

# The Study on the Construction Path of Modern Industry College of Hubei Higher Vocational Colleges

**Dabo Chen**

HuBei Water Resource Technical College, Hubei Wuhan 430070

---

**Abstract:** Modern Industrial College, as an important measure to deepen the integration of industry and education and school enterprise cooperation, has become an effective way to improve the quality and status of higher vocational education in Hubei. Since July 2020, many modern industrial colleges have been established in Hubei vocational colleges, and the construction of modern industrial colleges has also made certain progress. Hubei vocational colleges rely on modern industrial colleges to continuously promote the reform of talent training models, innovate school enterprise cooperation and industry education integration models, continuously promote the construction of practical training and internship bases, strengthen the cultivation of students' practical and innovative abilities, and vigorously promote the construction of teaching staff. However, the modern industrial colleges established by Hubei vocational colleges have failed to achieve deep integration of industry and education, making it difficult to achieve "diverse" subject collaborative education and effectively implement "collaborative" governance. Based on this, vocational colleges in Hubei should establish a talent cultivation model that integrates industry and education, as well as a platform for "deep integration and symbiotic development" of industry, academia, and research; Clarify the status of enterprises as the main body of education and form a modern industrial college governance model of diversified co governance; Build a management system and mechanism of "diverse collaboration, co construction and co management".

**Keywords:** Hubei higher vocational colleges, modern industry college, construction path

---

## Introduction

As an important practical achievement in deepening the integration of industry and education and school enterprise cooperation, modern industrial colleges in vocational colleges are a new type of educational model derived from the integration of industry and education and school enterprise cooperation. Under the new situation, the talent cultivation mode of Hubei vocational colleges is constantly innovating, which puts forward new requirements for the transformation and upgrading of talent cultivation work, and poses new challenges to the operation, management, guarantee mechanism and specific practice of industry education integration and school enterprise cooperation. As an important measure to deepen the integration of industry and education and school enterprise cooperation, Modern Industrial College has become an effective way to improve the quality and status of higher vocational education in Hubei.<sup>[1]</sup>

## 1. Research background

At present, there are still many shortcomings in the research on the construction of modern industrial colleges, and there is room for further research. Firstly, domestic scholars have conducted relatively little theoretical research on the

---

Copyright © 2024 by author(s) and Frontier Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>

---

construction of modern industrial colleges, and have not yet formed truly valuable theoretical achievements; Secondly, domestic scholars' research on the construction of modern industrial colleges is limited to the perspective of education,<sup>[2]</sup> neglecting the application of knowledge from other disciplines such as economics, management, sociology, etc; Thirdly, in the practical exploration of modern industrial colleges, current research is limited to qualitative analysis and lacks quantitative analysis. At the same time, domestic scholars have conducted relatively little research on modern industrial colleges in Hubei vocational colleges, which is also an urgent problem that needs to be solved in the construction of modern industrial colleges in Hubei vocational colleges.

## **2. The current situation of the construction of modern industrial colleges in Hubei vocational colleges**

Since July 2020, universities in Hubei Province have established more than 60 industrial colleges to serve the breakthrough development of five advantageous industries, nine emerging characteristic industries, and the "51020" modern industry cluster in Hubei Province,<sup>[3]</sup> focusing on the comprehensive management and coordinated development plan of the provincial river basin, the construction of "three highlands and two bases", and the construction of "three metropolitan areas". They have also established talent training alliances with more than 200 enterprises, including Dongfeng Motor Group Co., Ltd., Huawei Technology Co., Ltd., FiberHome Communications Technology Co., Ltd., iFlytek Co., Ltd., a large number of technology innovation demonstration enterprises, manufacturing industry single champion enterprises, specialized and new enterprises, and "little giant" enterprises.<sup>[4]</sup>

At present, the modern industry colleges of universities in Hubei Province are in the initial stage of construction, and the pilot colleges of national and provincial modern industry colleges are both undergraduate colleges. However, the construction of modern industry colleges in Hubei vocational colleges is still in the stage of theoretical and practical exploration.<sup>[5]</sup>

### **2.1 Hubei vocational colleges rely on modern industrial colleges to continuously promote the reform of talent training models**

Hubei vocational colleges have fully utilized the role of the council and expert committee in the construction of modern industrial colleges, and have constructed a talent cultivation system that integrates vocational colleges, industries, and enterprises to jointly formulate talent cultivation plans, develop curriculum resources, meet industry needs, share full-time and part-time teaching staff, jointly build on campus and off campus training platforms, share dynamic resources of industrial development, jointly implement the talent cultivation process, and jointly evaluate the quality of talent cultivation. They have also explored the introduction of real enterprise business cases, enterprise environments, project management, etc. into the talent cultivation model, forming a new path of comprehensive and real-life teaching for talent cultivation.

### **2.2 Hubei vocational colleges continuously innovate school enterprise cooperation and industry education integration models**

Hubei vocational colleges provide technical services to enterprises through the construction of modern industrial colleges, and jointly carry out technological breakthroughs and product research and development with enterprises, cultivating and delivering excellent graduates for enterprises, encouraging university teachers to participate in enterprise product research and development and solve important industrial technology problems, providing business training services for employees of upstream and downstream enterprises in the industrial chain, and injecting new development momentum into industrial development; At the same time, enterprises have established scholarships and part-time mentors to support the talent cultivation of vocational colleges, forming a good model of industry education integration and educational ecology.<sup>[6]</sup>

### **2.3 Hubei vocational colleges continuously promote the construction of training and internship bases and strengthen the cultivation of students' practical and innovative abilities**

Hubei vocational colleges have established dozens of modern industrial colleges around the industrial chain and related enterprises in various regions, continuously upgrading and transforming practical places such as internship and training bases, greatly improving students' internship and training conditions. Modern industrial colleges have included innovation and entrepreneurship education for college students in the scope of professional education, and have achieved systematic integration of quality education, professional courses, teaching evaluation, and other aspects based on the characteristics of disciplinary majors. Students have repeatedly won awards in innovation and entrepreneurship competitions, as well as innovation competitions at all levels and types of disciplines. Taking 2022 as an example, Hubei higher vocational colleges won 34 gold awards, 49 silver awards and 121 bronze awards in the provincial semi-final of the 8th China International "Internet plus" Undergraduate Innovation and Entrepreneurship Competition, and won 1 gold award and 4 silver awards in the national finals. In the 12th "Challenge Cup · Bank of China" College Student Entrepreneurship Plan Competition in Hubei Province, Wuhan Railway Vocational and Technical College won the Challenge Cup, and 6 vocational colleges in the province won the Excellence Cup.<sup>[7]</sup>

### **2.4 Hubei vocational colleges vigorously promote the construction of teaching staff**

Hubei Vocational College Modern Industry College has introduced teachers through various means such as school enterprise, school enterprise, and government school cooperation to create a combination of full-time and part-time teachers. It has also introduced experienced high skilled talents from enterprises into the curriculum and practical teaching system of the college.<sup>[8]</sup> At the same time, Modern Industry College has introduced and cultivated some high-level and high skilled talents such as overseas experts and scholars, continuously strengthening its teaching staff and broadening its horizons in cutting-edge and international aspects. Hubei vocational colleges promote young and middle-aged backbone teachers to go deep into enterprises for practical training through the entry of teachers into enterprises, continuously enhancing the interdisciplinary and sustainable development capabilities of teachers in industrial colleges.

## **3. The challenges faced by the construction of modern industrial colleges in Hubei higher vocational colleges**

From the current situation of the integration of industry and education in vocational colleges in Hubei, many modern industrial colleges are in a shallow and low-level state of construction, and there are many difficulties and problems faced in the construction of modern industrial colleges.

### **3.1 Modern industrial colleges have failed to achieve deep integration of industry and education**

At present, most of the modern industrial colleges in Hubei vocational colleges belong to the school enterprise joint construction type. Both universities and enterprises are the leading, construction, and management entities of industrial colleges. Modern industrial colleges can integrate the educational resources of universities and the industrial resources of enterprises, so that the education and industrial development of universities can be integrated. However, the limited affairs of both parties are only stipulated in written contracts between schools and enterprises, and a standardized cooperation system has not been truly established. Most schools and enterprises operate independently, and there is a clear disconnect between industrial development and educational development, making it difficult for industry and education to achieve deep integration.<sup>[9]</sup>

### **3.2 Modern industrial colleges find it difficult to achieve "diverse" subject collaborative education**

The construction entities of modern industrial colleges include vocational colleges, governments, industry associations, enterprises, etc. In the construction of modern industrial colleges, the government pays more attention to their political benefits, universities focus more on educational benefits, and enterprises focus more on economic benefits. Due to the different demands of the government, universities, industry associations, and enterprises on the modern enterprise college, the goals of the construction subjects are diversified and divergent, resulting in constraints on the construction positioning, professional offerings, course settings, teaching venues, and other aspects of the modern industrial college. This has led to conflicts in concepts and cooperation among the construction subjects, which have been continuously intensified, thus affecting the collaborative education of "diverse" subjects and suppressing the construction of modern industrial colleges in Hubei vocational colleges.

### **3.3 Modern industrial colleges find it difficult to effectively implement "collaborative" governance**

At present, Hubei Vocational College Modern Industry College has formed three governance methods. The first method is to implement the dean responsibility system under the leadership of the council or board of directors, the second method is to implement the dean responsibility system under the leadership of the party committee, and the third method is to implement the dual dean responsibility system under the leadership of the council or board of directors. The above three methods all have the attribute of diversified construction subjects, but due to the different degrees of dominance of construction subjects in industrial colleges and the degree of integration between construction subjects, there are differences in the direction of education in industrial colleges, and it is also difficult to achieve effective "collaborative" governance.

## **4. The construction path of modern industry college in Hubei higher vocational colleges**

Based on the difficulties encountered in the construction process of modern industrial colleges in Hubei vocational colleges, this article proposes a construction path for modern industrial colleges in vocational colleges.

### **4.1 Hubei vocational colleges should establish a talent cultivation model that integrates industry and education, as well as a "deep integration and symbiotic development" industry university research platform**

The construction of industrial colleges should focus on improving the quality of talent cultivation, constructing a system to solve the problem of the disconnect between industry and education, and implementing a coupled development model of industry nurturing education and education promoting industry. Hubei vocational colleges should collaborate with enterprises to develop talent training programs that integrate industry and education. Enterprises first develop a job competency breakdown table and standards based on their business, while vocational colleges construct theoretical and practical course systems based on job competency standards, and develop standards for each course. The school enterprise jointly completes the original draft of the professional talent training plan. The original draft must be jointly reviewed and revised by relevant experts of the construction entity to finalize the professional talent training plan. Modern industrial colleges should implement a talent cultivation model that combines engineering and technology. The construction of modern industrial colleges should continuously introduce enterprises into the school, so that the real business of enterprises can enter the classroom and the school classroom can penetrate into enterprises, in order to achieve the joint training of students and the deep integration of teaching and production by full-time and part-time teachers from schools and enterprises.

### **4.2 Hubei vocational colleges should clarify the status of enterprises as the main body of education and form a modern industrial college governance model of diversified co governance**

Modern Industrial College of Vocational Colleges is a school institution formed under the background of innovative

knowledge production mode, and it is also an important innovation in the mode of higher education. The diversification and heterogeneity of construction subjects have become important characteristics of modern industrial colleges in higher vocational colleges. Therefore, modern industrial colleges in Hubei higher vocational colleges need to create a governance mechanism that involves the collaboration of multiple subjects. Firstly, the Industrial College should establish an independent committee to exercise decision-making power, to make decisions and arrangements on human resources, financial resources, business, etc., and improve the management system of the Industrial College that integrates decision-making, execution, and supervision and balances each other. On the premise of determining enterprises as the main body of education, the committee should grant more management authority to enterprises, guide them to participate in the formulation of professional talent training plans, the construction of curriculum systems, and the setting of professional courses, so as to fully integrate production with teaching. Secondly, industrial colleges should establish efficient communication and coordination mechanisms. Modern industrial colleges should establish efficient communication channels to solve specific problems in the construction of industrial colleges. Industrial colleges can form joint working groups to jointly determine the construction goals and plans of industrial colleges, the rights and obligations of each construction subject, and formulate implementation plans for construction projects, continuously promoting the construction of industrial colleges.

### **4.3 Hubei vocational colleges should establish a management system and mechanism of "diversified collaboration, co construction and co management"**

The construction of modern industrial colleges in Hubei vocational colleges should solve the main problems that have always affected the motivation of vocational colleges, such as "insufficient management", "excessive management", and "poor management". It is necessary to promote the appropriate delegation of relevant powers by government departments, give vocational colleges sufficient personnel, affairs, and financial powers, create a management model and scientific evaluation and incentive system with equal rights and responsibilities, mutual checks and balances, stable operation, and strong execution of modern industrial colleges, and establish an industrial college management organizational structure formed by the construction committee and expert committee to promote the deepening development of the construction of modern industrial colleges in vocational colleges. The management mode of modern industrial colleges in Hubei vocational colleges should gradually shift from single subject management to multi-party collaborative governance. The management methods should also shift from experience accumulation to cultural consciousness, and management innovation should shift from local innovation to integrated innovation, promoting the construction and governance mode innovation of modern industrial colleges.

#### **Conflicts of interest**

The author declares no conflicts of interest regarding the publication of this paper.

#### **References**

- [1] Wang Chunli, Sun Dandan, Xu Yao. Research on the New Model Construction of "Five Integrations" Modern Industrial College [J]. *Modern Education Science*. 2021; 4: 149-156.
- [2] Deng Zhixin. Collaborative Innovation in Modern Industrial Colleges under the Triple Helix Theory: Root Causes of Difficulties, Logical Mechanisms, and Practical Paths [J]. *China Vocational and Technical Education*. 2021; 31: 45-52.
- [3] Yang Guolan, Zhang Hongliang. Construction Model and Implementation Strategy of Modern Industrial College in Vocational Colleges [J]. *Journal of Tianjin Vocational University*. 2022; 2: 29-33.
- [4] Li Dingzhen, Hou Jie. The Construction Model and Path of Modern Industrial Colleges in Hunan Vocational Colleges in Connection with the "Three Highs and Four News"[J]. *Communication of Vocational Education*. 2023; 1: 22-28.
- [5] Qi Jiaqing. The value orientation and practical path of vocational colleges leading the construction of industrial colleges[J]. *Education Science Forum*. 2023; 4: 24-29.

[6] Jiang Yunying. Research on the Construction and Development Path of Modern Industrial Colleges under the Background of Industry Education Integration: Based on the "Triple Helix Model" Theory [J]. Higher Education Forum. 2023; 8: 25-27.

[7] Guo Yu, Gong Youkui, Wang Zuopeng. Analysis of the Attributes, Challenges, and Paths of Vocational Industrial Colleges from the Perspective of Knowledge Production Mode [J]. Education and Career. 2023; 9: 71-74.

[8] Li Mingliang, Shi Jingyan. Modern Industrial Colleges in China: Interpretation of Connotation, Logical Approach, and Research Direction [J]. Education and Career. 2023; 10: 13-20.

[9] Ye Yaohui, Liao Xueqiang, Wang Haixia. Requirements, Paths, and Guarantees for the Construction of Local Modern Industrial Colleges: NVivo Analysis Based on 16 Provincial Policy Texts [J]. Education and Career. 2024; 2: 21-27.

### **Fund project**

General Project of Education Science Planning of Hubei Province in 2023 "Research on the Construction and Development Path of Modern Industrial Colleges in Hubei Vocational Colleges under the Background of Industry Education Integration" (Project No.: 2023GB231)

Key Project of Education Research of Hubei Vocational and Technical Education Society in 2024 "Research on the Path of Promoting the Integration of Science and Education in Hubei Vocational Colleges" (Project No. 2024ZJGA002)

The Key Project of Logistics Education Reform and Research in National Universities and Vocational Colleges in 2023, titled "Research on the Promotion Path and Implementation Strategy of Logistics Management Undergraduate Education in Higher Vocational Colleges in Hubei Province" (Project No. JZW2023136).