

# A Study on the Cooperation Modes of Higher Vocational Education of China

**WANG Ruoxiang**

*Wenzhou Polytechnic, Wenzhou, China*

**ABSTRACT.** *In the new era of globalization, educational community that transcend the limitations of national interests and regard the common interests as the purpose to promote the win-win cooperation of regional and international became an inevitable requirement. This essay mainly focuses on the characteristics of higher vocational education in China, briefly analyses the current situation of cooperation modes, causes of problems as well as solutions that higher vocational education colleges, industry and government encounter in the development of educational community.*

**KEYWORDS:** *Educational community, Higher vocational education cooperation*

## 1. Introduction

General secretary Xi Jinping's basic principles of “the community of human destiny” and its win-win cooperation have been widely recognised by the international community since its first announced in 2013. This new philosophy has been quoted in official documents issued by the UN Security Council, the Commission for Social Development, the Human Rights Council and other main international organisations. Since the educational community can realise complementary advantages, share resources, disperse risks and improve the construction of educational connotation, it has become the universal choice of international cooperation of higher vocational education. It is a strategic choice to meet the practical needs of the policy of opening up education to the outside world in the new era and to promote the international cooperation in higher vocational education to catch up with and surpass the development in the new normal.

## 2. Literature Review of Educational Community

It has been more than half a century since the “educational community” and its similar formulation were first proposed, and explored to develop continuously. It mainly includes the following 3 theories. (1) Educator John Dewey and Manabu Sato first provided theoretical conception and behavioral practice for the educational

community. They believed that the educational community is an educational community based on a common goal, task, faith and beliefs, through equality and mutual trust cooperation mode, integration and sharing of education resources, to maximise benefits, to achieve a common vision, and to form a solid collaboration. (2) The internationalisation theory of vocational education. UNESCO stressed that “vocational education should promote international understanding and inclusiveness, cultivate citizens with global vision and sense of responsibility, and advocate strengthening international cooperation in vocational education”. Some researchers evaluated from the political, economic, social and cultural perspective, as well as the vocational education institutes’ own development status, discussed the causes of the internationalisation of vocational education, proposed that vocational education in various countries play an important role in cultural exchange. During the process of international exchange and cooperation, it has formed international characteristics such as international resource allocation, management mechanism, construction of teaching staff, scientific research cooperation, personalised courses and so on. (3) The theory of human resource development and theory of collaborative innovation. Some scholars believe that education can develop the intelligence of human resources, education investment can bring core competitiveness to labor force, therefore knowledge is the strongest driving force for the development of productivity. However, the development and increment of human resources is not a task that could be accomplished by a single individual. The transformation of knowledge requires multilateral cooperation and coordination with the government, scientific research institutes and industrial enterprises, so as to realise knowledge creation and to increase the value of knowledge, realise technology upgrading and application, promote resource integration, maximise innovation and energy efficiency, and form a virtuous circle of multilateral reciprocity.

With the implementation of the Silk Road Economic Belt and the 21<sup>st</sup> Century Maritime Silk Road (hereinafter referred to as the “B&R”) initiative, the realisation of the optimal allocation of educational resources, the establishment of a community for the integration of school-industry, promote synergetic and sustainable development of the “B&R” initiative started to be discussed by Chinese academia, the relevant researches are mainly focused on the following aspects: (1) The trend research of the internationalisation of higher vocational education: some scholars put forward the development history of the internationalisation of local higher vocational education and its three stages of transformation, and emphasized the importance of “vocational education community” at the present stage, especially in the context of “going global”, higher vocational education should pay more attention to the talent training and development strategy in the process of international education. (2) Research on the dilemma of internationalisation of higher vocational education: focus on the dilemma and current situation of discourse power and discourse practice, financial shortages of realisation of higher vocational education, issues on differences of various educational system in the educational community, etc.. (3) Research on the mode of cooperation between the main bodies of the existing education community: discusses the practice of the cooperation of school, industry and research of China ASEAN Union, which is one large portion of the educational community.

Domestic scholars have done some research on the model, problems and Countermeasures of the educational community, which has laid a foundation for the development of the educational community. However, most of the relevant researches on the work of the vocational education community are based on the comprehensive discussion of the national background, with a large and complete summary of the government, vocational colleges, enterprises and social groups. However, the characteristics of different regions of the country are different, the development level is not consistent, at the same time, the types of Vocational Colleges and disciplines involved are different, the business model and corporate culture of enterprises are not consistent, so the single theory has limited guiding significance for practice.

### **3. Analysis of Cooperation Modes of Higher Vocational Education of China**

China has obtained a fruitful outcome and rich experiences during the development of the “B&R” initiative from March, 2015 till now. It is mainly reflected in the following 3 aspects. First, relying on the community to realise the international economic collaboration which has become the internal demand and motivation of all parties. At present, China is the largest trading partner of ASEAN in 10 years. In 2019, ASEAN replaced the United States as the second largest trading partner of China. Second, the educational community has emerged diversified organisational forms, such as China ASEAN Education Exchange Week, China EU Education Policy Think Tank Forum, China Pakistan Economic Corridor University Alliance. Last but not least, gradually facilitate the autonomy of the policy for the educational community. In April 2016, the Central Committee of the Communist Party of China and the State Council of China issued “Opinions on the Opening Up Operations of Education in the New Era”, provides a strong support for the top-level design of openness, sharing and autonomy. In June 2020, “Opinions of the Ministry of Education and other Eight Departments on Accelerating and Expanding the Opening Up of Education in the New Era” released by the Ministry of Education of China, with the purpose to encourage qualified domestic vocational colleges and enterprises to participate in international production capacity cooperation, to nurture more high-level professionals with educational community perspective .

Along with the progress that the “B&R” initiative has made, vocational education paves its way to better cooperation mode. In October 2015, the Ministry of Education of China issued “the action plan for innovation and development of higher vocational education”, which requires vocational institutes to actively seek cooperation, support benchmarking enterprises to “going global”, serve the economic and social development of countries and regions along the “B&R” initiative, thus enhance the international reputation of China's vocational education. Under the support and guidance of policies, vocational education institutes have made several achievements. The quality and quantity of Sino-foreign cooperation in running schools have been improved. On a broader platform, China's occupation education has gone out in the true sense and provided educational resources and

services for more countries, regions and multinational enterprises.

N .	Joint Institute	Vocational education institute of China	Countries or Regions of Cooperation	Foreign Vocational Education Institutes	Cooperative Corporations	Cooperative Majors
1	Luban Workshop	Tianjin Bohai Vocational and Technical College	Thailand	Phranak hon Si Ayuttha ya Technical College	Bohai Chemical Group	Mechanics
2		Tianjin No. 2 Business School	United Kingdom	Chichester College	N/A	Cuisine Specialty
3		Chongqing Industry Polytechnic College	Russia	N/A	Chongqing Lifan industry (Group) Imports& Exports Co.	Automotive Electronics , Automotive Inspection & Maintenance, Technical Services.
4	Sino-Romania (Deva) International Art School	Ningbo Foreign Affairs School	Romania	Romania Deva Art School	N/A	Music, Dance, Art.
5	China Africa (Benin) Vocational and Technical Education Institute	Ningbo Polytechnic	North Africa	Cerco Institute, Benin	Teams International Co., Ltd.	Application of Electronic Technology , Architectural Design

6	Cambodia Sinuhak Port Special Economic Zone Training Center	Wuxi Vocational College of Commerce	Cambodia	N/A	Hongdou Group Co., Ltd.	Marketing, Accounting, IT, Chinese, English
7	Cambodia - Wenzhou Polytechnic-Yalong Silk Road College	Wenzhou Polytechnic	Cambodia	National Technical Training Institute	Zhejiang Yalong Education Equipment Co., Ltd.	Electrical Automation, Chinese Culture and Language

Chart1. Examples of Cooperation Programs of Vocational Education.

At present, there is an increasing number of top ranking vocational colleges cooperate with foreign institutions of vocational education, industries and enterprises, give full play to their own professional expertise, connect with the development needs of multinational enterprises, and train professional and skilled talents for them. There are basic 5 mode of cooperation, namely cross border short-term exchange and learning, government-conducted communication activities, Luban Workshops, overseas vocational skill training center through school-enterprise cooperation, offshore campuses through government-school-enterprise cooperation.

To be specific, cross border short-term exchange and learning includes international students, overseas research and studies for teachers, professional expertise and teachers give lectures abroad or provide professional training in foreign countries. China and ASEAN carry out international exchanges and cooperation in vocational education, and deepen international student programs, teacher exchanges and scientific research cooperation to promote mutual recognition of credits and certification of vocational qualification standards. For example, China has become one of the preferable destinations for overseas study in ASEAN countries. At the same time, some vocational colleges in Guangxi Province send students to in colleges and universities in ASEAN countries for exchange programs to enhance cross-cultural understanding of talents and promote the sustainable development of China-ASEAN exchanges.

Nowadays, the government led international cooperation mode of vocational education carried out by the educational community mainly includes the following ways: (1) the bilateral or multilateral international exchange and cooperation forum, exchange week and ministerial round table meeting organised by the government. For example, Zhejiang Ningbo-Central and Eastern European countries' educational cooperation and exchange activities led by Ningbo Municipal Government have been held for six consecutive times, providing a favorable platform for educational

exchanges and cooperation between Zhejiang Province and Central and Eastern European countries. (2) the government formulates international exchange and cooperation policies and signs international cooperation agreements on vocational education. Sino-Romania (Deva) International Art School is one of outstanding outcomes of this activity. Besides, Premier Li Keqiang proposed to strengthen the compatibility of China-EU education system in “The Strategic Agenda 2020 for China-EU Cooperation” in 2013. 3 years later, the conference of Ministers of education of China EU countries was officially held, which repeatedly proposed to jointly build a future oriented China EU educational community.

Luban Workshop, originated from Tianjin as an forerunner of education-industry overseas cooperation, now has developed into most famous “going global” brand of Chinese Vocational Education. In the year of 2016, Tianjin Bohai Vocational and Technical College, relying on Bohai Chemical Group, established first overseas Luban Workshop of China in Phranakhon Si Ayutthaya Technical College in Thailand, initially form an effective way to export high-quality vocational education resources and serve the educational construction of “B&R” initiative. In addition to this workshop pioneered, two colleges cooperated in international competitions, international conference on vocational education, faculty and student exchange programs, and so on. As a result, it has been highly praised and affirmed by the Chinese and Thai governments, strengthened people-to-people ties and promoted the construction of high quality development of educational community. Moreover, the experience of high vocational education “go global” that Luban Workshop formed became a optional reference to other level of vocational education, and vocational colleges in other provinces. In 2017, the Luban Workshop jointly established by Tianjin No. 2 Business School and Chichester College in the UK, was officially launched. In the format of Luban Workshop, to carry out academic education and skill qualification certification of Chinese cuisine in the UK, to cultivate applied international skills talents, the professional training standards were incorporated into the British national vocational qualification framework system, thus the vocational education standards of China are successfully introduced. Also, Chongqing Lifan Industry (Group) Imports& Exports Co., a company occupies large market share of vehicles in Russia, cooperated with Chongqing Industry Polytechnic College, to assign teachers to Russia to train talents for industry.

An example of overseas vocational skill training center through school-enterprise cooperation is Wuxi Vocational College of Commerce and Hongdou Group Co., Ltd. jointly established the Cambodia Sinuhak Port Special Economic Zone training center in 2012, which is the first talent training center in overseas parks of China, and it was the first higher vocational colleges serving Chinese enterprises offshore. Up to 2019, the number of people benefited from training has exceeded 35 thousand. Owing to such preferable performance of past 7 years, Sinuhak Port Commerce University successfully established in 2019 and became the first overseas applied undergraduate university independently set up by a higher vocational college in China.

Meanwhile, some vocational colleges take the lead and work together with

foreign government and “going global” Chinese enterprises as well as foreign vocational institute. To illustrate, with the guidance and assistance of Ministry of Labor of Cambodia, Wenzhou Polytechnic accompanied with Zhejiang Yalong Education Equipment Co., Ltd. whoes educational equipment has a certain degree of recognition in ASEAN countries, and built an overseas campus in top 2 vocational college of Cambodia--National Technical Training Institute, to expatriate lecturers for major courses teaching and training, as well as provide professional training to employees of Chinese entities and enterprise run by overseas Chinese in Cambodia. At the same time, Wenzhou Polytechnic established a Chinese Culture Research Center, with the purpose of teaching Chinese language and culture, to play an important role in national public diplomacy.

#### **4. Problems of Current Cooperation Modes of Higher Vocational Education of China**

Although the countries along the “B&R” initiative have received great achievements in integrating into the educational community, at the same time, China and the EU educational community have established diplomatic relations for more than 40 years, with a long tradition of educational exchanges and sound cooperation, there are still several problems that worth mentioning.

First, the industries involved in the educational community is not balanced, statistics present that current cooperation is mainly based on the tertiary industry. Specifically, there are less than 10% of the first industry majors and 33% of the second industry majors that Chinese higher vocational colleges devoted to the “B&R” initiative, therefore, tremendous space for educational resources integration in the first and second industries demands for exploration. This is due to the unbalanced economic development among regions. As a matter of fact, when local Chinese enterprises participate in international cooperation, they need a large number of human resources with core competitiveness including international vision, knowledge of international rules and ability to participate in international affairs and competition. The higher vocational colleges in the educational community is responsible for the function of improving the comprehensive quality of existing industrial talents and cultivating potentially high-end industrial talents to serve the promotion of local economy. A key indicator of core competitiveness is that those talents master high-tech skills of the first and second industries. Besides, there are some research indicate that the core competitiveness and service ability of higher vocational colleges need to be improved.

The second is the lack in ways of pioneering cooperation in the educational community. Currently, the common methods of cooperation of higher vocational colleges in China are cross regional cooperation in running schools, overseas students cultivation, faculty exchange programs and vocational skills training. There is not enough cooperation for enterprises. At the same time, the depth and influence of cooperation are not strong enough, vocational colleges focus on conducting short-term exchange and communication without forming into comprehensive communication mechanism. Beside, geographically speaking, about 80 percentages

of current cooperation are concentrated in ASEAN, South Asia, Russia and Africa. China's educational exchanges with Europe are still dominated by the introduction of European educational resources to China, with insufficient innovation[6]. However, there are deficient cases of Chinese higher vocational colleges internalise advanced educational experience of developed countries into their own advantages.

Finally, there are great differences in educational and political system among the countries of the educational community, and the mechanism of interest protection has not been effectively established. The practice of school-enterprise cooperation has found that the lack of corresponding mechanism, neither guarantee of government departments led to certain problems, which affected the sustainable cooperation between countries[7]. Russia adheres to the concept of running schools by the state, and public universities account for a large proportion. However, Kazakhstan began to encourage private owned higher education institutes after 2010. If the proportion of private schools continues to be too large, cross-regional educational exchange and cooperation will be greatly affected. In addition, the current educational cooperation and exchange with institutions of various countries has not formed a unified process and mode, therefore, schools and enterprises are accumulating experience through repeated practice. Furthermore, government departments in some countries also do not have a national unified higher education management mechanism, such as Cambodia, which indicated the establishment of the National Council of Education in national law, but the agency is not coordinating as well as it should be, the current work scope is only at the undergraduate stage, and there is no systematic standard for higher vocational education evaluation and certification.

## **5. Solutions to Current Cooperation Modes of Higher Vocational Education of China**

In order to do a good job in the practice of international cooperation of higher vocational colleges and give full play to the experience and advantages of the existing educational community, it is necessary for higher vocational colleges, industries and governments to take actions. There are certain solutions of the to the problems mentioned above.

Most importantly, effectively stimulate the leading role of higher vocational colleges. (1) Higher vocational colleges are progressively becoming one of the important disseminators of innovative culture and builders of international education atmosphere. Under the mode of educational community, international thinking is gradually internalised into the personnel training, knowledge innovation, academic research and other aspects of higher vocational, incubating certain forms of future scientific, technological, economic and social development. Especially in the current stage of China, when enterprises are facing the dilemma of “going global” talents, and the the guarantee of international exchange is relatively weak, the community responsibility of the higher vocational colleges is particularly important. Therefore, higher vocational colleges must maintain an active attitude, working with globalisation strategy of Chinese enterprises, facing the industrial characteristics of

the target countries, cultivating talents and engaging in the international planning of disciplines, effectively promoting the transformation of talent training into productivity, take the initiative to assume the role of national public diplomacy, and actively spread Chinese culture. (2) By successfully integrating transnational high-quality educational resources, contribute in building a high-level educational community focusing on the development of high-end industries in the region, to improve the core competitiveness of the higher vocational college. In terms of academic ideas, the paper puts forward the innovative cooperation and coordination mode of higher vocational education community and the 5ICEC system of “higher vocational education + enterprise + government”, “talent + environment + application”, namely, International Community Education Concept, International Community Education Culture, International Community Education Communication, International Community Education Cooperation and International Community Education Certificate, to jointly create a diversified, open and collaborative ecosystem, so as to create a complete global cooperation theory of innovative higher vocational education. By analysing the synergy effect among the multilateral subjects of the educational community, and constructs the theoretical framework of localization from the perspective of strategic planning and collaborative evolution. On one hand, strive to train and transport qualified talents with international comprehensive strength for industrial enterprises, on the other hand, integrate the international vision and awareness of openness, equality, respect, inclusiveness and democracy into professional teaching. As a result, the institute establishes the value concept of harmonious coexistence of the world, observe and think rationally from a global perspective, and promote the high-quality development of the community. (3) Higher vocational colleges should gives full play to the functions of think tanks, comprehensively analyse the trend of globalisation, the needs of industry and enterprises, regional political, cultural and legal differences, to provide consulting solutions and forward-looking strategic advises for the development of the educational community, and promote the harmonious development of the educational community and the sustainable development of multilateral cooperation.

Secondly, encourage to boost social functions of enterprises and to explore ways of cooperation from the perspective of educational community. (1)At current stage, enterprises owns advantages from national strategy of school-industry cooperation mode of “going global”, without awareness of actively pursuing every opportunity to work with higher vocational colleges. As a matter of fact, it is urgent for enterprises to consider how to improve the absorption and development capacity of high-tech to gain opportunity in the fierce global competition from a long-term perspective, to more actively approach the international talent market, and to increase international capital investment, such as the establishment of international talent training funds, the introduction of transnational technology innovation center. Higher vocational colleges, as the institutions that provide front-line talents for enterprises, have advantages in predicting international scientific and technological forms and providing policy consultation that other institutions do not obtain. (2) It is crucial to attract relevant scientific and technological personnel from higher vocational education colleges to participate in the form of transnational cooperative scientific research projects or

production tasks, such as to form an international talent group, to carry out talent training, technological innovation and technical services. (3) It is necessary to establish an internal incentive mechanism, to actively cultivate and introduce talents that meet the international standards, so that enterprises can acquire key technologies that meet the highly innovative criteria in the process of internationalisation.

Thirdly, by working with government sectors, will give full play to the role of the government in policy guidance and guarantee. (1) Recreate a open atmosphere for all sectors of the society to attach importance to, support and participate in the educational community, and further improve the consensus of the whole society on higher vocational education and its internationalization. (2) Internalisation plans and projects should be funded by government in order to strengthen the guidance and capital investment for the multilateral cooperation “going global” of higher vocational education, accumulate the resources of various higher vocational colleges, industry enterprises and social groups, and promote the formation of corresponding international cooperation organizations. (3) Relevant policies and regulations should be negotiated through official government communication, therefore guidance documents issued by local governments at all levels, provide institutional norms and guarantees for the community of higher vocational education, and guarantee the sustainability of cooperation. (4) The construction of public think tank service platform for international cooperation and exchange of higher vocational education should be perfected, and promote the formation of think tank synergy. Think tank forums should be organised; form new mode of “Internet plus educational community”, the latest international new technology demand and talent training trends need to be timely announced through the Internet and APPs on mobile phones, explore the establishment of a new mechanism for normalized Education Exchange Based on the Internet, accumulate achievements for actively and steadily promoting international cooperation in vocational education, and strive to form replicable and generalizable experiences; Intermediary agencies that provide professional services to collaborator of educational community should be established and monitored with certain regulations.

To sum up, with the continuous improvement of higher vocational education system with Chinese characteristics, the educational community is also facing a new stage of in-depth development. As crucial sectors of the internationalisation of higher vocational education, higher vocational colleges, enterprises and government requires various approaches to strengthen core competitiveness individually, also the joint effort of these components is needed, to enrich the channels of cooperation in higher vocational education, to effectively balance the problems of industrial talents, to innovate the mode of international cooperation in higher vocational education, and to enhance the effectiveness and sustainability of cooperation in higher vocational education, thus becoming powerful driving forces for the in-depth development of the educational community, as well as the future development of mankind.

## References

- [1] Dickmann, M., Brewster, C. and Sparrow, P. (2008), *International Human Resource Management, A European Perspective*, 2nd Edition, Oxon: Routledge.
- [2] Deresky, H. (2003). *International Management: Managing Across Borders and Cultures*, 4th Edition, New Jersey: Pearson Education.
- [3] Gary, S.B. (1964) *Human Capital: A Theoretical and Empirical Analysis*, with Special Reference to Education, 1st edition, National Bureau of Economic Research, New York.
- [4] Haixia Qie & Baocun Liu. (2018). the “B&R” Education Community Construction and Innovation of Regional Education Governance Mode, *Journal of Educational Science of Hunan Normal University*, Vol.17, p.37-44.
- [5] Jinlin Qiu. (2020). Exploration and Reflection on the Integration of Industry and Education in the Internationalization of Vocational Education -- Practice of Vocational Colleges Based on the construction of China ASEAN Vocational Education Community, *Vocational and Technical Education*, Vol.41, p.24-28.
- [6] Juxia Zhang, Xiya Liu & Lei Zhu. (2019), The Practice, Incentives and Development of “going out” of Higher Vocational Education in China--Analysis of the Annual Quality Report of 1298 Vocational Colleges in China[J]. *Vocational & Technical Education Forum*, Vol.10, p.28-34.
- [7] Maolin Zeng. (2019). A Study on the Win-win Cooperation Mechanism of Vocational Education between China and ASEAN[J]. *Vocational & Technical Education Forum*, Vol.07, p.165-169.
- [8] Shengbing Li & Donglian Liu. (2013), The evolution and new conception of higher education internationalization motivation theory. *Journal of Higher Education*, Vol.34, p.29-34.
- [9] Shuqin, Wu. (2018). The Development Stages and Strategies of Higher Vocational Education Internationalization in the Evolution[J]. *Education and Vocation*, Vol.8, p.57-61.
- [10] UNESCO (2010). *Communiqué: 2009 World Conference on Higher Education: The New Dynamics of Higher Education on and Research for Societal Change and Development*. Paris: UNESCO, p.5.