

From "School-enterprise Cooperation" to " Integration of Production and Education" ——Take Dingli Institute of City College of Southwest University of Science and Technology as an Example

XiaoBo Wu^{1,*}, Gang Cheng¹, MengRu Deng², FuYou Tang³

¹. *City College, Southwest University of Science and Technology

¹ City College, Southwest University of Science and Technology

² City College, Southwest University of Science and Technology

³ City College, Southwest University of Science and Technology

*Corresponding author. Email: fabio@cumt.edu.cn

ABSTRACT

With the adjustment and upgrading of the industrial structure and changes in the social and economic development mode, our country needs a large number of technical talents. Therefore, there is an urgent need to promote the structural adjustment of higher vocational education. Regardless of the requirements of social development for outstanding talents or the strategic positioning of the Ministry of Education, the transformation and upgrading of regional higher vocational colleges as the backbone of higher vocational education is a general trend.

Keywords: *Production and education integration, school-enterprise cooperation, talent training, application-oriented universities*

1. STATUS QUO AND QUESTIONS OF INDUSTRY-UNIVERSITY INTEGRATION

1.1. Recognizing misconceptions: school-enterprise cooperation in running schools, integration of industry and academia

We can analyze "the integration of production and education" from the perspective of etymology. "Production" can be used as an adjective or a proper noun. As an adjective, it can be expressed as manufacturing, production, and refers to the creation of chemical substances or spiritual food; as a proper noun, it can be expressed as commodities, industrial chains, etc. The industrial chain refers to the combination or system software of economic activities with similar characteristics. It consists of each related field with interrelated rights and different responsibilities. Although their operation mode, operation form, company method and commodity circulation stage are different, their operation objectives and business scope are closely concentrated on the same product. And they can implement a separate circulatory system in each

area that makes up the business circle. "Teaching" can be used as an adjective, referring to training education, teaching, classroom teaching, that is, to spread professional knowledge or professional skills to people; it can also be used as a proper noun to refer to various cultural education and training schools to cultivate various Practitioners, including training schools established by companies in the field and their secondary and higher vocational schools. "Combination" refers to the integration of several different things into one. The essence of the term "integration of production and education" is the integration of manufacturing, training and education. Classroom teaching in actual manufacturing environment, manufacturing in classroom teaching, manufacturing and classroom teaching are closely related and interdependent. It is generally believed that the technical term for the integration of industrial education has emerged and is often used after higher vocational education became popular in Europe. On the one hand, it refers to industrial chain companies that organize or cooperate according to their own training in order to better industrial transformation or product upgrades. Joint training institutions of universities must

be excellent talents. On the other hand, in order to complete the overall goal of cultivating application-oriented talents, higher vocational colleges must actively integrate with on-site companies, and in accordance with on-site company regulations, conduct overall planning and design of training methods for training institutions^[1].

Everyone usually regards the integration of industry and education and school-enterprise cooperation as synonyms. In fact, there is a difference between the two. As mentioned above, the combination of work and study means that in order to better distinguish the development trend of higher vocational colleges, they must be integrated. Therefore, the integration of industry and academia is a process of dual strength and dual integration. Universities are all participants in the integration of industry and education. Only when the two form a closely related community of interests can the integration of industry and education be truly completed. School-enterprise cooperation means that colleges and universities actively follow up the company and seek coordination with the company to better complete the overall goal of talent training. The theme of school-enterprise cooperation in running a school is higher education. This is a unilateral whole process of a single subject. It is difficult to work closely with the company, especially in the initial stage of the transformation and upgrading of undergraduate colleges in the region, as well as in the cultivation of talents in colleges and universities that have not cultivated the company's characteristics and advantages, and the company is unable to obtain outstanding talents from institutions of higher This kind of cooperation is only wishful thinking of universities and colleges, and it is not easy to obtain good practical results.

2. MISUNDERSTANDINGS OF PRACTICAL ACTIVITIES: STATUS QUO AND DOUBTS

In the whole process of the development trend of higher vocational education, a situation of school-enterprise cooperation and integration of industry and education was born. Compared with Western capitalist countries, my country's higher vocational education is relatively late, and the school-enterprise cooperation is relatively late. Sexual backwardness. In order to better integrate into my country's economic and industrial restructuring, as well as the company's requirements for high-level talents and outstanding talents, the Third Plenary Session of the 11th Central Committee of the Communist Party of China clearly stated that it is necessary to fully develop higher vocational education and improve the level of higher vocational education. , Open University. Higher vocational education at the undergraduate and graduate level, enrolling graduate, master and doctoral students, establishes a post-

education system that is connected to the left and right. In June 2013, the my country Applied Technology University Alliance was established in Tianjin, and some local undergraduate universities were gradually transformed and upgraded. In April 2014, the International Forum on the Integration of Industrial Education, formed by the alliance of the Ministry of Education and the Institute of Applied Technology, was held in Zhumadian, Henan Province. School-running cooperation and school-enterprise cooperation combining production and education have become a way of cultivating talents who are vigorously developing higher education reforms in the region. Judging from the current situation, higher vocational colleges, universities that have been upgraded from higher vocational colleges to undergraduates, and higher vocational colleges that have undergone transformation and development, have done a good job in school-enterprise cooperation. Undergraduates have just changed and developed. The school is still in the development link in these aspects. Generally speaking, compared with European capitalist countries that have conducted higher vocational education earlier, the talent training method in my country's higher education reform is still at a low level of school-enterprise cooperation and has not yet been realized. Production and education. The ideal situation of tight integration is reflected in the following multiple levels

2.1. Collaboration is unstable and the merge method is not fully connected

Due to differences in characteristics, systems, functions, and structures between companies and universities, it is difficult for school-enterprise cooperation to complete cooperation in a realistic and practical sense based on the "freedom of love" approach in the early stages of higher vocational education. . The company's overall goal is to make a profit, and it must create economic benefits, so it lacks the motivation for school-enterprise cooperation with universities. In these respects, government departments can build a bridge between the two. I don't know that the advocacy of government departments only stays on the current policy, and lacks a strict restraint mechanism. Government departments are ineffective in agreeing to coordinate and consider school-enterprise cooperation, running schools, joint training, and formulating regional skills and talent building plans. This has led to the management of school-enterprise cooperation that runs the school. Mechanisms, systems and methods cannot be truly established. The core communication system for harmonious cooperation between government departments and schools and enterprises has not yet been formed. In operating a school, the key to creating and maintaining most school-enterprise cooperation is based on interpersonal relationships and credibility. Most of the partnerships created in this way are short-

term, non-standard, and unsustainable grassroots collaborations. They cannot produce unified, harmonious and positive overall actions, and the results of collaboration are uneven. In order to truly solve this problem, it is necessary to establish as soon as possible the current school-enterprise cooperation school-running policy and management model as the core of government departments, and formulate relevant higher vocational education school-enterprise cooperation policies, regulations or regulations. Establish government departments and fields in accordance with the law. Job responsibilities in school-enterprise cooperation and responsibilities of companies and colleges.

2.2. The cooperation method is single and the cooperation content is not deep

Higher education, as a kind of higher vocational education closely related to social and economic development, and closely related to social and economic development, has undergone higher education reforms. Institutions of higher learning must complete the roles of talent training, lifelong education, technological innovation and social service, and must have close ties with companies in this field. The development of local society is the completion of good interaction in social and economic development. For school-enterprise cooperation, the integration of production and education should be carried out around the entire process of talent training. The depth, breadth, and breadth of school-enterprise cooperation are directly related to the quality of talent training, and the completion of cultural education and social thinking in higher vocational colleges. As we all know, my country's current higher education reform is in the early stages of transformation and upgrading. The key to school-enterprise cooperation is limited to the co-creation of student internship industrial bases, characterization, and on-the-job internships. Schools that have undergone rapid transformation and development introduce companies to schools to create schools in schools or schools to enter companies to create factory schools, but in general, the cooperation method is relatively simple, the cooperation content is not deep, and the system software is reliable. There are many reasons for this situation. The main reason is that school-enterprise cooperation does not timely understand the internal correspondence and actual meaning of the cooperation, and there is no standardized and restrictive cooperation mechanism. Due to its own reasons, the company lacks motivation to cooperate. The passionate regional colleges and universities have not been fully prepared for school-enterprise cooperation, nor have they formulated a scientific and standardized school-enterprise cooperation plan^[3].

2.3. Misunderstanding when choosing cooperation goals

School-enterprise cooperation has misunderstandings about understanding and practical activities when choosing cooperation goals. "Regional higher education reform. The educational philosophy and overall goal of higher education institutions is to serve the project area. We should always adhere to the regional economic and social development and socio-economic development as the goal of the service project, and adhere to the unremitting cultural integration development strategy, Unswervingly cultivate technical talents urgently needed by local development trends, cultivate excellent undergraduate talents in colleges and universities, accelerate the transformation of high-tech to the locality, strengthen local resource allocation, and form pillar industries with local characteristics. Make necessary contributions. "The college education reform was lost at the beginning. This is reflected in the level of school-enterprise cooperation. They are usually eager to achieve quick success and emphasize the high-end atmosphere on the one hand. The overall goal is to target large and medium-sized overseas companies. The pursuit of perfection caused a sensation and reached a state of vanity. As a result, due to the limitations of its own standards and the limitation of location advantages, the situation of insufficient water and soil resources has been caused, and the actual effect of cooperation is not good. From the perspective of the company field, whether it is a well-known company or a regional small and medium-sized enterprise, when choosing a cooperation target, they usually consider themselves, pursue perfect short-term rights and interests, and lack a long-term development strategy. . As regional universities are still in the initial stage of transformation and upgrading, the basic construction of the teaching staff, the professional construction of course content, and the basic construction of the training platform are relatively late, the high-tech research and development capabilities are poor, the quality of personnel training is not high, and the social development of the project area is served. Strong ability, not strong working ability for social and economic development, and limited ability to show immediate effect to the company. The company cooperates with regional colleges and universities to cultivate talents that are time-consuming, labor-intensive and expensive. It is not as convenient as hiring talents immediately^[4]. Moreover, under the current talent flow system, the required talents can be obtained without school-enterprise cooperation. Therefore, in the context of short-term commercial interests, the company is unwilling to assume the corporate social responsibility of school-enterprise cooperation in order to cultivate outstanding talents and help the development of regional colleges and universities. Even if they cooperate, they want to choose these high-tech

R&D capabilities. The training of talents is of high quality, which can give him direct economic development rights and prestigious institutions of higher learning. Since school-enterprise cooperation cooperates with each other on the core concept and purpose of cooperation, rights and interests are contradictory. If there is no restriction mechanism, school-enterprise cooperation will be difficult to achieve.

2.4. The infrastructure of dual-qualified teachers is backward

School-enterprise cooperation requires school-enterprise cooperation to create a high-quality teacher team composed of teachers with dual qualifications. For a long time, many regional colleges and universities that have undergone transformation and upgrading have realized this problem and have adopted a variety of strategies to achieve dual-qualified team management [5]. But the current situation seems worrying. Many regional universities have just changed from ordinary universities to applied universities. The original teachers were led by basic theoretical classroom teaching, and could not be integrated into the work of shaping excellent practical talents such as experiments and practical activities. Without the cooperation of the field and the company to develop high-tech product research and development and other applied scientific research, the social development of the service project area will be restricted by the social and economic development capacity. Although the company's teachers have strong self-learning ability in practical activities, most of the basic theoretical skills are still insufficient, and they lack the professional skills and methods of classroom teaching in colleges and universities. The shortage of teachers has severely restricted the depth and breadth of industry-university integration, and endangered the quality of training applied talents.

3. CONCLUSION

At present and for a long time in the future, "industry-education integration" will be the focus of research on talent training in applied undergraduate colleges, and the action research of "industry-education integration" will also become an important research method instead of dialectical thinking. Whether the adaptability and synergy of university majors and local industries meet the in-depth requirements of the integration of production and education is the focus of research on the transformation and development of various applied undergraduate colleges. How to position and develop each applied undergraduate college and what it involves Industry and enterprise development, optimization of professional talent training programs, curriculum reforms, curriculum structure, curriculum content, innovation in teaching models and methods, and teacher team building, and other mid- and micro-

level "footprints", will surely become everyone's attention in the new era.

ACKNOWLEDGMENTS

This paper is sponsored by :

1.Sichuan Province Finance First-class Curriculum Construction Project (CC-YLKC2003)

2.The second batch of collaborative education projects of the Ministry of Education in 2020-Southwest University of Science and Technology City College Financial Big Data Practice Teaching Base Construction Project

REFERENCES

- [1] ShanXue Sun, The Theoretical Connotation and Practical Points of the Integration of Production and Education, Chinese Vocational and Technical Education, vol. 34, 2017, pp. 90-94. DOI: CNKI:SUN:ZONE.0.2017-34-017
- [2] XiaoBo Wu, The mode and reflection of general English education in independent colleges and vocational colleges: Taking Dingli College of City College of Southwest University of Science and Technology as an example, South Agricultural Machinery, vol. 9, 2020, pp. 209. DOI: CNKI:SUN:NFLJ.0.2020-09-163
- [3] Xing Chen, XueMin Zhang, Transcendence in Dependence: Application-oriented Colleges and Universities Deepen the Reform of Industry-Education Integration, Tsinghua University Education Research, vol. 1, 2017, pp: 45-46, DOI: 10.14138/j.1001-4519.2017.01.004611
- [4]. DanZhong Wang, PeiHua Zhao, Exploration of the Cooperative Education Mechanism in Higher Vocational Colleges from the Perspective of the Integration of Production and Education, Chinese Higher Education, vol. 21, 2014, pp. 47-49, DOI: CNKI:SUN:ZGDJ.0.2014-21-020
- [5] Fan Yang, Deepen the integration of production and education and accelerate the construction of modern vocational education system, Chinese Vocational and Technical Education, vol. 21, 2014, pp. 143-146. DOI: CNKI:SUN:ZONE.0.2014-21-038