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*2025 3rd International Conference on the Sociology of the Global Economy, Education, Arts and Humanities (GEEAH 2025)***Research on the Current Situation, Problems and Countermeasures of the Integration of Industry-Education Consortia in Higher Vocational Education in Chongqing**Wanli Li ^{1,2,*}¹ Infrastructure University Kuala Lumpur, Kuala Lumpur, Malaysia² Chongqing Business Vocational College, Chongqing, China

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Abstract: This study examines the path of industry-teaching integration in higher vocational education in Chongqing, addressing the lack of a comprehensive understanding of its current status and challenges. A qualitative approach was adopted, involving surveys and interviews with 200 education sector managers, higher vocational education teachers and industry partners. Community theory and vocational education theory provided insights into key influences and patterns. The findings reveal the current state of community integration, highlight challenges, and propose strategies for stakeholder collaboration and resource optimization. This study provides practical guidance for policymakers and educators, contributing to high quality human resource development and sustainable development of higher vocational education.

Keywords: industry-education; higher vocational; integration; research

1. Introduction

Globally, the United Nations Educational, Scientific and Cultural Organization (UNESCO), through documents such as the Strategy for Technical and Vocational Education and Training, has clearly identified the important role of vocational education in supporting skills development and enhancing the quality of life of individuals. Institutional Planning Division Director General Azman Arshad, who argued that "in today's interconnected world, achieving the SDGs requires international cooperation and expressed his desire to work together with all present to expand the impact of the TVET system" [1]. Global attention to the development of vocational education has increased the focus and pursuit of vocational education models that are in line with regional development. At the international level, such as Germany's "dual system" education model, the United States' "cooperative education" model, Japan's "industry-academia-government" collaborative model, and the United Kingdom's "sandwich" model, which is a typical case of industry-education integration of integration of industry and education, and these models continue to explore new modes of community building through in-depth cooperation between schools and enterprises, government policy support, resource sharing and curriculum co-construction, etc., to further enhance the adaptability of vocational education to the development of the regional economy and industry [2]. Domestically, China has proposed to promote the high-quality development of vocational education by centering on school-

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enterprise cooperation and the construction of industry-teaching integration communities through policy frameworks such as the Law of the People's Republic of China on Vocational Education (revised in 2022) and the Implementation Plan for Vocational Education Industry-Education Integration Empowerment and Enhancement Actions. However, although a large number of studies have paid attention to the policy framework and practical effects of the integration of industry and education, they are still insufficient in analyzing the deep-rooted mechanisms and regional practices, such as superficial community construction, conflicting cooperation dynamics, underutilized integration advantages, and funding shortages, which together hinder the deep integration of the community and may even further exacerbate the disconnection between higher vocational education and market demands, which have limited the in-depth integration of the community, and may even further aggravate the disconnection between higher vocational education and labor market demands [3]. These problems limit the deep integration of the community and may even further aggravate the phenomenon of disconnection between higher vocational education and the market. Therefore, this study analyzes the current situation of the higher vocational education industry-teaching integration community in Chongqing, analyzes the existing problems and their root causes, and proposes a high-quality development strategy for integration. It aims to provide theoretical support and practical reference for the practice of industry-teaching integration in higher vocational education in Chongqing and the whole country.

2. Research Status and Issues

2.1. Analysis of Current Status

2.1.1. Construction Progress and Practice

According to the data of China Bureau of Statistics, in 2023, the total number of higher vocational (specialized) schools in the country is 1547, and there are 45 schools in Chongqing, accounting for about 2.84% of the total number of higher vocational education institutions in China [4,5]. The number and scale of higher vocational education institutions in Chongqing is relatively large, and there is a certain foundation for development. According to the higher vocational development think tank statistics, in March 2024, a total of 916 public higher vocational colleges and universities in the country announced the departmental budget for the current year, and the budget of Chongqing ranked 4th in the country, and Chongqing's higher vocational colleges and universities have invested a large amount of money in the education budget [6]. According to the "Announcement on the Selection Results of Typical Cases of Industry-Education Integration and School-Enterprise Cooperation in 2024", Chongqing has established four Industry-Education Integration Communities (IECs), focusing on cooperation in the areas of intelligent manufacturing, transportation, and technology industries. Chongqing higher vocational education and industry-teaching integration community construction has a certain basic conditions and development potential, to create a high-quality community construction has a lot of room for growth.

2.1.2. Promoting Role of Policies

In recent years, the Chongqing Municipal Government has actively promoted the integration of industry and education, and has formulated a number of policy documents. 2023, Chongqing Municipality issued the Creating a Municipal Industry and Education Consortium to Deepen the Reform of the Modern Vocational Education System to Serve the Construction of the Chengdu-Chongqing Twin-City Economic Circle to Serve the Construction of the Chengdu-Chongqing Area Twin-City Economic Circle Implementation Plan, etc., a number of government documents to strengthen the construction of Chongqing's modernized vocational education system, and to promote the integration of industry and education community. Through the cooperation mode of government guid-

ance, enterprise participation and school cooperation, more than 40 higher vocational colleges and universities in Chongqing have established school-enterprise cooperation platforms, which are still in the development stage but have contributed to the improvement of practical training and internship programs of higher vocational colleges and universities and play a certain positive role in cultivating talents needed by enterprises. At present, the construction of modern management system is crucial to the integration of industry and education, especially the application of intelligence and information technology to significantly improve the efficiency of the community operation, management and evaluation. The construction of the community of industry-teaching integration should focus on digitalization and informationization, especially in the city of Chongqing, where manufacturing and information technology are the main pillar industries, adjusting and optimizing the higher vocational education system to meet the evolving needs of the local economy, reflecting a forward-looking development trend.

2.1.3. Fit of Demand

In the process of promoting the integration of industry and education, the regions focus on the development of the concept of becoming a fusion of industry and education [7]. This is crucial for improving the quality of education and serving local economic development. The pillar industries of Chongqing include manufacturing and information technology industry, which requires higher vocational colleges and universities to continuously optimize and adjust their professional settings to ensure that the cultivated talents can meet the needs of the local economy and industry. Especially in the field of information technology and intelligent manufacturing, the integration of industry and education promoted by Chongqing further promotes the combination of higher vocational colleges and local industries. By combining the needs of local industries, Chongqing has not only enhanced the practical and innovative capabilities of higher vocational colleges and universities, but also provided important talent support for the transformation and upgrading of the local economy. At present, Chongqing has added 56 undergraduate specialty points that support the development of regional industries. Based on the adjustment of specialties at the undergraduate level, it drives the dynamic adjustment of specialties in local higher vocational education, effectively improves the degree of matching between the specialty settings of higher vocational education and industries, highlights the advantages of specialty settings, and provides strong support for the in-depth development of industry-teaching integration.

2.2. Analysis of Problems and Causes

2.2.1. The Integration of the Community Is Not Deep and the Mechanism Is Not Perfect

The integration of the community of industry and education is a systematic project and involves a wide range of aspects. Some scholars have clearly pointed out that the poor coordination mechanism is one of the main obstacles to the construction of the community, and the speed of the development of higher education in each region should be decided according to the talent market, economic support capacity and conditions of running schools in each province and region [8,9]. The current outstanding problems are that the goal of university-enterprise cooperation is not clear and the depth of cooperation is insufficient [10]. The depth of understanding of the integration of industry and education is insufficient, and even if the work of integration of industry and education is carried out, it stays at a shallow level of cooperation. In the concrete implementation, in the construction of industry-education integration communities, there is a tendency to prioritize initiating projects over ensuring their sustained development of prioritizing initiation over implementation, with many projects remaining superficial. As a result, shallow integration has become a common issue in the development of industry-education communities, the industry-teaching integration of the community there is a "wear new shoes to take the old road The problem of "wearing new shoes and walking on the same old road" in the

construction of the community of industry-teaching integration, formalism is a serious issue [11]. Moreover, the lack of a long-term and stable cooperation mechanism hinders the development of genuinely collaborative education models, often stay in the surface cooperation, failed to form a deep-level collaborative education model, up to now, the Chongqing community of industry-teaching integration of a certain scale, but the community of the physical platform is not enough to run the platform, the lack of platform subjects of the elements of the exchange, The system construction of compensation for benefits, failure to establish a standardized mechanism for talent training and an evaluation index system for platform operations, etc. These problems affect the deep integration of the community [12].

2.2.2. Specialized Settings Are out of Touch with Industrial Demand and Insufficient Adaptability

Research shows that China's higher vocational education is developing too fast, while the relevant theoretical research and practice process is relatively slow, the process of integration of industry and education, the integration of the community of each subject in the training of talents with different purposes, higher vocational colleges and enterprises in the cooperation scenario is mainly internships, including students and teachers. However, institutions lack in-depth understanding of enterprise needs and often fail to update their talent training programs in a timely manner; enterprises merely provide venues as required, without engaging in long-term skill development or training efforts. Taking the integration of industry and education in higher vocational education in Henan Province as an example, we analyze the problems of uneven geographical distribution, insufficient capacity of professional construction to serve the development of industry, and large differences between schools and enterprises in the demands of schooling [13,14]. The development of higher vocational education industry-teaching integration community in Chongqing has these common problems, in the context of the new Chongqing, higher vocational education exists in the professional failure to accurately match the rapid development of industry demand, information asymmetry among various stakeholders in the community, coupled with low adaptability, has hindered deeper integration, these factors lead to the cultivation of higher vocational colleges and universities in the cultivation of talents and the local industry demand docking, can not realize the precise match, it is difficult to meet the new demands of the market industry.

2.2.3. Unclear Authority and Responsibility of the Main Body, Weak Integration Construction

In the actual implementation, local government departments need to formulate a series of implementation documents, in the face of this new product, there may still be a "policy vacuum" in the collaborative development of the integration framework, resulting in issues such as "school enthusiasm, enterprise indifference" and "integration without true integration" [14]. The government, schools, enterprises and other subjects in the integration of industry and education in the division of rights and responsibilities is not clear, resulting in the process of cooperation, shirking and contradictions, resulting in low initiative from enterprises to participate, unclear division of rights and responsibilities among stakeholders, and obstructed communication channels between the various subjects in the community, which which reduces the effectiveness of cooperation and further weakens the community's construction motivation, and further exacerbate the community of the main body of the initiative to participate in the community! , leading to the poor effect of cooperative education .Chongqing City, in the process of promoting the integration of industry and education, higher vocational colleges and universities in the service of local industrial development is weak, the existence of the community of the rights and responsibilities of the various subjects is unclear, the integration of the lower degree of the problem, mainly in the distribution of benefits mechanism, policy implementation, resource

allocation and other aspects of the weaker, the superposition of these problems, resulting in varying levels of effectiveness in the construction of industry-education integration communities, and affects the overall higher vocational education and industry in-depth integration of the quality of the development of higher vocational education and industry.

3. Research Responses

3.1. Strengthen Policy Support and Build a Multifaceted Collaborative Governance Framework

Policies continue to be issued and implemented across China to promote the high-quality development of industry-education integration communities. Policies such as the Circular on Ten Measures to Promote the High-Quality Development of Higher Vocational Education in Shanghai, issued by the Shanghai Municipal Education Commission in October 2023, and the Circular on the Implementation Plan for Creating a Municipal Industry-Education Consortium to Deepen the Reform of Modern Vocational Education, issued by the General Office of the People's Government of Chongqing Municipality in September 2023, have clearly set out the policy framework for the integration of industry and education with the aim of infusing higher vocational education in various regions with new aims to inject new momentum into higher vocational education in China and promote close integration between education and industry. Meanwhile, Fujian Province and Beijing Municipality have also introduced policies and measures to promote the high-quality development of vocational education respectively. The implementation of national policies, focusing on the integration with local economic and industrial characteristics, and the formation of a mutually beneficial alliance between industry and education should also cultivate the value concept of synergistic governance of multiple subjects, and construct new and diversified modes of governance [15,16]. In order to build a high-quality industry-education integration community in Chongqing, it is necessary to increase the policy and institutional support, enhance the initiative of the integration and development of multiple subjects, and persistently apply the practice, so as to build the overall framework of the synergistic governance of multiple subjects.

3.2. Deepen the Cooperation of Subjects and Promote the Deep Expansion of the Community

The construction of the community of industry-education integration involves multiple subjects, and defining and satisfying the interests of all parties is the key to deepening cooperation. Identifying common interests and meeting the interests of each subject of the symbiosis promote closer cooperation among subjects and promote the sharing of resources and complementary advantages. Effective integration between communities is the core way to realize high-quality industry-education integration. The study found that strengthening school-enterprise cooperation has become a consensus, and it has been pointed out that industrial colleges are a model that emerged from school-enterprise cooperation in vocational education, which has become an important platform for promoting the integration of industry-teaching and school-enterprise cooperation, and an important platform for exploring talent development models that align with regional economic needs [17,18]. There are also, exploring tripartite subjects such as enterprises, industries and schools, and some exploring multiple subjects, The vocational education community of shared future is a new ecological system for the integration of industry and education, which is formed by the deepen cooperation and deep integration of multiple subjects such as vocational colleges, enterprises, government and society, in practice, whether it is school-enterprise cooperation, tripartite subject cooperation or multiple subject cooperation, it provides valuable experience for the development of industry-education integration communities in higher vocational education in Chongqing [19]. This promotes the shift from formalized cooperation to deeper integration, in order to create a new ecosystem of efficient and collaborative industry-education integration, cultivate talents for regional development, and promote the high-quality development of local economy [20].

3.3. Transform the Integration Mode and Expand the Dimension of the Community

In order to adapt to the rapid development of science and technology, the construction of the industry-education integration community must keep pace with these changes, focusing on the multi-dimensional development of the community's integration model. The traditional mode of industry-education integration is no longer sufficient to meet the needs of modern education and industry, It also needs to establish a digital vocational education platform to optimize the use of educational resources and improve service delivery [21]. In practice, many colleges and universities enhance the ability and level of higher vocational education services by using digital resources to build community information resources. Not only making good use of technology and resources, but also further optimizing the community integration process, such as streamlining the process of communication and management [22]. To a large extent, it stimulates the integration of community stakeholders, reinforces the concept of collaboration, and helps build a new and diversified governance model, maximizes the initiative and service effectiveness of each stakeholder, enhances the role of the community, and taps greater resources for the integration of higher vocational education and industry, improving the capacity of local vocational education to educate and serve talent [23,24].

4. Summary

By analyzing the integration status, existing problems, underlying causes, and potential countermeasures of the higher vocational education industry-teaching integration community in Chongqing, this study aims to comprehensively reveal its current development situation. The goal is to identify key issues that hinder the effectiveness of integration and to explore the root causes from institutional, structural, and stakeholder-related perspectives. Based on this analysis, a practical framework will be proposed to clarify the roles and collaborative mechanisms of government, vocational institutions, and enterprises, thereby promoting high-quality and sustainable development of the integration community.

Furthermore, future research should consider the impact of technological advancements—particularly digital learning platforms and virtual communities—on the process of integration. These emerging tools offer new opportunities for flexible, scalable, and interactive learning, which are highly relevant in the context of vocational training. Exploring their influence will provide insights not only for Chongqing but also for other regions undergoing similar transitions.

This study highlights the importance of a supportive institutional environment, efficient resource allocation, and active stakeholder engagement in enhancing industry-education collaboration. Its findings will offer practical recommendations to improve the integration process, serving as guidance for policymakers, educators, and industry representatives in building a more coordinated and responsive vocational education system.

The research will employ case studies, literature review, and policy analysis to offer a well-rounded understanding of the current landscape. Ultimately, it will contribute to broader discussions on vocational education transformation in response to the changing demands of modern economies.

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