocational colleges to a new level.

#### Finding

Research on the Entry Point of School-Enterprise Co-construction of Intelligent Manufacturing Majors to Serve the Construction of the Core Area of the "Belt and Road" (Project No.: BJKY-2024-354)

### **Disclosure statement**

The author declares no conflict of interest.

### References

- Niu L, Li J, Qin R, 2024, Research on the Talent-Training Model of Higher Vocational Colleges Based on the Deep Integration of Industry and Education. Industrial & Science Tribune, 23(14): 93–95.
- [2] Lin S, Yang A, 2023, Analysis of the Deep School-Enterprise Cooperation Model in Higher Vocational Colleges Under the "Belt and Road" Initiative. Journal of Jiamusi Vocational Institute, 39(07): 164–166.
- [3] Cao Q, 2023, Research on the Training Model of New-Type Enterprise Management Talents in Higher Vocational Colleges Under the Deep Integration of Schools and Enterprises. Liberal Arts Enthusiast, 2023(03): 13–15.
- [4] Yang A, Lin S, 2023, Analysis of the Influencing Factors of Deep School-Enterprise Cooperation in Higher Vocational Colleges Under the "Belt and Road" Initiative – Taking the Port and Shipping Management Major as an Example. Economic Outlook the Bohai Sea, 2023(06): 133–135.
- [5] Zhang P, 2023, Research on the Training Model of Higher Vocational Students' Professional Accomplishments Based on the Deep Cooperation Between Schools and Enterprises – Taking Higher Vocational Colleges in Henan Province as an Example. Shanxi Youth, 2023(08): 136–138.
- [6] Lin S, Yang W, 2023, Exploring the Path to Constructing a Long-Term Effective Mechanism for Deep School-Enterprise Cooperation in Higher Vocational Colleges. Employment and Security, 2023(04): 133–135.
- [7] Lin S, 2023, Practical Exploration of Deep School-Enterprise Cooperation in Higher Vocational Colleges Under the "Belt and Road" Initiative. China-Arab States Science and Technology Forum (Chinese and English), 2023(04): 23–27.

- [8] Lin F, 2023, Exploration of the Current Situation and Countermeasures of the Deep Cooperation Among the Government, Schools, and Enterprises in Higher Vocational Colleges Based on Talent-Training. The Road to Success, 2023(03): 9–12.
- [9] Ge H, 2022, Practical Exploration of the Linkage Mechanism Among Employment, Enrollment, and Training in Higher Vocational Colleges Under the Background of Deep School-Enterprise Cooperation. Employment and Security, 2022(04): 108–110.
- [10] Shi L, Du J, 2022, Exploration and Practice of the Deep School-Enterprise Cooperation Model Under the New Era Background – Taking Higher Vocational Mechanical Majors as an Example. Automobile Time, 2022(09): 64–66.
- [11] Mao S, Zhu X, 2021, Exploration of a New School-Enterprise Cooperation Model in Higher Vocational Colleges From the Perspective of the Integration of Industry and Education. Time-honored Brand Marketing, 2021(11): 170– 172.
- [12] Mu A, 2021, Some Issues and Reflections on the Deep School-Enterprise Cooperation in Higher Vocational Education. Science & Technology Vision, 2021(16): 180–181.
- [13] Du Z, 2020, Research on the International Talents Training Model of Sino-Foreign Cooperative Education Projects in Higher Vocational Colleges in Hubei Province – Based on Hubei's Deep Integration Into the Construction of the "Belt and Road". Journal of Yangtze Engineering Vocational College, 37(04): 33–36.
- [14] Wang L, Yang Y, 2020, Service Outsourcing: A New Model of School-Enterprise Cooperation in Higher Vocational Education Under the "Belt and Road" Initiative. Chinese Vocational and Technical Education, 2020(22): 80–86.
- [15] Xie D, 2018, Exploration of a New Model of School-Enterprise-Government Cooperation for Higher Vocational Tourism Management Majors Under the "Belt and Road" Initiative. Journal of Jiamusi Vocational Institute, 2018(12): 44 + 46.

#### Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.