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# Research on difficulties and countermeasures of cooperation between college and enterprise for higher vocational education

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ABSTRACT: With the rapid development of society, its heavy demand for applied talents promotes the rapid development of higher vocational colleges. This paper carries out systematic analysis of prominent problems in the current school-enterprise cooperation with the current situation of higher vocational education as an entry point, and puts forward approaches and methods of "setting up stage' by the government, "guiding" by the industry, and "performing" jointly by schools, enterprises and students through combination with valuable experience in the school-enterprise cooperation in many well-known higher vocational colleges in China and China's education practice, in order to promote healthy and rapid development of higher vocational education in China.

Keywords: higher vocational education; enterprise; school-enterprise cooperation; countermeasures

### 1 RESEARCH BACKGROUND

Annual Report on Talent Training Quality in China's Higher vocational education in 2012 shows that there are 1,276 higher vocational colleges in the country last year, accounting for 60% of ordinary colleges and universities; Annual Report on Talent Training Quality in China's Higher vocational education in 2017 shows that the graduates from 1,298 higher vocational colleges who are involved in rating play a great role in promoting the development of society. The annual report shows that higher vocational education accounts for half of China's higher education, and plays a decisive role in China's higher education from the elite education stage into the popular education stage [1]. A new idea of the development of modern occupation education through "improving the guiding capacity of industry and further promoting integration of production and education" has become a new task of higher vocational education [2]. Higher vocational colleges have achieved remarkable results in the level of talent training. These successful experiences are guiding the reform and practice of the whole front. With the constant deepening reform of China's economic system, a higher vocational education system which is full of vitality and meets the needs of socialist modernization construction has also been initially formed [3].

In recent years, national and local governments have paid more and more attention to higher vocational education. National conference on reform and development of higher vocational colleges (2010) and a series of documents issued by the Ministry of Education point out that the future reform and development of higher vocational education should take the initiative to adapt to the needs of regional economic and social development and economic transition, adhere to the objective of service, employment-oriented, and collaborative promotion of integration development of production and education [4]. Therefore, to speed up the development of modern occupation education depends on two key factors: 1. overall environment of social occupation education outlook: 2. educational reform of higher vocational college and talent training mode. Viewing from the developed occupation education in Germany, Australia, the United States and other Western countries, they establish an effective school-enterprise cooperation model to improve the conditions for running schools and improve the quality of talent training, thus promoting the development of occupation education. Thus, "school-enterprise cooperation" is an inevitable requirement for the development of higher vocational education and one of ways of survival and development of higher vocational colleges. However, China has not yet formed a large occupation education concept, and the majority of

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enterprises have been in a passive position, the key factor of running schools through school-enterprise cooperation has not had breakthrough, and effective cooperation mechanism has not yet formed. Therefore, there is no time to delay in proposing new ways and new methods to solve problems in school-enterprise cooperation.

# 2 REVIEW OF RELATED RESEARCHES

School-enterprise cooperation in occupation education has had a long history of research in foreign countries. Arthur and Elizabeth researched the motivation of school-enterprise cooperation, measures taken in cooperation and advantages of school-enterprise cooperation. In a report of school-enterprise cooperation published by OECD in 1992, it analyzed the cases of school-enterprise cooperation in occupation education in more than 20 countries in the organization, and carried out a comprehensive comparison and evaluation of the cooperation background and mode and cooperation situation [5]. Witkey Karan and Peter Arthurs analyzed the background, cooperation mechanism and cooperation process of school-enterprise cooperation of NCVER2 in Australia, and pointed out the problems in cooperation.

The research on school-enterprise cooperation in higher vocational education was relatively late in the country, but it also has achieved more fruitful results. Ouyang Yuan and Zhang Yongjing believed that school-enterprise cooperation refers to a cooperative relationship between the enterprise, industry and school, who are combined to develop its advantages of resources in the product research and development, process research, management technology, talent training and so on, in order to achieve mutual integration of resources [6]. Wang Xiaoqing believed that school-enterprise cooperation is a form of educational practice in cooperation in teaching, scientific research, training, employment and other aspects, which is based on the theoretical education and business practice education in higher vocational colleges in form, and oriented by training talents with the integration of production and research and compound applied talents who are adaptable to the development of market economy and enterprise in the objective [7]. Huang Jisheng believed that the problems are manifested in the following aspects: the government's support on running a school with school-enterprise cooperation is not enough, the industry association's authority in running a school with school-enterprise cooperation is not enough, the enterprise's motivation in investment of school-enterprise cooperation is insufficient, and the capacity of higher vocational colleges in running a school with school-enterprise cooperation is not strong [8]. Song Anshun and Mei Xiangli believed that the content of cooperation and the actual form of cooperation are still relatively simple, lack of stability and persistence, and the school-enterprise cooperation mode needs to be improved, and the utilization rate of college resources in school-enterprise cooperation is relatively low [9].

This paper mainly researches the difficulties and opportunities of school-enterprise cooperation under the new form, and explores and constructs the school-running mechanism of school-enterprise cooperation with Chinese characteristics, and explores new ideas and new ways to running a school with multiple school-enterprise cooperation.

# 3 CORRELATION THEORY OF SCHOOL-ENTERPRISE COOPERATION IN HGIHER OCCUPATION EDUCATION

# 3.1 Characteristics of higher vocational education

# 3.1.1 Meaning of higher vocational education Higher vocational education not only includes higher education, but also includes the category of occupation, which is clearly defined in China's Education Law [10]. Graduates from higher vocational colleges should possess the relevant professional practice skills in addition to the required theoretical and cultural literacy and professional literacy.

3.1.2 Characteristics of higher vocational education Occupation is one of distinguishing features of higher vocational education that is different from colleges and universities. Higher vocational education is a dual position, which not only requires the graduates possessing professional theory, but also possessing related professional practice and practical ability. Because of its characteristics, higher vocational education has had a rapid development in the 1990s, resulting in a large number of higher vocational colleges, cultivation of e a large number of applied professional talents.

# 3.2 Characteristics of school-enterprise cooperation

# 3.2.1 Meaning of school-enterprise cooperation School-enterprise cooperation refers to the cooperation between school and social enterprise in scientific research, talent supply and demand other aspects. The nature and type of "school" and "enterprise" determine the specific connotation and level of school-enterprise cooperation. Speaking from the general social service function of colleges and universities, the basic connotation of school-enterprise cooperation is "technical project and talent output". Colleges and universities bear the task of research on serving economic construction, and academic research results of colleges and universities need to be transformed into real productive forces via the channel of school-enterprise cooperation.

- 3.2.2 Requirements of school-enterprise cooperation School-enterprise cooperation is based on "talent training" and "demand for employment", and aims at meeting the demand of talent output in higher vocational colleges and the introduction of enterprise employees.
- (1) Talent training programs of school should meet industry standards

Talent training in school-enterprise cooperation should be based on the demand of industry and enterprise for talents under the social background. Therefore, the school should identify an entry point between professional construction and industry requirements, rather than simply extending the traditional disciplinary training system, or completely ignoring the students' belief education, world view education, cultural heritage education and education of basic professional theoretical knowledge. The enterprises in relevant industry should participate in the development of talent training program [11].

(2) School education fields should embody the production and operation scenarios of the enterprise

Without real practical teaching fields, it is difficult to enhance the students' hands-on practical ability. Therefore, through school-enterprise cooperation, higher vocational colleges can meet the teaching tasks of students in practice via the practice platform of industry and enterprise, so as to avoid "idle theorizing" in school education. For example, in 2012, Shijiazhuang City Vocational College and Shijiazhuang Longkou Water Treatment Co., Ltd. carried out in-depth cooperation, and achieved two national patents (patent number of large and medium-sized enterprise-school business drinking fountain: 201320016351.2; patent number of small and medium-sized business drinking fountain: 201330091774.4). Through this practice, the students' hands-on practical ability has been improved, and the enterprise has obtained economic benefits, with a remarkable cooperation effect.

(3) School education culture and industrial culture achieve connection

In the process of school-enterprise cooperation, how to effectively connect with occupation education and industrial culture, and build a humanistic environment for technology applied talent training is an important guarantee for seamless connection with students and enterprise employees. Further promotion of the culture of industry and enterprise into the campus, classroom and teaching materials can create an opportunity for direct dialogue between students and enterprises, guide students to consciously cultivate professional ethics quality and team cooperation spirit required by the enterprises, consciously set up a responsibility consciousness, safety awareness and legal awareness possessed by the qualified workers and business entities, and promote the students to form an awareness of consciously serving the socialized mass production (4) School enrollment and market demand are coordinated

Under the contradiction of fault structure in China's technology applied talents, many enterprises issue "talent training orders" to the vocational colleges in advance, so that the talents are trained in accordance with the requirements of enterprises. Such "tailored training" mode is oriented by the talent market demand, and fully guarantees the requirements of equality, voluntariness and development of school, enterprise and students. To set up professions, the school should carry out the market investigation deeply, and scientifically and reasonably set up the number of enrollment according to the gap of industry talents demand. In recent five years, Information and Communication School of Shijiazhuang City Vocational College have cooperated with Hebei Huahengxin Communications Co., Ltd. The company set up the number of enrollment in "Feature Class of Mobile Communications" according to talent gap in the national and provincial communications industry. Many graduates graduated from such profession, and there was no social contradiction caused by employment problems.

# 4 DILEMMA AND SOLUTIONS TO SCHOOL-ENTERPRISE COOPERATION IN HIGHER VOCATIONAL EDUCATION

# 4.1 Development process of school-enterprise cooperation in China's higher vocational education

China's occupation education could be traced back to the 1920s. Mr. Huang Yanpei put forward the education concept of "great occupation education doctrine" in 1925. In 1985, Shanghai University of Engineering Science learned the experience from University of Waterloo, Canada by using the school-running mode of "three semesters in one year, alteration of working and learning" for production-learning education experiment, which was known as a symbolic beginning of school-enterprise cooperation in China [13]. In 1989, China was the first to participate in the World Education Cooperation Conference, and China's school-enterprise cooperation officially opened. In 2006, there were 1,147 higher vocational colleges in 1,867 colleges and universities, accounting for 61.44% of the total number of schools, with the average number of students in the national higher vocational colleges of about 6,600. In 2007, the number of enrollment was more than 2.84 million, with an increase of 6 times compared to 1998, and the number of students at school was 8.6 million [14]. It has played a fundamental and decisive role in China's higher education into the popular stage. The research and practice of school-enterprise cooperation also have obtained vigorous development. The successful mode of Shenzhen

Vocational and Technical College and Xingtai Vocational and Technical College becomes the main representatives in this period. Since 2011, the Ministry of Education has introduced a series of guidance documents, such as J.Z.C. [2011] No. 11, No.12 and so on. In 2013, the National Industry Occupation Education and Teaching Steering Committee held a working meeting, and the Deputy Director of the Ministry of Education made an important speech at the meeting. In recent years, the degree of emphasis of the national education administration, government at all levels and higher vocational colleges on school-enterprise cooperation has been raised to a new height [15, 16].

### 4.2 Dilemma of higher vocational education

# 4.2.1 Prominent problems in running a school with school-enterprise cooperation

China's higher vocational education adheres to adjoining local industry, and actively cooperating with the industry and enterprise, thus training a large number of high-quality skilled professional talents, and constructing a number of "national model higher vocational colleges" and "national higher vocational colleges". But in general, the overall school-running level of higher vocational colleges and the quality of talent training fail to meet the needs of new situation. It is manifested in the following aspects: first, the enterprise is not positive in cooperation in running a school; second, higher vocational education is affected by the traditional education mode, and lack of school-running vitality; third, the teaching and talent training system and mechanism of higher vocational colleges for the "skilled craftsmen" to participate in the front line of the industry and enterprise is not established; fourth, school educational culture and industrial culture are not effectively integrated.

In addition, speaking from the breadth of cooperation, the category of school-enterprise cooperation carried out by most of higher vocational colleges and enterprises is based on a pilot of a small number of profession, rather than within the scope of whole school. The education mode and talent training methods of most of other professions are still based on the traditional education mode. Shenzhen Vocational and Technical College, Xingtai Vocational and Technical College and a number of higher vocational colleges that have achieved a certain effect in school-enterprise cooperation also do not cover all professions, and a considerable part of professions are still based on the traditional education mode. Speaking from the depth of cooperation, most of higher vocational colleges are limited by the scientific research, social service capabilities and comprehensive strength, its capability to serve enterprises is limited, and rights and obligations are unequal, so the depth of cooperation will naturally be limited. The existence of above problems greatly restricts the school-enterprise cooperation in China's higher vocational education developing towards depth direction.

# 4.2.2 Reasons for dilemma in school-enterprise cooperation

(1) There is a misunderstanding of school-enterprise cooperation

On the one hand, because some higher vocational colleges have a less understanding of the current international and domestic requirements on talent training in higher vocational education and social needs, coupled with the impact of the traditional education concept and model, they fail to fully understand the urgency, importance and inevitability school-enterprise cooperation in training for adapting to the needs of economic and social development and industry transformation and upgrading. On the other hand, many enterprises overemphasize their own economic interests, and are lack of a large occupation education concept, ignore the social responsibility and education obligations of the enterprise itself, and generally believe that talent training is the responsibility of the school due to the prejudice in traditional thinking; in addition, the supply exceeds demand on the current talent market, so that the rights and obligations of schools and enterprises in school-enterprise cooperation are unequal, and the enterprise fails to obtain the corresponding services after investment of a lot of manpower, equipment and financial resources and training places. Therefore, the contradiction between unequal rights and obligations makes the enterprise lack of a comprehensive understanding school-enterprise cooperation education.

# (2) The state's macro-control strength in school-enterprise cooperation is not enough

The Ministry of Education and other administrative departments in China have introduced documents on the encouragement and support of higher vocational colleges to carry out school-enterprise cooperation in running a school, such as J.Z.C. [2011] No. 12, but the state and local governments have not introduced legal provisions, preferential policies and executive documents on the implementation of school-enterprise cooperation, nor tax, financial support, leading to more obvious spontaneity of school-enterprise cooperation implemented in China. Only by the strength of school and enterprise, it is difficult to reasonably plan school-enterprise cooperation in running a school as a whole according to the layout of regional economic development, and needs of industry transformation and upgrading. Overlapping investment, intensive investment and regional imbalanced investment are bound to appear. Due to the lack of laws and policies, it is impossible for a special national or local organization to plan, deploy, implement and evaluate school-enterprise cooperation, so it is difficult to form a long-acting school-enterprise cooperation mechanism. In addition, the state's investment in funds of higher vocational education is much different from

that of colleges and universities, so that the enterprises are more willing to cooperate with elite schools full of strength rather than higher vocational colleges.

(3) Cultural difference leads to conflicts in interests of school, enterprise and students

Due to the lack of the large occupation education concept, coupled with the traditional concept of education and enterprise formed over the years, the cultural difference between school education and cooperative enterprise in the level of management, decision-making and implementation becomes more obvious. How to give an overall consideration to the conflict in interests of enterprises, school and students is one of fundamental contradictions to be resolved by implementation of school-enterprise cooperation. For a school, its function is to impart knowledge and educate people, scientific research, social service and cultural heritage and innovation, in which high-end skilled talent training is the primary task of higher vocational colleges; for an enterprise, its fundamental goal is to obtain the largest profit with the smallest cost; for students, their fundamental purpose at school is to learn enough professional theoretical knowledge and practical ability to meet the needs of employment and entrepreneurship, which is also one of fundamental problems in solving problems of social livelihood.

According to the large occupation education concept of Mr. Huang Yanpei, in addition to considering the factors of students, schools and enterprises, social benefits should also be one of main factors in school-enterprise cooperation. Xingtai Vocational and Technical College has formed the cooperation concept of "growing together, accompanied growth" in the long-term practice of school-enterprise cooperation and achieved four win-win results: the school characteristic and brand subjects have been recognized and developed, the government's functions have been fully exerted, the profit of enterprises has been expanded, and the students have realized happy employment.

- 4.3 New ways to construct school-enterprise cooperation under the new situation
- 4.3.1 To make clear of the development direction of higher vocational education, and establish collaboration mechanism of connection between education and industry
- (1) To update the understanding of education in higher vocational education

First, there is a need to make clear of the main line. In 2010, the reform and development work of higher vocational education in the country determined the development idea of higher vocational education with "four cooperation" as the main line, and put forward a definite requirement and development direction for how to deepen the reform of education and teaching, improve the quality of talent training, promote the innovation of higher vocational education and

school-enterprise cooperation system and mechanism, and strive to build higher vocational education with Chinese characteristics, and then made clear of the missions. The core task of reform and development of higher vocational education is to improve the level of education and teaching and the quality of talent training, lead the sustainable development of occupation education, and cultivate innovative, compound and developing high-end technical talents for the industry transformation and upgrading and technological innovation in China. Finally, there is a need to grasp the direction. In the future reform of education and teaching and talent training mode, higher vocational education should deepen the reform of education and teaching and talent training mode, and vigorously improve the quality of talent training in higher vocational education and social service capacity in strict accordance with the spirit of the document [14, 17].

(2) To accurately locate the role of government

In school-enterprise cooperation, the government should fully act as a coordinator, supervisor and assessor, and play its role in regulation, coordination and supervision. Firstly, the government should act as a coordinator of "interests of enterprise, school, individual and society"; secondly, the government should act as a supervisor in school-enterprise cooperation, and then act as an assessment organizer of cooperation achievement, and finally act as an advocator of establishment of a sound cooperative environment. Therefore, how to improve the social awareness of higher vocational colleges, lead and guide all circles to concern about the development of higher vocational education, so as to create a sound social environment of higher vocational education and school-enterprise cooperation is one of tasks of the local government

(3) To enhance the social service capability and influence of school-enterprise cooperation.

In the next 10 to 20 years, China will face the outstanding problems of high-skilled and high-dynamic shortage. How can higher vocational colleges get rid of the embarrassing situation of "wishful thinking" of school-enterprise cooperation? Under the new development situation, there is a need to continuously improve the social service capability, and enhance the appeal and influence of school-enterprise cooperation under the premise of enhancing self-development capacity [19].

4.3.2 To play the absolute role of national education will, and develop featured modern occupation education

The state is a real promoter of the whole educational business in modern society, which embodies the formation and implementation of national education, and the operation of public power in educational law. The effective guarantee of national education will and education power is the most powerful guarantee for the effective development of educating people in school-enterprise cooperation  $^{[20]}$ .

(1) To establish a sound law related to school-enterprise cooperation

Establish a policy guarantee for school-enterprise cooperation. Shanghai Municipal Labor and Social Security Bureau and other departments have jointly introduced a series of documents, and the main idea is how to build a high-end skilled talent training platform between colleges and enterprises under the macro-control and guidance of the government through the effective use of various educational resources and various types of diversified school-enterprise cooperation based on the demand of industry transformation and upgrading in Shanghai and surroundings for the high-end skilled and innovative talents, thus forming a high-end skilled and innovative talent training system [21]

Establish industry associations. The association is composed of government, enterprise and training experts. The association signs a training contract with the government's training department every year, and determines the training tasks, and then signs a subcontract with the qualified training institutions respectively. The establishment of association strengthens the dominant position of the enterprise, clarifies the relationship between the enterprise association and the government, and also has an irreplaceable effect on the allocation and selection of teachers to participate in the practice of higher vocational colleges.

Government fund regulation and control system. All levels of government should include the management funds of school-enterprise cooperation in the financial budget <sup>[22]</sup>.

(2) To strengthen the function of advisory committee of school-enterprise cooperation

Talent training for the enterprise is an inescapable responsibility. The government should encourage it to actively participate in the construction of profession of higher vocational colleges and talent training in the relevant industries, and view it as an important reference basis for the enterprise upgrading, tax relief and raw material supply.

Higher vocational colleges should be encouraged to actively participate in the skills contest of the national higher vocational colleges, so as to find problems in the contest, and identify shortcomings in the construction of profession and talent training, in order to improve the school's professional construction and talent training mode.

(3) To properly handle the relationship between the government, enterprise and school, and establish modern occupation education concept in China

Relationship between government-led and market regulation: As an important part of large occupation education concept in China, the enterprise participates in education cooperation or talent training, and is included in the category of national quasi-public welfare undertakings, which should enjoy the national public welfare policy, financial tilt and support. But the enterprise itself is an industrial subject, which should also adapt to market regulation [24]. Therefore, the government should not only reasonably develop the development program and policy of school-enterprise cooperation, but also scientifically make an overall plan of the scale, scope and development planning of the local school-enterprise cooperation, and even fully respect the autonomy of running a school and the development rules of market economy in an appropriate manner.

Relationship between government-led and enterprise involvement: The state and the government should continuously improve the awareness of corporate social responsibility, mobilize their positivity and initiative of participation in school-enterprise cooperation, and gradually form a diversified school-running and education pattern led by the government and involved by all circles, and form a large occupation education concept [<sup>24</sup>].

Correct positioning. The correct role positioning can make industry-academy cooperation rise to a large occupation education concept. There is a need to closely focus on the core of talent training in higher vocational colleges, and make the students become core beneficiaries, schools and enterprises become partners of national education, and the government becomes a regulator of multiple subjects, so as to achieve a vision of students' happy employment, continuous increase in corporate profits, healthy development of economic society and promotion of the whole social progress through the school's characteristic education.

- 4.3.3 To play the role of education with excellent culture, and solidly promote the excellent industrial culture into the campus
- (1) To further promote the industrial enterprise culture into the campus, into the classroom, into the teaching materials

Guide students to carry out career planning. Modern career planning starts from basic education and affects lifetime, which is also a requirement of lifelong learning system. Occupation education assumes this role, and strives to explore school-enterprise cooperation culture and educational pattern full of characteristics of the times and characteristics of the schools combined with career planning and lifelong learning concept.

Set up basic courses of industry and excellent corporate culture. The core of industrial culture is the industry values, which is the code of conduct to be strictly abided by the enterprise workers, and essence accumulated over decades. Therefore, to enhance students' industrial culture literacy is inseparable from the necessary work, namely values education <sup>[25]</sup>.

The industrial culture is integrated in the professional construction and curriculum reform. On the one hand, schools can turn the production and operation

workshop of the enterprise into a base of learning professional courses for students. On the other hand, schools can seize opportunities for students to take post as internships in the enterprise, let the students accept the rules and regulations management of the enterprise and feel the enterprise version of the industrial culture as internship employees.

- (2) To penetrate the educational practice with industrial culture into every link of cultural education
- 1. School and enterprise jointly build a "double type of teachers" team to impart knowledge and educate people through teachers' words and deeds; draw the enterprise management and education system of the advanced industrial culture to enhance students' safety awareness, quality awareness and responsibility consciousness, and mange and educate people well; 3. actively explore the reform of credit management system and examination system, view the practice and operation links as examination (assessment) contents, and scoring standards in accordance with the operating standards of the enterprise; 4. vigorously carry out gratitude education and responsibility consciousness education, so that the majority of students understand the important significance of retribution, and then transform the feeling of gratitude into a strong sense of social responsibility, and put into practical action to serve the community  $^{[25]}$ .
- (3) To enhance the industrial cultural literacy of teachers and students, and form cultural consciousness
- 1. Each professional group can accumulate the students' industrial culture knowledge reserves according to the traditional culture of industry, regional characteristics, characteristics of the times, production mode of the modern enterprise, typical enterprise culture, social service function and development concept of development trend; 2. Seize the core culture of safety awareness, responsibility consciousness and quality consciousness in the industrial culture, and strengthen the students' professional ethics education and enhancement of responsibility consciousness; 3. Combined with the professional characteristics and the recreational activities and community activities jointly carried out by enterprises and jointly involved by students and workers, the school regularly holds a joint council for responsible persons of schools (departments) and enterprises (workshops), in order to organically combine with the school's traditional education culture and excellent corporate culture [25].
- (4) To establish a school-enterprise cooperation culture research center, innovate and develop outstanding industrial culture

Under the premise of conditions permitted, higher vocational colleges and enterprises can establish a culture research center for school-enterprise cooperation, combine with excellent industrial culture and education culture, so as to inherit and innovate the excellent industrial culture and school-enterprise cooperation culture. For example, in 2013, Shijiazhuang City Vocational College applied for the establishment

of "Hebei Municipal Cultural Institute" to the Social Organization and Management Bureau of Hebei Provincial Civil Affairs Bureau. It has made a positive contribution to the research of the development of urbanization in Hebei Province and the county's economic development culture, and is bound to play a positive role in cultivation of students' awareness of urbanization.

# 5 CONCLUSION

This paper starts from the limitation in the development of school-enterprise cooperation in China's higher vocational education to analyze its predicament, and lists new ways to solve prominent problems in school-enterprise cooperation through combination with more effective experience of higher vocational colleges in the field of school-enterprise cooperation gained by Shijiazhuang City Vocational College, Xingtai Vocational and Technical College, Shenzhen Vocational and Technical College and so on, and puts forward that the effective school-enterprise cooperation is inseparable from the cultural connection between school and enterprise, as well as approaches and methods of connection; this paper also puts forward the problems and solutions to connection between educational culture and industrial culture in higher vocational colleges.

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