

Analysis of the Functions and Optimization Strategies of Vocational Education Industry-Teaching Integration Service Organizations

Zhu Wanqi

Department of Education, Guangxi Normal University, Guilin, China
wanqier@outlook.com

Abstract: As a kind of service organization with marketization, intermediary, specialization and autonomy, vocational education industry-teaching integration service organization can promote the effective connection between the supply side of skilled personnel training and the demand side of the industry, and it is the key organization to promote the in-depth development of industry-teaching integration in vocational colleges and universities. Vocational education industry-education integration service organizations can promote the effective connection between industrial demand and talent cultivation, and have the functions of cultivating talents, providing service resource support and guaranteeing the quality of talents. For this reason, the government, service organizations, enterprises and colleges need to continuously promote the optimization of the functions of vocational education industry-industry integration service organizations in terms of laws and policies, cultivation specialization and degree of cooperation.

Keywords: Vocational Education, Integration of Industry and Education, Strategies

1. Introduction

On the one hand, with the rapid change of modern technology, the rapid change of industrial demand, China's manufacturing industry continues to transform and upgrade. On the other hand, by the historical influence, our country has long been affected by the cost preference training strategy of enterprises, the overall quality of technical and skilled personnel is low, and the skill development needs can not be quickly supported by the corresponding skill supply. From the supply side, affected by the reform of the education system at the end of the 20th century, in China's current school vocational education-based training system for skilled personnel, the cultivation of skilled personnel is more based on the concept of education than on the demand for technological change, so there is a lack of mechanisms for enterprises to participate in vocational education, the participation channels are not smooth, and the depth of participation is insufficient. At the same time, vocational schools due to the lack of direct contact with the real production environment, resulting in its independent completion of technical standards to educational standards, educational content transformation difficulties, ultimately leading to vocational education, industry and education integration presents a "joint but not deep" dilemma [1]. From the point of view of the current national situation, first of all, China's vast land, the total economic volume is large, the operating environment is more complex, there is a gap in economic development between the regions, objectively increasing the difficulty of school-enterprise cooperation and docking. Secondly, the level of independent development in China's industry is limited, the ability to guide the development of vocational education is insufficient, and its own ability still needs to be gradually cultivated [2]. In terms of personnel training standards, they have not fully played their role, leading to difficulties in aligning the employment demand standards of enterprises with the personnel training standards of institutions. Finally, due to the different capabilities of schools and enterprises, it is difficult for enterprises to quickly find suitable vocational colleges and universities for cooperation, and there is a lack of corresponding experts to effectively dock the technical demand standards with the educational demand standards. The concept of "service organization for industry-education integration" was first put forward at the national level, and in the actual process, many institutions similar to service organizations have played a great role in it, including industry organizations, industry vocational education teaching guidance committees, training and evaluation organizations, and education service-oriented enterprises with the participation of social forces.

Based on the definition and characteristics of vocational education industry-teaching integration

service organizations, this paper elaborates on their functions, then summarizes the problems and difficulties encountered in their development and analyzes the reasons that hinder their further development. In the end, the functions of vocational education-industry-teaching integration service organizations are further optimized at the governmental level, the level of vocational education-industry-teaching integration service organizations themselves, the level of enterprises and the level of vocational colleges and universities, so as to promote the in-depth development of vocational education-industry-teaching integration.

2. Conceptual Connotation of Vocational Education Industry-Education Integration Service Organization

Vocational education industry-teaching integration service organization is a key concept in this study, and its related concepts need to be interpreted before having an accurate grasp of its connotation.

2.1. The Concept of Industry-Education Integration

This concept was first put forward at the Second National Working Conference on Vocational Education in 1991. In the same year, the State Council made the Decision on Vigorously Developing Vocational and Technical Education, which clarified the strategic position and role of vocational and technical education and advocated the integration of industry and education and the integration of work and learning. In 1996, China promulgated the Vocational Education Law of the People's Republic of China, which stipulates in Article 23 that vocational education “shall be implemented in the integration of industry and education”, establishing the legal status of integration of industry and education. The integration of industry and education is the flow of knowledge and value-added between schools and enterprises^[3], through the mutual penetration and support of vocational education and industry, and the interest drive of schools and enterprises to jointly create value, to form a benign interaction of schools, enterprises, and society to educate people^[4].

2.2. The Concept of Vocational Education Industry-Education Integration Service Organization

The Vocational Education Industry-Education Integration Service Organization is established on the basis of the law of the market in accordance with the provisions of the current relevant laws and regulations, which combines various resources through market-oriented operation to provide students with a kind of professional education service. It aims to enable the industry's hiring standards and talent training standards to be better and effectively combined, thus promoting the further development of industry-education integration. It encompasses the industry associations and industry teaching steering committees that already exist, as well as the training and evaluation organizations led by social forces that are emerging, and education service enterprises.

3. Characterization of service organizations

3.1. Marketability

“Marketability” refers to the anticipation of market needs and changes with full consideration of one's own conditions. Vocational education industry-teaching integration service organizations are formed spontaneously in accordance with the law of the market based on the current market-oriented background. Promoted by the government and demanded by the market, they integrate resources and operate independently according to market requirements. On the basis of independence in accordance with the law, it establishes an independent management mode and combines the employment needs of enterprises and the talent cultivation needs of vocational colleges in accordance with its own development goals, so as to realize the effective articulation between the two. The role of the government has gradually changed from “leading” to “promoting” in the documents issued by the government on vocational education over the years, with the government decentralizing and relying more on the market's own regulatory mechanism to play a role, reflecting the changes in the governance system of vocational education.

3.2. Intermediary

Intermediation is the most prominent characteristic of vocational education industry-teaching

integration service organizations, and it is also a more distinctive feature that distinguishes them from other educational service organizations. The so-called “intermediary” refers to the intermediate medium between two or more systems or constituent elements of a system. According to the Marxist paradoxical point of view, the “intermediary organization” can be understood as an independent organization that coordinates the two sides and objects that are opposites of each other in social life [5]. On this basis, by providing the public with more social services and objective and fair information, the whole system can be standardized and orderly operation. As an intermediary organization between schools and enterprises, the Vocational Education Industry-Education Integration Service Organization organically integrates the norms of employment needs of enterprises in the industry, and then converts them into the teaching standards of vocational schools. Therefore, the Vocational Education Industry-Education Integration Service Organization is a kind of intermediary organization that can combine the supply and demand of skills, and it is a bridge that plays the role of communication.

3.3. Professionalism

“Professionalism” refers to the provision of specialized services through specialized personnel. In order to play a good role as an intermediary bridge between schools, enterprises and schools, and to balance the interests of all the relevant subjects, then we need to do a good job in the following two aspects. One is the professionalism of the staff of the service organization, which should not only be professional but also have diversified skills. The second is that the intermediary services provided by the service organization should be professional, reflected in its ability to accurately practice and predict the industry's employment needs and development trends, to provide rationalization suggestions for enterprises and institutions, so that both sides can make continuous adjustments according to the suggestions, and ultimately achieve the effective docking of enterprise demand standards and institutional training standards. Education is a kind of practical activity with the nature of service, and educational service is the product of educational activity, or a product in the form of service [6]. Vocational education industry-teaching integration service organizations provide specialized services aimed at improving the teaching level and quality of talents in vocational colleges and universities, increasing the degree of participation of industrial enterprises in running schools, and cultivating a large number of high-quality innovative talents and technically skilled talents.

3.4. Independence

As third-party intermediary organizations, service organizations have a certain degree of independence, including independence in terms of organizational form and organizational economy. The form of organization is usually approved by the relevant government departments and operates independently in accordance with the relevant national laws and regulations, distinguishing itself from the government in terms of the public services it provides and the social responsibilities it undertakes. The independence of the economic aspect of the organization means that whether the service organization is founded by the industry, enterprise or the name of the university, it has an independent legal status and economic status. As a service organization for industry-education integration in the field of vocational education, it also has independent legal and economic status. Relying on its own resources to operate independently, it combines the employment needs of enterprises and the talent training needs of vocational colleges, thus realizing the effective articulation between the two.

4. Functions of Vocational Education Industry-Education Integration Service Organizations

As a third-party intermediary organization, vocational education industry-teaching integration service organizations need to give full play to their characteristics and advantages, cultivate talents based on industry needs, provide service resources to support industry-teaching integration, and introduce evaluation mechanisms to guarantee the quality of talents. In this way, they can get out of the predicament of “cooperation without depth” of vocational education industry-education integration.

4.1. Industry Demand-Oriented Talent Cultivation

Vocational education industry-teaching integration service organization combines the laws of education with the laws of industry in the dimension of cultivation, incorporates the standards of enterprise employment demand into the standards of talent cultivation, and provides solutions for the cultivation of talents in vocational colleges and universities. To meet the new economic and technological

development, industrial transformation and upgrading of the vocational field of talent training put forward higher requirements, but also through the characteristics of vocational colleges and universities to enhance the core competitiveness of the connotation of the development. The new changes in the field of vocational education have put forward new development needs for talent cultivation, requiring vocational colleges and universities to adapt their professional settings to the needs of local industries, connect the curriculum content to the occupational standards, and integrate information technology with professional teaching. On the basis of sufficient research, the service organization of industry-teaching integration of vocational education represented by education service enterprises, combined with the development trend of the current new industry and the characteristics of the local industry, differentially set up characteristic majors and general majors. It combines the actual project development of enterprises with the curriculum construction of vocational colleges and universities. It can adjust and optimize itself at the right time according to the changes of the industry and the development of information technology, so as to optimize and innovate the curriculum content. In addition, service organizations should actively promote the teaching method of "integration of science and practice", combine theory and practical work, and integrate all aspects of internship and training into the teaching process, so as to cultivate high-level, composite and high-quality applied technical and skilled talents for enterprises to meet the needs of the industry.

4.2. Supporting Service Resources for Industry-Education Integration

Vocational education industry-teaching integration service organizations represented by education service-oriented enterprises assist vocational colleges and universities to carry out teacher training projects, establish practical training teaching bases based on real production environments in enterprises, and develop professional teaching resources. While improving the quality of teaching, they not only effectively make up for the single theoretical deficiency of talent training in vocational colleges and universities, but also improve the innovation and practicability of talent training, so as to promote the cultivation of skilled talents in China. Vocational school industry-teaching integration service organization is mainly based on practical teaching, through the construction of a realistic working environment, the establishment of a multi-level training system, and the cooperation with vocational colleges and universities, to establish a production training base that matches the relevant industry. Service organizations can combine the internship needs of enterprises with the teaching internships of vocational colleges and universities, thus serving the construction and development of the local regional economy. On the one hand, it strengthens professional skills training and assists vocational colleges and universities in implementing teacher upgrading projects and innovative teacher orientation so as to optimize their teaching staff. On the other hand, it also provides teachers with training in enterprise standards, offers suitable training and upgrading opportunities, and builds a high-quality teaching force with a reasonable structure and complete specialties. Service organizations participate in vocational education curriculum construction, develop teaching materials independently, and create professional teaching resources. It develops teaching materials based on real case projects in enterprises and designs content around students' employment positions. On this basis, optimization and adjustment are made according to the development of the industry and information technology, which achieves the purpose of optimizing and innovating the teaching content.

4.3. Introducing Evaluation Mechanisms to Ensure Talent Quality

Vocational education industry-teaching integration service organizations represented by education service-oriented enterprises are based on the knowledge and ability requirements of specific positions in the evaluation dimension, based on objective evaluation standards, and introduce a third-party evaluation mechanism to supervise and evaluate the quality of enterprises' participation in the teaching quality of vocational education and the quality of talent cultivation. This is conducive to promoting the quality of talent cultivation and the quality of vocational education teaching. The relevant historical experience of developed countries shows that the standardized construction of vocational education standard system is the starting point for the standardized development of vocational education, and only by strengthening and perfecting the vocational education standard system can we realize the transformation of China's vocational education from large-scale development to high-quality development. Therefore, it is necessary to build China's vocational education standard system, promote the participation of social forces in vocational education, and give full play to the role of industry organizations, training and evaluation organizations and other vocational education industry-teaching integration service organizations. By introducing third-party evaluation mechanism, formulating teaching quality supervision mechanism, and improving the professional technology and skill standard system of relevant

industries, the vocational education industry-teaching integration service organizations can provide scientific and standardized basis for the cultivation of scientific and technical talents in China. Utilizing its own resource integration capabilities, the organization aligns with international advanced standards and professional certification systems, based on the skill requirements for specific positions in enterprises. It constructs a vocational education standard system in the industry sector, tailored to the needs of industrial transformation in the sector. It then launches relevant training programs, monitors teaching quality, and establishes a comprehensive education system for all. It then launches relevant training programs, monitors teaching quality, and establishes a comprehensive talent grading system, all in the pursuit of fostering technical and skilled talents for the industry.

5. Strategies for Optimizing the Functions of Service Organizations for Industry-Education Integration in Vocational Education

In light of the preceding discussion regarding the functions of the vocational education industry-teaching integration service organization, the examination of its optimization strategy should be conducted from a multi-level perspective, encompassing the government, service organizations, enterprises, and higher education institutions, as follows:

5.1. Enhancing Oversight and Evaluation with Policy Support at the Governmental Level

In order to ensure the orderly operation of vocational education industry-education integration service organizations, it is necessary to formulate special laws and regulations to regulate them. Firstly, in terms of the legal system, the national government should formulate and improve the special laws and regulations for the development of vocational education industry-industry fusion service organizations, to ensure the standardization of their operation, so as to improve the legitimacy and authority of their operation. Secondly, the status, duties and powers of service organizations for industry-industry integration in higher vocational education should be clarified, and relevant access standards, service standards and industry rules should be defined. In terms of access principles, the qualifications, experience, legal operation record and industry recognition of the institution should be considered comprehensively. Thirdly, in terms of support policies, it is necessary to increase guidance, improve the corresponding policy system, establish and improve the operation mechanism and supervision system of the school-enterprise cooperation service organizations of vocational colleges and universities, and enhance the operation efficiency of higher vocational colleges and universities. The government can encourage enterprises to participate in vocational education by means of macro-control policies, such as tax relief and financial subsidies, and increase publicity and guidance to raise enterprises' awareness of participation in vocational education. Finally, in terms of procedural operation, it should adopt a system of information disclosure and formulate relevant provisions and regulations, and make clear stipulations on the rewards and punishments of organizations providing services for the integration of industry and education, as well as on the system of safeguards.

5.2. Strengthening Professional Development and Elevating Service Standards at the Service Organizations Level

As far as the service organization for industry-industry integration in vocational colleges and universities itself is concerned, in order to enhance its professionalism, it is necessary to enhance the professionalism of the personnel of the service organization and strengthen the professionalization of the organization. First of all, focusing on the professionalism of the service organization personnel, actively seek the extensive participation of experts in the field of industry and industry, and establish a dynamic flow of expert group members to participate in the mechanism. Secondly, in the construction of specialization, it is necessary to improve the professional level of service organizations, docking international advanced standards, and building China's standardization system. By giving full play to the role of service organizations, they can promote the alignment of enterprises' employment needs standards with talent training in vocational colleges and universities. Furthermore, by enhancing the prediction ability of service organizations for the updating of technical skills and changes in industry and sector development trends, they can assist vocational colleges and universities in improving their capabilities in various aspects. Finally, the organization will improve its own service capacity and provide vocational colleges and universities with the necessary teacher training, internship and training facilities, curriculum optimization and professional resource development. Fully motivate the cooperation of relevant enterprises and guide cooperative enterprises to participate in the process of running vocational education,

thereby sharing resources and benefits.

5.3. Promoting Active Collaboration and Perfecting Talent Development at the Enterprise-Institute Level

As the two main parts of the integration of industry and education in vocational education, both sides should actively participate in school running and cooperation. Enterprises should have a deep understanding of the participation in vocational education school-enterprise cooperation, fundamentally recognize the importance of participating in vocational education, and cooperate with vocational colleges and universities with a proactive mindset. To this end, enterprises should combine their own profit-seeking nature with the public welfare of education, not only focusing on immediate interests, but also taking a long-term view of participation in vocational education. To realize that vocational colleges and universities to cultivate talents is ultimately for the enterprise services, participation in vocational education is also recognized and advocated by all sectors of society. Only when enterprises actively engage in the educational process of vocational colleges, led by the industry-education integration service. Only when enterprises actively engage in the educational process of vocational colleges, led by the industry-education integration service organizations, can they truly contribute to talent cultivation. By sharing educational resources and benefits, enterprises can effectively integrate their latest technological advancements into the training of talents. This integration will enable vocational colleges to produce graduates who are more suited to the current changing landscape of technical skills, thus satisfying the needs of the country's economic development and supporting the new round of technological revolution. This integration will enable vocational colleges to produce graduates who are more suited to the current changing landscape of technical skills, thus satisfying the needs of the country's economic development and supporting the new round of technological revolution.

6. Conclusions

Vocational education and general education are of equal importance in China's education system. With the rise of the new economy and new industries, vocational education plays an increasingly important role in cultivating technical and skilled talents. In order to meet the demand for talents in industrial transformation and upgrading, it has become imperative to promote the deep integration of vocational education and industry. In this process, vocational education industry-education integration service organizations play the role of bridge and link, but their development is also facing many problems and challenges. Vocational education industry-education integration service organizations are an important platform connecting vocational education and industrial demand, aiming to promote the effective docking between the supply side of talent cultivation and the demand side of industry. However, in actual operation, these organizations face a number of problems and dilemmas, such as insufficient ability to integrate resources, inadequate service mechanisms, and weak willingness to cooperate. These problems constrain the development of vocational education industry-education integration service organizations and affect the performance of their functions.

Through the above analysis of the characteristics as well as functions of vocational education industry-education integration service organizations, vocational education industry-education integration service organizations play an important role in promoting the deep integration of vocational education and industry. In order to give full play to their functions and roles, they need to be optimized and improved at multiple levels, including the government, organizations, enterprises and vocational colleges and universities. Through measures such as strengthening policy guidance and support, improving service content and methods, and increasing the willingness to cooperate and participation, we will promote the in-depth development of vocational education industry-education integration service organizations and provide strong talent support for China's economic development and industrial transformation and upgrading.

References

- [1] Pan Haisheng, Pei Xudong.(2019). *Service Organization for Industry-Education Integration in Vocational Education: Dynamics, Connotation, and Functional Optimization*. *Vocational and Technical Education*,40 (27),22-26.
- [2] He Zhen.(2013). *The Inevitable Path for the Development of Modern Vocational Education under Deep Industrial Transformation*. *China Higher Education Research*, (1),90-93.

- [3] Yang Shanjiang.(2014). *Analysis of Issues and Promotion Policies in School-Enterprise Cooperation in Vocational Education*. *Education and Vocation*, (33),8-10.
- [4] Wang Lingling.(2015). *Construction and Implementation of the Integration Mode of Industry and Education in Modern Vocational Education*. *Hubei Social Sciences*, (8),160-164.
- [5] Ge Xinbin.(2011). *Analysis on the Rational Construction and Functional Operation of Educational Intermediary Organizations*. *Tsinghua Journal of Education*, (6),99-103.
- [6] Jin Xibin.(2003). *On Educational Services and Their Values*. *Educational Research*, (1),44-47.