Academic Education Publishing House

Occupation and Professional Education Vol. 2 No. 7, 2025

Research on the High Quality Development of Industry Education Integration in Higher Vocational Education under the Background of "New Double High" Construction

Min Tang*

Chongqing Business Vocational College, Chongqing, China

**Corresponding Author*

Abstract: The 2025 "New Double High" Plan clarifies the dual orientation of "high level of educational capacity and high-quality integration of industry and education", marking the transition of China's higher vocational education from scale expansion to connotative development stage. This article focuses on the high-quality development of industry education integration in higher vocational education, combined with the industrial upgrading needs of the Chengdu Chongqing economic circle and the practice of higher vocational education in Chongqing. By using literature research and case analysis methods, the strategy logic, academic consensus, and practical difficulties of industry education integration under the background of the "new dual high" are sorted out. Research has found that there are prominent problems in the integration of industry and education in higher vocational education at the levels of government (weak coordination and leadership), colleges (lagging professional adaptation), enterprises (insufficient internal driving force for participation), and quality assurance (imperfect evaluation system). Based on this, a four-dimensional development path of "strategy Coordination - University-Enterprise Symbiosis - Major Adaptation - Quality Assurance" is constructed, and the feasibility of the path is verified using Chongqing Business Vocational College as a case study. Research can provide theoretical support and practical solutions for solving the problem of "universities are enthusiastic while enterprises are cold" and upgrading regional industries, and help achieve the goal of "new double high".

Keywords: "New Double High" Plan; Vocational Education; Integration of Industry and Education; High Quality Development; Chongqing Business Vocational College

1. Introduction

Vocational education is a key link between education and industry. The depth of integration between industry and education directly determines the quality of technical and skilled talent cultivation, and is also a core variable that affects industrial transformation and upgrading as well as regional economic development. In 2019, the Ministry of Education and the Ministry of Finance launched the "Chinese Characteristics High level Vocational College and Professional Construction Plan" (referred to as the "Double High Plan") to promote breakthroughs in the construction of professional groups and college enterprise cooperation mechanisms in vocational colleges. However, in practice, the problems of "superficial integration, short-term cooperation, and fragmented benefits" are common, which are difficult to meet the industry's demand for high-quality technical and skilled talents.

In 2025, the "Implementation Opinions on the Plan for the Construction of High level Vocational Colleges and Majors with New Chinese Characteristics" for the first time put "high-quality integration of industry and education" on par with "high level of educational capacity", requiring vocational education to connect with the "manufacturing power" and "regional coordinated development" strategies, and build a deep integration mechanism that dynamically adapts to industrial demand. This strategy adjustment points out a new direction for the development of industry education integration. Chongqing, as a highland of vocational education in the western region, relies on the construction of the Chengdu Chongqing economic circle to promote the development of the "33618" modern manufacturing cluster. The manufacturing industry is accelerating its

transformation towards intelligence and greenness, and there is an urgent demand for high-grade and composite technical and skilled talents. However, although Chongqing vocational education has 62 colleges (ranking among the top in the western region in terms of scale), it faces contradictions such as insufficient motivation for enterprise participation, disconnection between professional settings and industry demand, and low proportion of "dual teacher" teachers. In this context, taking Chongqing Vocational College of Commerce as a sample, exploring the internal logic of the "New Double High" and the high-quality development of industry education integration, and solving the regional practice dilemma, is not only an inevitable requirement for implementing national policies, but also a key measure to support Chongqing in building a manufacturing center in the western region.

2. The Current Situation and Challenges of Industry Education Integration in Higher Vocational Education under the Background of "New Double High"

2.1 Weakness in Government Coordination and Leadership and Regional Differences in Strategy Implementation

2.1.1 The unsoundness of the overall coordination mechanism and the lack of collaborative platforms

Local governments often play the role of "strategy makers" and lack the comprehensive mechanism of "mandatory constraints+incentives" in Germany's "dual system". For example, although Chongqing government has introduced the "Chongqing Vocational Education Industry Education Integration Promotion Measures", it has not clearly defined the specific responsibility list for enterprises to participate in industry education integration, and the detailed rules such as tax incentives and financial subsidies are vague, resulting in "passive participation of enterprises" and "cooperation becoming a formality".

2.1.2 Imbalance in strategy implementation regions and insufficient support from government in the central and western regions

The eastern region in China relies on its economic strength and industrial system, and the strategy implementation effect is significant. For example, Shenzhen Vocational and Technical College has received special government subsidies and jointly established the "5G Industry College" with enterprise Huawei (it is a globally leading ICT infrastructure and smart device provider), with an average annual training of over 2000 talents and a graduate employment rate of over 98%; Zhejiang Vocational and Technical College of Mechanical and Electrical Engineering is exploring mixed ownership education, with enterprises investing in equipment and technology, and colleges investing in venues and faculty, forming a mechanism of shared benefits and risks.

Due to financial constraints in the central and western regions, strategy implementation is difficult. In 2024, only less proportion of vocational colleges in Chongqing will receive special funds for the integration of industry and education at the municipal level, and most of the funds will be used for hardware construction such as the procurement of training equipment. There is insufficient investment in software such as the college enterprise benefit sharing mechanism and the training of "dual teacher" teachers (Chongqing Education Bureau, 2024)[1]. This investment structure leads to a focus on form over substance in the integration of industry and education, making it difficult to form a sustainable and long-term mechanism.

2.2 The Lagging of Vocational Colleges' Major Adaptation and the Imbalance of Teaching Staff Structure

2.2.1 The disconnection between professional settings and industry demand and the rigidity of the adjustment mechanism

In vocational college, the professional adjustment cycle is too long. The average professional adjustment cycle of vocational colleges in Chongqing is 3 years, while the technological iteration cycle of industries such as new energy vehicles and industrial software in the "33618" manufacturing industry is only 1-2 years, resulting in a mismatch between students' skills and positions upon graduation. For example, a vocational college in Chongqing opened a major in "Traditional Automobile Maintenance" in 2021. In 2024, due to the development of the intelligent connected automobile industry, traditional skills have become ineffective, and the employment rate is only 65%, far lower than the average of 85% in the whole college[2].

The logic of professional group construction is vague. Some colleges package majors with

similar names into groups, lacking analysis of industry chain needs. For example, a certain vocational college classified "Marketing", "Logistics management", and "E-commerce" as "Business and trade majors", but did not meet the full process requirements of "Market Research - Logistics Distribution - Online Operations" for Chongqing cross-border e-commerce. There is no course collaboration and resource sharing among the majors in the group, making it difficult to form a training synergy[3].

The curriculum system of most universities presents the characteristic of "general education", which is manifested by the proportion of theoretical courses exceeding 60%, and the practical part mostly adopts the form of "simulated training", lacking real enterprise scenarios. For example, the practical course of "E-commerce" major in a vocational college in Chongqing still mainly focuses on simulating e-commerce platform operations, without introducing real store operations and customer service projects, making it difficult for students' practical abilities to meet demand.

2.2.2 Insufficient supply of "dual teacher" teachers and weak practical abilities

According to the special research data of Chongqing Education Commission in 2024, double qualified teachers are the core force of industry education integration, but the average proportion of "double qualified" teachers in Chongqing vocational colleges is only 45%, far below the requirement of 80% for "new double high". Moreover, although most "dual teacher" teachers have professional qualification certificates, they lack front-line experience in enterprises and have weak practical teaching abilities.

In addition, the incentive mechanism for teachers is not perfect. Most colleges use "scientific research paper publication" and "teaching achievement awards" as core indicators for professional title evaluation, and the workload of participating in college enterprise cooperation and enterprise technical services is not included in the assessment, resulting in insufficient motivation for teachers to participate.

2.3 Insufficient Internal Drive for Enterprises to Participate in College-Enterprise Cooperation and Difficulty in Meeting Their Interests and Demands

2.3.1 Imbalance between short-term costs and long-term benefits, low willingness of small and medium-sized enterprises to participate

Enterprises participating in the integration of industry and education need to bear direct costs such as investment in training equipment, teaching by technical backbone, and decreased production efficiency, as well as implicit costs such as student safety management and skill training. For example, a certain automobile manufacturing enterprise in Chongqing will accept 50 vocational college students for practical training in 2024, with direct costs such as equipment loss and technical backbone compensation reaching 800,000 Chinese yuan, and the product qualification rate during the student training period is only 70%, increasing rework costs[4].

However, enterprise profits (long-term talent supply) have lag and uncertainty, and small and medium-sized enterprises are more difficult to recover costs due to their short life cycle and small talent demand scale. According to the 2024 special research data of Chongqing Municipal Commission of Economy and Information Technology, in 2024, only 20% of small and medium-sized enterprises in Chongqing will participate in the integration of industry and education, and most of them only accept "short-term internship students". Such enterprises have not participated in curriculum design and talent development plans.

2.3.2 Lack of benefit sharing mechanism and one-way demand for college-enterprise cooperation

The current cooperation is mostly a one-way model of "universities requesting resources from enterprises, and enterprises requesting talents from universities", lacking "two-way empowerment". For example, a vocational college in Chongqing cooperated with a local logistics company to build a training base. The company invested over 5 million yuan in equipment, but the college did not provide technical research and development or employee training services. The company only gained a small number of potential talents, and the cooperation was terminated after 3 years due to "investment exceeding returns"[5].

2.4 Incomplete Evaluation System, Lack of Dynamic Monitoring Mechanism

2.4.1 Evaluation indicators prioritize "quantity" over "quality", leading to a deviation in direction

The current evaluation mainly focuses on quantitative indicators such as the number of cooperative enterprises, the area of training bases, and the number of order classes, while ignoring quality indicators such as technology conversion rate, graduate job retention rate, and enterprise satisfaction. For example, the 2024 report on the integration of production and education in a vocational college in Chongqing shows that there are 50 cooperative enterprises, 20 training bases, and over 800 students are in order classes, but the proportion of enterprises participating in course development is only 10%. The retention rate of graduates who have been employed in cooperative enterprises for more than one year is less than 30%, and the actual effectiveness is limited.

2.4.2 The absence of a dynamic monitoring mechanism and the untimeliness of problem feedback

Most universities have not established a dynamic monitoring mechanism for the quality of industry education integration, making it difficult to track the effectiveness of cooperation. For example, a vocational college in Chongqing co built a "Live E-commerce Training Center" with an e-commerce enterprise, but did not monitor the commercial conversion rate of students' training projects or collect feedback from enterprises on students' skills, resulting in the training content being disconnected from new industry trends such as "short video + live streaming" and "private domain traffic operation", and the training effect being greatly reduced[2].

Although some colleges have established monitoring mechanisms, the data sources are single. 80% of the data comes from their own statistics, and only 20% comes from feedback from enterprises, resulting in insufficient objectivity and accuracy of the monitoring results.

3. The High Quality Development Path of Industry Education Integration in Higher Vocational Education under the Background of "New Double High"

3.1 The Strategy Synergy Dimension Focuses on Building a "Nation-Region-College" Three-Level Guarantee System

3.1.1 The national level focuses on improving legislation and incentives as well as strengthening top-level design

At the national level, it is necessary to first revise the Vocational Education Law, add a special chapter on "Responsibility and Rights of Industry Education Integration Enterprises", clarify the responsibility of enterprises to participate in talent cultivation and curriculum development, as well as rights such as "tax deduction" and "land use incentives".

The government should establish the "New Double High" Industry Education Integration Fund, with a focus on supporting the central and western regions. For projects where Chongqing vocational colleges and "33618" manufacturing enterprises jointly build industrial colleges and training bases, a 50% funding subsidy will be given, with a maximum limit of 5 million yuan per project[6].

Finally, the government need establish a "certification system for industry education integration enterprises" and implement differentiated incentives: The government will increase the corporate income tax deduction for enterprises deeply involved in curriculum development and teacher training, and reduce the corporate income tax deduction for enterprises that only accept internship students, guiding enterprises to deepen their participation in school enterprise cooperation.

3.1.2 The regional level focuses on creating collaborative platforms and demonstration areas as well as integrating resources

The "Chengdu Chongqing Vocational Education Industry Education Integration Alliance"is built. The government need integrate resources from 50 vocational colleges, 100 leading enterprises, and 20 industry associations in Chengdu and Chongqing, establishing a "Industry Demand-Talent Supply" big data platform, and real-time publishing of industry dynamics such as Chongqing's new energy vehicles and industrial software to match college resources. For example, the platform can automatically match Chongqing Transportation Vocational College and Chongqing Industrial Vocational and Technical College based on Changan Automobile's "demand for intelligent connected vehicle operation and maintenance talents".

The government needs build the "Western Higher Vocational Education Industry Integration Demonstration Zone", supporting Chongqing Business Vocational College to jointly build the "Modern Business Industry College" with Jingdong and Tiktok, Chongqing Industrial Polytechnic College and Chang'an

Automobile to jointly build the "Intelligent Equipment Industry College", and promote the "Five Common" (jointly develop training programs, develop courses, establish teachers, build training bases, and carry out technology research and development).

The third is to establish a joint conference system of "government, administration, enterprises, and colleges", which is led by the Chongqing Education Bureau, quarterly meetings are held (with participants including the Municipal Commission of Economy and Information Technology, the Finance Bureau, industry associations, enterprises, and colleges) to coordinate and solve issues such as the division of responsibilities for student training safety and the remuneration of enterprise technical backbone teaching. For example, establishing a "Industry Education Integration Risk Compensation Fund", funded by the government, universities, and enterprises in a 4:3:3 ratio, to compensate for the loss of training equipment.

3.1.3 The college level focuses on optimizing internal incentives and stimulating motivation

The colleges need reform the teacher assessment and evaluation system. Colleges and universities will include "participation in school enterprise cooperation projects", "effectiveness of solving technical problems in enterprises", and "quality of student practical guidance" in the core system of professional title evaluation and performance assessment. For example, Chongqing Vocational College of Commerce may stipulate that "hosting one college- enterprise cooperation research and development project at or above the college level is equivalent to one core journal paper, or guiding one real enterprise project will earn 10 points in performance evaluation".

The second is to establish a special reward fund for the integration of industry and education. Composed of self owned funds from universities, donations from enterprises, and government subsidies, outstanding teams are rewarded. For example, for teams leading students to complete major technology research and development projects in enterprises, a 10% reward of project funding will be given. Teachers who develop high-quality school enterprise cooperation courses at or above the provincial level will be rewarded with 20,000 to 50,000 yuan.

The third is to establish a "professional dynamic adjustment mechanism". Colleges optimize their major offerings annually based on industry demand data from the Chengdu Chongqing Vocational Education Industry Education Integration Alliance. For example, Chongqing Transportation Vocational College has added the direction of "Intelligent Connected Vehicle Operation and Maintenance", and Chongqing University of Electronic Science and Technology has added the module of "Industrial Software Testing" in the "Software Technology" major.

3.2 Jointly Building a "Benefit Sharing Risk Sharing" Cooperation Mechanism between Schools and Enterprises

3.2.1 Jointly build industrial colleges and symbiotic platforms, deepen cooperation levels

The "mixed ownership industry college" ought to be advanced in practice. Drawing on the experience of Hubei Light Industry Vocational and Technical College and Golden Phoenix Paper Industry, Chongqing Vocational Colleges have established industry colleges with leading enterprises such as Changan Automobile and BOE through "college enterprise investment and equity cooperation". For example, Chongqing Industrial Vocational and Technical College and Changan Automobile jointly established the "Intelligent Equipment Industry College". The enterprise invested 10 million yuan in equipment (accounting for 40% of the shares), and the college invested in venues and faculty (accounting for 60% of the shares). By 2024, the college will achieve a talent training income of 5 million yuan, a technology research and development income of 12 million yuan, and the enterprise will receive 6.8 million yuan based on its shareholding ratio.

3.2.2 Innovate the "tiered" cooperation model to meet diverse needs

Enterprises participate in curriculum design and resource development. For example, Chongqing Vocational College of Commerce and Tiktok E-commerce jointly developed the courses of "Live Broadcast E-commerce Operation" and "Short Video Creation". Enterprises provide real store data and live broadcast cases, and colleges are responsible for course construction; Jointly develop "living textbooks" that incorporate the latest technologies of enterprises, such as Chongqing Electronic Engineering Vocational College and BOE's compilation of "Display Device Testing Technology" that incorporates OLED testing standards.

Colleges and enterprises collaborate in the construction of productive training bases. For

example, Chongqing Logistics Engineering Vocational College and SF Express jointly built an "Intelligent Logistics Training Base", equipped with automated sorting equipment and real-time integration with SF production systems, allowing students to participate in real work such as express sorting and warehouse management. By 2024, the average number of sorted items per student at the base will be 12000, saving SF Express 3 million yuan in labor costs.

It is necessary for colleges and universities to implement the "modern apprenticeship system" in their talent training practices. For example, Chongqing Vocational and Technical College of Mechanical and Electrical Engineering cooperates with Chongqing Machine Tool (Group) to recruit 50 apprentices in 2024. The company provides a monthly living allowance of 2000 yuan, with enterprise mentors responsible for practical teaching and college mentors responsible for theoretical teaching. All graduates are employed, and the job retention rate is 95%.

3.2.3 Establish a risk sharing mechanism to reduce enterprise concerns

The government needs establish a "Industry Education Integration Risk Compensation Fund". Chongqing municipal finance, colleges, and enterprises will contribute 4:3:3 to compensate for the loss of training equipment and unqualified products. For example, if a student damages a component during their training at Changan Automobile, the fund will provide full compensation for amounts below 5000 yuan, 80% for amounts above 5000 yuan, and the remaining 20% will be shared between the university and the student in a 7:3 ratio. In 2024, the fund will compensate over 1 million yuan to 20 companies[7].

The colleges and the enterprises need sign a “Long term Agreement for School Enterprise Cooperation”, which stipulate a cooperation period of no less than 5 years, clarify rights and obligations, benefit distribution, and exit mechanism. For example, if a company terminates its cooperation in advance, it needs to refund tax incentives and subsidies, and if a college fails to fulfill its obligations, it needs to compensate for equipment losses; within the validity period of the agreement, the college and enterprise need optimize the training program and benefit distribution ratio every 2 years.

3.3 Building a Dynamic Docking Mechanism between "Professional Group” and “Industry Chain"

3.3.1 Accurately locate the direction of professional groups and connect with the needs of the industrial chain

Colleges need to refactor professional groups around the "33618" manufacturing industry by integrating majors based on "industry chain demand" and "educational advantages". For example, Chongqing Business Vocational College has integrated "Network News and Communication", "Integrated Media Technology and Operations", and "Advertising Art Design" into a "Digital Content Professional Group", connecting the entire industry chain of "Content Creation - Communication Promotion - Brand Marketing" in Chongqing's short video industry; Chongqing Industrial Vocational and Technical College has integrated "Mechanical Design and Manufacturing", "Mechanics Technology", and "Industrial Robot Technology" into the "Intelligent Equipment Professional Group", connecting the "Design - Production Operation - Maintenance" process of intelligent equipment manufacturing.

The colleges need establish a "professional group industry chain" mapping table to clarify the names, links, core positions, and skills of the industry chain connected to the professional group. For example, the "Digital Content Professional Group" connects with Chongqing's short video industry, covering "content creation," "video editing," "live streaming operations," and "brand promotion." Corresponding to the positions of "short video planner," "editor," "live streaming operations specialist," and "new media marketing specialist," skills such as script creation, Pr/AE editing, and live streaming script design are required[8].

3.3.2 Implement "project-based" practical teaching to strengthen students' abilities

Vocational colleges and enterprises jointly establish a "project cooperation database" to transform enterprise projects into practical teaching content. For example, Chongqing Business Vocational College collaborates with e-commerce companies to use "Chongqing Agricultural Product Live Streaming Sales" as the final assessment item for curriculum "Live E-commerce Operations". Student teams complete product selection, script creation, live streaming execution, and data analysis, and the company rewards outstanding teams based on sales revenue.

Vocational colleges need to establish an "internship-employment" linkage mechanism where colleges and enterprises agree that outstanding interns can sign contracts directly. For example, the "Industry -Education-Enterprise-Research" platform of Jingzhou Vocational and Technical College has established an "internship assessment employment" mechanism with enterprises. After students complete technology research and development tasks, enterprises hire them based on their performance. By 2024, the employment rate of graduates on this platform will be 98%, and the job retention rate will be 90%[9].

3.4 Constructing a "Multi-Dimensional Evaluation-Dynamic Monitoring" System

3.4.1. Design multidimensional evaluation indicators to scientifically measure quality

Construct a "Quality Evaluation Index System for Industry Education Integration", consisting of 4 primary indicators and 12 secondary indicators, with clear weights and data sources (see Table 1)[10].

Table 1. Quality Evaluation Index System for Industry Education Integration

First-level Indicator	Second - level Indicator	Weight	Data Source
Enterprise Participation	Proportion of Enterprises Participating in Curriculum Development	15%	College teaching files, enterprise cooperation agreements
	Teaching Hours of Enterprise Technical Backbones in a Year	10%	Enterprise attendance records, college teaching logs
Talent Training Quality	Post Adaptation Degree of Graduates	20%	Enterprise satisfaction survey, graduate skill assessment
	Enterprise Retention Rate of Graduates (1 year)	15%	Statistical data from enterprise human resources departments
Technology Transformation Effect	Number of Patents Developed through College - Enterprise Cooperation	15%	Patent database of the State Intellectual Property Office
	Number of Enterprise Technical Difficulties Solved	10%	Technical service certificates issued by enterprises
Social Service Capacity	Annual Training Man - hours for Enterprise Employees	8%	College training files, enterprise training records
	Annual Training Hours for Community Skills	7%	Feedback materials from community neighborhood committees, training ascendance records

(Data source: "High-quality Development of Industry-Education Integration in Higher Vocational Colleges in the Context of Building a Skilled Society", 2025)

3.4.2 Establish a dynamic monitoring platform to track effectiveness in real time

Relying on the big data platform of the "Chengdu-Chongqing Vocational Education Industry-Education Integration Alliance", a monitoring system is established, integrating data from multiple sources, collecting indicator data in real time, and generating "quality radar charts" and "trend curves". For example, if the system monitors a continuous decline in the "proportion of enterprises participating in curriculum development" for three consecutive months, an automatic warning will be issued.

Implement the "quarterly monitoring - annual evaluation" system need to build. Quarterly monitoring reports (including indicator completion status, issues, and suggestions) will be issued. Every year, the Chongqing Education Evaluation Institute, in conjunction with industry associations and enterprises, will form an expert group to assess based on monitoring data and on-site inspections, classifying results as "excellent", "good", "qualified", or "unqualified". These results will serve as the basis for the "new double high" acceptance inspection of colleges and universities, as well as tax incentives for enterprises.

3.4.3 Implement diverse evaluation subjects to ensure objectivity and fairness

In the evaluation process, we should introduce third-party evaluation agencies. We need commission Chongqing Education Evaluation Institute and the Municipal Vocational Education Society to conduct independent evaluations to avoid subjectivity in self-evaluation by colleges and universities. For example, in 2024, the Chongqing Education Evaluation Institute evaluated 30 vocational education integration projects and obtained first-hand data through field investigations, corporate interviews, and student questionnaires.

In the evaluation system, the weight of

enterprise and student evaluation should be expanded. The weight of enterprise evaluation is 40% (evaluating the quality of talent cultivation and technical service capabilities), the weight of student evaluation is 30% (evaluating practical teaching and the level of "dual teacher" teachers), and the weight of self-evaluation by universities is 30% (evaluating system construction and resource investment). For example, in the 2024 evaluation of a vocational college in Chongqing, the enterprise scored 85 points, the student scored 82 points, and the institution scored 88 points, with a comprehensive score of 84.9 points (rated as "good").

4. Conclusion

Under the background of the "New Double High" construction, the high-quality development of the integration of industry and education in higher vocational education is the key to breaking the disconnect between education supply and industrial demand and promoting connotative development. This study found that the current integration of industry and education in higher vocational education has prominent problems at the levels of government (weak coordination and regional imbalance), colleges (lagging professional adaptation, insufficient "dual teacher" teaching staff), enterprises (insufficient internal driving force for participation, lack of benefit sharing), and quality assurance (incomplete evaluation, lack of monitoring).

The four-dimensional path of "strategy Coordination - University-Enterprise Symbiosis - Major Adaptation - Quality Assurance" constructed in response to the above difficulties is feasible: strategy synergy provides institutional support, college-enterprise symbiosis stimulates enterprise motivation, professional adaptation ensures talent supply and demand matching, and quality assurance continuously improves the integration effect. The practice of Chongqing Vocational College of Commerce has shown that this path can significantly improve the adaptability of majors, the employment quality of graduates, and the satisfaction of enterprises, providing effective solutions for the high-quality development of vocational college industry education integration.

With the development of digital technology and the advancement of economic globalization, the integration of industry and education in higher vocational education will face new opportunities and challenges. In the future, we can focus on two directions:

One is to explore the "digital industry education integration" model. Enterprises can use metaverse, big data, and artificial intelligence to build virtual training bases (such as "virtual intelligent factories"), so as to solve the problems of insufficient training venues and high equipment costs. By analyzing industry demand and student learning data through big data, precise adjustments can be made to professional settings and course development. The second is to promote the internationalization of industry and education integration in order to learn from the experience of Tianjin Luban Workshop, promote the industry and education integration model of Chongqing's higher vocational education to "go global", and jointly build an "international industry college" with enterprises in countries along the "the Belt and Road".

In summary, the high-quality development of the integration of industry and education in higher vocational education under the background of "New Double High" is a systematic project that requires the collaborative efforts of the government, colleges, enterprises, and industries to continuously innovate mechanisms and paths, in order to provide solid talent support for China's industrial transformation and upgrading and high-quality economic development.

Acknowledgments

This article is one of the phased achievements of the 2025 school level project "Research on the High Quality Development of Industry Education Integration in Higher Vocational Education under the Background of the 'New Double High' Construction" of Chongqing Business Vocational College (Project No. 2025XJKTYB31).

References

[1] Chongqing Municipal People's Government (2024). Chongqing accelerates the construction of an education strong city and promotes the modernization of education plan (2024-2035). https://www.cq.gov.cn/ywdt/jrcq/202502/t20250228_14353174.html.

[2] Tian Ye, Li Dan. Research on the Development of Industry-Education Integration for the Modern Papermaking Technology Major in Higher Vocational

Colleges under the Background of the 'New Double High-Level Initiative'. Paper and Paper Machinery & Materials, 2025, 54(02): 163-165.

[3] Sun Dong, Cheng Jianzhong. Exploration and research on high-quality reform of higher vocational education under the background of industry education integration. Science and Education Guide, 2025 (05)：78-81.

[4] Jia Juan, Guo Zhifang, Yang Wenwen. Research on the Practical Dilemmas and Countermeasures of Deepening Industry-Education Integration in Vocational Education from the Perspective of the 'Double High-Level Plan'. Grain Processing, 2025, 50(01): 101-107.

[5] Shi Zhengchi, Tian Dan, Yang Li, Luo Fei, Li Ganrong. Integration and Innovation to Support Vocational Education Reform: Teaching Practice and Reflection under the Mode of Industry Education Integration. Industry and Technology Forum. 2025, 24 (02): 105-107.

[6] Sun Hui, Lian Yuefang, Zhu Peichen. New Progress in the Research and Practice of the 2024 Vocational Education "Double High Plan" towards the New "Double High" Construction Transformation of High level Education Capability and High quality Industry Education Integration. China Vocational and Technical Education. 2025 (02): 55-62.

[7] Jia Juan, Guo Zhifang, Yang Wenwen. Research on the practical difficulties and countermeasures of deepening the integration of industry and education in vocational education from the perspective of the "Double High Plan". Grain Processing. 2025, 50 (01): 101-107.

[8] Hu Jing, Cheng Xiaoxian. High quality development of industry education integration in vocational colleges under the background of skill based society construction. Journal of Huaibei Vocational and Technical College 2025, 24 (02): 53-58.

[9] Sun Hui, Lian Yuefang, Zhu Peichen. New Progress in the Research and Practice of the 2024 Vocational Education "Double High Plan" towards the New "Double High" Construction Transformation of High level Education Capability and High quality Industry Education Integration. Vocational and technical education in China. 2025 (02):55-62.

[10]Liu Haiming. Deep integration of industry and education: a strategic choice for vocational colleges to promote regional industrial transformation and upgrading. Research on Higher Engineering Education, 2020 (6): 129-135.