

# Analysis on the Construction of Modern Industry and Education Community

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**Abstract:** *Vocational education is a type of education characterized by the integration of industry and education. Only education that integrates industry and education can be considered true vocational education. Based on the characteristics and principles of vocational education, deepening the integration of industry and education is the key point, promoting the integration of general and vocational education is the critical point, and fostering the integration of science and education is the new direction. Whether or not the integration of industry and education is practiced is the fundamental characteristic that distinguishes vocational education from general education. This article explores the new era of industry-education collaboration in talent cultivation, based on the research of modern vocational education system construction and school-enterprise cooperation. The study highlights that cultivating talents for the new era's industries requires a range of core competencies, including mastery of cutting-edge industry skills, innovative practical abilities, teamwork and communication skills, the ability to handle complex environments, as well as strong professional ethics and a sense of social responsibility. To meet these needs, school-enterprise cooperation should establish a new era industry-education talent cultivation system, encompassing reforms in educational content, innovations in teaching methods, advancements in educational management, and support for career development.*

**Keywords:** Industry and education integration, School-enterprise cooperation, New era.

## 1. The Background of Industry - education Integration

In order to further expand the scope of vocational education, with professional construction as the core and industry-education integration as the leading factor, follow the characteristics and laws of vocational education, optimize the training mode of applied talents in the new era, and construct the industrial training mode of school-enterprise cooperation with high standards.

By reviewing the key tasks of vocational education reform during China's 14th Five-Year Plan and studying the construction of a modern vocational education system and school-enterprise cooperation, this paper explores a new era industrial talent training system under the deep integration of industry and education. By analyzing the background and significance of industry-education integration, it proposes models and practices for school enterprise cooperation, actively exploring an industrial talent training system that meets the requirements of the new era.

With the rapid development of China's economy and the continuous upgrading of industrial structure, the demand for high-quality, highly skilled and highly qualified talents is increasing. The traditional education model has been unable to meet the needs of talent training, so the concept of industry-education integration has been gradually put forward and widely paid attention to [1].

The integration of industry and education involves collaboration between the industrial and educational sectors, aiming to integrate educational and industrial resources to jointly cultivate talents that meet market demands. This integration effectively strengthens the connection between education and industry, enabling students to better adapt to the industrial environment and acquire the skills and qualities needed to meet market demands, thereby enhancing the employment competitiveness of graduates [2].

The integration of industry and education in China has received strong policy support and promotion. The General Office of the State Council's 'Guiding Opinions on Deepening the Integration of Industry and Education to Promote Industrial Structure Adjustment and Innovation-Driven Development' clearly requires all regions and departments to actively promote the integration of industry and education, thereby fostering industrial upgrading and innovation [3]. The Ministry of Education's 'Several Opinions on Strengthening Higher Education to Serve the Real Economy' encourages universities to engage in deep cooperation with real economy sectors, promoting the integration of industry and education. As a result, the integration of industry and education has become a key concept and practice in modern vocational education, playing a crucial role in economic development and talent cultivation.

The rapid economic growth and continuous upgrading of our country's industrial structure have led to a growing demand for high-quality, highly skilled talents. The traditional education model can no longer meet market needs, leading to the emergence of industry-education integration as a new educational concept. This integration, through collaboration between the industry and education sectors, combines educational resources with industry resources to jointly cultivate talents that meet market demands. National policies strongly support industry-education integration, and the State Council has issued guidelines explicitly requiring the promotion of industry-education integration to drive industrial upgrading and innovation.

In recent years, the government has introduced a series of policy documents, including "Opinions on Deepening the Reform of the Modern Vocational Education System" and "National Vocational Education Reform Implementation Plan," which highlight the importance of integrating industry and education and outline specific goals and tasks. On June 8, 2023, the National Development and Reform Commission

and other departments released the "Vocational Education Industry-Education Integration Empowerment and Improvement Action Implementation Plan (2023-2025)." [4] This plan clearly states that by 2025, the number of national pilot cities for industry-education integration will reach around 50, and over 10,000 industry-education integration enterprises will be established and cultivated, gradually forming a development pattern where education and industry are integrated and interact positively.

The mode of industry-education integration is also constantly innovating, and common modes include.

## **2. The Current Situation and Problems of School-enterprise Cooperation**

At present, school-enterprise cooperation has become one of the main forms to realize the integration of industry and education. In the process of school-enterprise cooperation, schools and enterprises give full play to their respective advantages and complement each other, realizing resource sharing, information sharing, technology sharing, talent sharing and other cooperation modes, effectively promoting the development of modern vocational education.

However, in the process of school-enterprise cooperation, several issues and challenges remain [5]. Firstly, the cooperation models and mechanisms between different schools and enterprises are inconsistent, making it difficult to achieve resource sharing and coordinated talent development. Secondly, some enterprises lack a deep understanding and recognition of school-enterprise cooperation, hindering their genuine involvement. Additionally, some schools face issues such as the disconnection between teaching and practical application and insufficient faculty resources, which impact the effectiveness of school-enterprise cooperation.

In addition, there are still some problems in the current vocational education, such as unreasonable curriculum setting, insufficient training of practical ability, insufficient teaching staff, low educational quality and so on. These problems have restricted the development of modern vocational education and the implementation effect of school-enterprise cooperation.

Therefore, in the process of promoting school-enterprise cooperation, it is necessary to further strengthen the construction of cooperation mechanism among all parties, improve enterprises' cognition and investment in school-enterprise cooperation, strengthen the construction of teachers' strength and curriculum reform in schools, and improve the quality of education, so as to realize the benign development of school-enterprise cooperation and modern vocational education.

## **3. The New Era Background of School - enterprise Cooperation**

With the continuous development of national economy and scientific and technological innovation, the demand for talents in all walks of life is becoming higher and higher. In this context, the importance of school-enterprise cooperation is

more prominent, and it has become one of the key ways of talent training [6].

In the new era, school-enterprise cooperation is not only a problem of cooperation between both sides, but also a problem of industrial development and personnel training promoted by the whole society.

First of all, under the background of the new era, China's economy has entered a stage of high-quality development, and the requirements for talents are getting higher and higher. The traditional education mode can no longer meet the needs of modern industries, so it is necessary to break the traditional teaching mode through school-enterprise cooperation to improve the quality and efficiency of talent training.

Secondly, in the new era, technological advancements and transformations across various industries are undergoing profound changes. New technologies, such as artificial intelligence, big data, and cloud computing, are rapidly advancing, leading to evolving demands for talent and innovative training models. Collaboration between schools and enterprises can help promptly understand market and industry needs, achieve a deep integration of teaching and practice, and provide students with more practical talent development opportunities.

Finally, in the new era, school-enterprise cooperation is also a crucial method to achieve educational equity. By collaborating with enterprises, the learning and practical environments of students can be extended into the corporate setting, enhancing the practicality and relevance of education. Additionally, such cooperation can address employment issues for students, thereby cultivating more high-quality and valuable talents for society.

To sum up, under the background of the new era, school-enterprise cooperation has become one of the key ways of talent training, which is of great significance. School-enterprise cooperation should follow the trend of the times, closely combine with industrial development, and jointly promote the development of modern vocational education in China.

## **4. The New Era of School - enterprise Cooperation Industrial Talent Training System**

### **4.1 The Need for Industrial Personnel Training**

The core qualities needed for the cultivation of talents in the new era industry include: mastering cutting-edge skills and knowledge, having innovation and practical ability, having strong teamwork and communication skills, having the ability to deal with complex environment and challenges, and good professional ethics and social responsibility.

First, in order to meet the needs of industrial personnel training, it is necessary for schools and enterprises to cooperate to establish a new era of industrial personnel training system. The system should include the following aspects:

Second, Reform of educational content. School-enterprise cooperation should innovate in educational content, extending students' learning and practical environments into the corporate setting, enabling them to better acquire practical skills and knowledge. Additionally, school-enterprise cooperation should align with enterprise needs and market changes by timely adjusting the teaching content, ensuring that education remains practical and relevant.

Third, Innovation of teaching methods. School-enterprise cooperation should realize innovation in teaching methods and adopt advanced teaching methods and means, such as project-based learning, practical courses, internship and training, so as to achieve the deep integration of teaching and practice and provide students with more practical talent training.

Forth, Innovation in education management. School-enterprise cooperation should realize innovation in education management, and establish an efficient and scientific education management mechanism through strengthening teacher training, student management and curriculum evaluation, so as to ensure the best results of school-enterprise cooperation.

Fifth, Support for career development. School-enterprise cooperation should provide support for students' career development, such as employment guidance and entrepreneurship training services, to help students better adapt to the needs of the market and enterprises.

#### 4.2 Practice of School-enterprise Cooperation

In the new era, the practice of school-enterprise cooperation has achieved some positive outcomes. For instance, in Pidu District of Chengdu City, the establishment of industry-education integration demonstration bases has promoted school-enterprise cooperation and led to the initial formation of a comprehensive model for cultivating industrial talents through school-enterprise collaboration. This model is characterized by: fully integrating the strengths of schools and enterprises to set clear goals for school-enterprise cooperation. Additionally, by creating demonstration bases, the focus is on developing practical application skills for industrial talents; collaborating with enterprises on practical projects allows students to gain hands-on experience and acquire real-world skills and knowledge.

Promote the deep integration of school-enterprise cooperation. By establishing internship bases and joint laboratories, we can achieve a deeper integration of teaching with enterprise production processes. Students can intern at companies to gain insights into production management and processes, while also gaining hands-on experience in cutting-edge technologies and knowledge through practical projects, effectively enhancing their overall competence.

Emphasis on innovation in education management. The demonstration base pays attention to innovation in education management, and has formulated scientific and efficient management mechanisms, so as to comprehensively improve the quality of education from the aspects of teacher training, curriculum design, practical teaching and student

management.

Strengthen the support for students' career development. The demonstration base provides strong support for students' career development by providing entrepreneurship support, employment guidance and other services, helping students better adapt to the needs of the market and enterprises.

The Chengdu Shuangliu District Industry-Education Integration Innovation Practice Base focuses on the comprehensive integration of industry and education, covering all aspects such as teaching management, educational services, and educational resources. This initiative has achieved mutual benefits and win-win outcomes between universities and enterprises, not only enhancing students' practical and innovative skills but also providing outstanding talents to businesses. It is also a prime example of successful school-enterprise cooperation.

#### 4.3 Problems and Solutions of School-enterprise Cooperation

The inconsistency in educational goals between universities and enterprises is a significant challenge in university-enterprise collaboration. Universities focus on academic research and the imparting of theoretical knowledge, whereas enterprises emphasize the development of practical application skills. Achieving alignment in educational objectives within this partnership is a critical issue that needs to be addressed.

Resource sharing is insufficient. In school-enterprise cooperation, schools and enterprises should complement each other's strengths through resource sharing. However, in practice, there is a problem of inadequate resource sharing. Some enterprises may protect their core technologies and are unwilling to open relevant resources to schools, leading to the issue of insufficient resource sharing.

The mechanism of school-enterprise cooperation is not perfect. In the practice of school-enterprise cooperation, the imperfect mechanism construction is also a problem that needs to be solved. The imperfect mechanism of school-enterprise cooperation may lead to students' inability to get timely help when they encounter difficulties in practice, which will affect the practical effect.

In view of the above problems, they can be solved from the following aspects:

Determine the consistency of cooperation goals and educational goals. Before the start of school-enterprise cooperation, both sides should clarify and negotiate the cooperation goals and educational goals to ensure the consistency of the goals of both sides, so as to achieve win-win results.

Strengthen the openness of resource sharing. In school-enterprise cooperation, schools and enterprises should be more open, share their resources and realize complementary advantages. Enterprises should also strengthen the awareness of intellectual property protection and actively carry out technology transfer and exchange with

universities.

Establish a sound school-enterprise cooperation mechanism. The construction of school-enterprise cooperation mechanism is a long-term process, which requires the joint efforts of schools and enterprises. Both sides can establish joint working groups, formulate cooperation agreements and other ways to ensure the smooth development of school-enterprise cooperation and timely solve the problems encountered.

Enhance the exchange and training between teachers and enterprise employees. University teachers can visit enterprises to gain insights into their production processes and management practices, bringing back practical knowledge and skills to enhance classroom instruction and provide more practical education for students. Meanwhile, enterprises can also send staff to universities to engage with teachers and students, sharing their practical experiences and skills, thus deepening cooperation between schools and enterprises.

Strengthen the informatization of school-enterprise cooperation. With the support of modern information technology, the informatization of school-enterprise cooperation is gaining more attention. Schools and enterprises can use information technology to establish a platform for school-enterprise cooperation, enabling the sharing of teaching resources, practical activities, and internship positions. This can significantly enhance the efficiency and quality of school-enterprise cooperation, better serving the training of industry talents.

Through the above measures, we can effectively solve the problems in school-enterprise cooperation, promote the in-depth development of school-enterprise cooperation, further improve the modern vocational education system, and cultivate more industrial talents to meet the needs of national modernization construction.

## 5. The Path Practice and Method of Establishing Industry - university Cooperation Industry - education Integration Industrial College

In accordance with the Opinions of the General Offices of the CPC Central Committee and The State Council on Promoting the High-quality Development of Modern Vocational Education, the Guidelines for the Construction of Modern Industrial Colleges issued by the Ministry of Education and the Ministry of Industry and Information Technology, and other relevant policies.

1) The path of school-enterprise cooperation. It is mainly based on the main body of school-enterprise and government, with industry-university-research-application as the object of work, and the implementation of post-course competition certificate as the method, which is the key to promote the development of industrial colleges.

Enterprise connection. In combination with the Notice on the Matching of Vocational Education Resources and Major Industries issued by the Vocational Education Department of the Provincial Department of Education, the local area will be

investigated to connect with resource parks, select key connections based on its own professional classification structure, and accurately connect with large-scale enterprises.

Industry integration. It can pair with the corresponding local functional departments to connect with the development and in-depth cooperation of local academic resources. For example, in the Deyang region, this includes: designing and developing Sanxingdui tourism products; exploring and developing the cultural heritage of Zhao Po Tribute Tea in Mianzhu, enhancing the brand image of Mianzhu Liquor, and updating its business model.

School-enterprise cooperation. Through policy interpretation, in-depth market research and analysis, and by leveraging the local historical and cultural heritage, we aim to build a hub for innovation and entrepreneurship, which will benefit the industries in this province and city. We will focus on the typical industrial chains of local industrial parks and actively support the industry. Guided by party building, with the fundamental task of cultivating virtue and talent, and guided by the philosophy that 'labor is glorious, skills are valuable, and creation is great.'

### 2) Talent training path.

Professional development is integrated with the needs of industry and enterprise literacy.

The teaching content is integrated with the positions of enterprises in the industry.

The teaching process is integrated with the typical work tasks of industry enterprises.

Teaching evaluation is integrated with the skills and quality requirements of professional roles in industry enterprises.

### 3) "three combinations and six guidance" school-enterprise cooperation mode of industry- education integration.

"Three Combinations". Collaborative government: By developing cultural tourism and expanding local cultural connotations, achieve localized social functions. Collaborative universities: Dual-high system institutions, to achieve benchmarking and comprehensive functional enhancement. Collaborative enterprises: Utilize regional cultural resources to enhance the application of skills and the social service capabilities of products and projects in the industry.

"Six guides". Import typical enterprises, industry masters, project practice, export product output, students 'training, teachers' practice.

In summary, the integration of industry and education under the innovation context, along with the school-enterprise cooperation mechanism, has adhered to the Party's guidelines. On the foundation of comprehensive reform and accelerated development, this approach has achieved a comprehensive upgrade in modern vocational education. Under the modern vocational education philosophy, the integration of industry and education and school-enterprise cooperation should focus



on talent cultivation, with professionalism and innovation as the core. In the future, it is essential to consider common needs and goals, and follow certain efficiency principles and characteristics to achieve the integration of industry and education, deepen educational reforms, and fully address relevant focal points. This will help cultivate high-quality talents and promote social harmony and sustainable development.

## 6. Conclusion

The integration of industry and education is a core feature of vocational education, playing a crucial role in driving economic growth and talent development. The rapid economic growth and continuous upgrading of China's industrial structure have led to a growing demand for high-quality, skilled professionals, making the traditional educational model inadequate. By fostering collaboration between the industry and education sectors, this integration aims to combine educational resources with industry resources, jointly cultivating talents that meet market needs. National policies strongly support this integration, with the State Council's guidelines explicitly requiring the promotion of industry-education integration to drive industrial upgrades and innovation. School-enterprise cooperation is the primary form of achieving this integration, but it still faces several challenges. Firstly, the cooperation models and mechanisms between different schools and enterprises are inconsistent, hindering resource sharing and coordinated talent development. Secondly, some enterprises lack understanding and recognition of school-enterprise cooperation, making it difficult for them to fully engage in such collaborations. Additionally, some schools struggle with the disconnection between theory and practice, as well as insufficient faculty, which negatively impacts the effectiveness of school-enterprise cooperation. Furthermore, issues such as unreasonable curriculum design, inadequate practical skills training, insufficient faculty, and low educational quality in current vocational education hinder the development of modern vocational education and the effectiveness of school-enterprise cooperation. In the new era, the importance of school-enterprise cooperation has become even more prominent, serving as a key pathway for talent development.

Our country's economy has entered a stage of high-quality development, with increasingly stringent demands for talent. Traditional educational models can no longer meet the needs of modern industries, necessitating collaboration between schools and enterprises to innovate teaching methods and enhance the quality and efficiency of talent cultivation. In the new era, technological advancements in various sectors are undergoing profound changes, with new technologies such as artificial intelligence, big data, and cloud computing rapidly advancing. These developments are continuously reshaping the requirements for talent and the models of talent cultivation. School-enterprise cooperation can help timely understand market and industry needs, deeply integrate theory with practice, and provide students with more practical talent training. In the new era, school-enterprise cooperation has achieved some positive outcomes. For example, Pidu District in Chengdu City has established an industry-education integration demonstration base to promote school-enterprise cooperation, initially forming a comprehensive model for

industry talent cultivation. This model features: fully integrating the strengths of schools and enterprises to set clear goals for school-enterprise cooperation; creating demonstration bases that focus on cultivating the practical application skills of industry talents; collaborating with enterprises on practical projects to enable students to acquire real-world skills and knowledge through hands-on experience. However, challenges remain in school-enterprise cooperation, including inconsistent educational goals, insufficient resource sharing, and incomplete cooperation mechanisms. To address these issues, efforts should be made to align cooperative and educational goals, enhance resource sharing and openness, establish and improve cooperation mechanisms, strengthen the exchange and training of teachers and enterprise employees, and enhance information technology infrastructure. Combined with relevant policy documents, the path practice and method of establishing industry-university cooperation industrial college include: school-enterprise cooperation path, talent training path and "three combinations and six guides" school-enterprise cooperation industry-education integration mode. The school-enterprise cooperation path is mainly.

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