

Study on the Curriculum System of Labor Education in Vocational Colleges under the Background of Dawan District Construction

Pan Liandi^{1,a,*}, Zhang Yanhui²

¹Ideological and Political Department of Guangdong University of Business and Technology, Zhaoqing, Guangdong, 526061, China

²Public Teaching Department of Guangdong University of Business and Technology, Zhaoqing, Guangdong, 526061, China

^a Email: 411519335@qq.com

*Corresponding Author

Keywords: Dawan District, Education, Talents, Curriculum System Research

Abstract: the Construction of Guangdong Hong Kong Macao Bay Area Has Risen to the Level of National Development Strategy. the Integration and Coordinated Development of Education, Talents and Other Elements in the Bay Area Are the Basic Conditions for the Realization of the Development Goals of the Bay Area. Find out the Supporting Conditions and Existing Problems of Education and Talent Cooperation in Guangdong, Hong Kong and Macao Bay Area, Make Clear That Dislocation Development and Complementary Advantages Are Unified in the Construction of Education and Talent Cooperation Mechanism in Guangdong, Hong Kong and Macao Bay Area; Give Full Play to the Decisive Role of Market Mechanism, Actively Play the Leading Role of the Government; Create Innovation and Exchange Platform for Education and Talent Cooperation; Improve Education the Incentive Measures for Talents and the Transformation Mechanism of Innovative Knowledge and Scientific and Technological Achievements Are Conducive to the Integration of Regional Advantages, the Promotion of the Overall International Competitiveness of the Bay Area and the Achievement of the Goal of the First-Class International Bay Area.

1. Introduction

The cooperation between Guangdong, Hong Kong and Macao has a profound historical, geographical and cultural foundation. Especially since the reform and opening up, the cooperation between Guangdong, Hong Kong and Macao has been promoted in depth, from the early single field and market main body to the active participation, layout and planning of the government. In 2019, the introduction of the outline of Guangdong Hong Kong Macao development plan (hereinafter referred to as the outline) is a sign of the new stage of cooperation to promote the joint cooperation between the government, market and society, and ushers in a new era of Guangdong Hong Kong Macao cooperation from the spontaneous to the formal standardization[1]. As a national development strategy, starting from the top-level design, Guangdong Hong Kong Macao Bay area has improved the strategic positioning and cooperation level of Guangdong Hong Kong Macao cooperation. On the one hand, it helps to solve the practical problems such as the convergence of economic structure, blind competition and internal friction, and insufficient development potential of each city in the bay area; on the other hand, it helps to play the characteristics and advantages of each city and form a complementary system structure To effectively release the economic vitality and creativity of Dawan district and lay a foundation for further deepening reform and expanding opening up and building a world-class Bay area.

2. Significance of Education and Talent Cooperation in Guangdong, Hong Kong and Macao

Cooperation is a prominent feature of collective behavior in human society, which has a wide range of applicability[2]. It means that two or more subjects cooperate, support and coordinate with

each other to achieve common goals. The cooperation mechanism is a series of rules, procedural system and code of conduct that regulate the behavior, content and means of cooperation subjects, and ultimately achieve the goal of cooperation[3]. Regional education cooperation refers to a school running idea and mode in which local education subjects break through the barriers of traditional system, re integrate regional education resources, and effectively exchange and interact with relevant organizations and personnel based on the principle of mutual benefit, mutual benefit and complementary advantages to improve the quality and efficiency of school running. It also refers to the education cooperation subjects in or across regions based on their own or social development needs To integrate and make use of their respective advantages in education environment and teaching resources, and to carry out social activities around education. Therefore, regional education cooperation is not only the collection of education subjects, but also the regional education cooperation network formed on the basis of cooperation [4].

Table 1 Excellent Universities And Key Development Areas in Hong Kong and Macao

Organization name	Location	Key areas	Organization name	Location	Key areas
University of Hong Kong	Hong Kong	Biomedicine, neuroscience, chemistry, computational science and information technology, medicine, genomics, integrated biology, etc	Macao University	Macao	Electrical and computer engineering, civil and environmental engineering, computer science, electromechanical engineering, applied mathematics, biomedicine, microelectronics research, integrated circuit, traditional Chinese medicine, Internet of things
Hong Kong University of science and technology	Hong Kong	Nanotechnology, neuroscience, biologics, electronics, wireless communication, information technology, artificial intelligence, big data, etc	Macao University of science and technology	Macao	Traditional Chinese medicine quality and innovative drugs, lunar data analysis of Chang'e satellite and lunar and Planetary Science, system engineering, smart city, architecture and urban planning
City University of Hong Kong	Hong Kong	Wireless communication technology, marine environment, materials and section Science, biomedicine	City University of Macau	Macao	Big data of tourism and hotel management and urban governance
Hong Kong Polytechnic University	Hong Kong	Civil, architectural, structural and environmental engineering, sustainable urban development, textile, rehabilitation, advanced manufacturing technology, rail transit	Macao Polytechnic Institute	Macao	It, health care, machine translation

2.1 Education and Talent Cooperation is an Important Part of the Planning Outline of Guangdong Hong Kong Macao Bay Area

Chapter 8 of the outline proposes to build a highland for education and talents in Dawan District, and provides strategic plans and policy guidance. The general principle is to adhere to the people-centered development idea, actively expand cooperation in education, culture, tourism, social security and other fields in Guangdong, Hong Kong and Macao Bay area, so as to achieve the goal of jointly building a high-quality public service, livable, industry and tourism friendly life circle.

Among them, the requirement for the cooperation of educational talents is to build a “highland of education and talents” and lay a foundation for education and talents to build a world-class Bay area[5]. Based on this goal, the Outline gives a detailed classification and guidance on the scope and fields of education and talent cooperation, including university cooperation, international education cooperation, vocational education cooperation, basic education cooperation, talent introduction, talent incubation, international talent use, technical migration, qualification certification, talent flow, talent incentive and guarantee, etc. Through absorbing the successful experience of early education and talent cooperation practice, the outline has made theoretical improvement on the cooperation between education and talent in two aspects: first, the cooperation between education and talent is not only a hardware to support economic development, but also a complex system that is suitable for living, business and travel. Its higher goal is to shape the humanistic spirit of the bay area and enhance the cultural and soft power of the bay area. The cooperation of higher education in Guangdong, Hong Kong and Macao is no longer a cooperation mode characterized by learning from each other's strengths and complementing each other's weaknesses according to the self-interest of each educational subject, but a cooperation mode characterized by the integration and development of higher education, that is, the mutual penetration and integration of regional higher education individuals and organizations, the mutual acquisition of each other's memories, emotions and attitudes through the sharing of history and experience, and the final integration and development of a community of shared destiny Type[6]. Secondly, education and talent cooperation need to break the barriers of industry, region, system and mechanism, and better explore and innovate the system on the basis of “one country, two systems” [7].

2.2 Education and Talent Cooperation Lay the Social Foundation for Guangdong Hong Kong Macao Cooperation

The early education and people to people cooperation promoted the initial integration and development of Guangdong, Hong Kong and Macao[8]. The three places share the same root, similar location, similar language, similar customs and habits, which provide a good foundation for deepening the cooperation in education, humanities, science and technology, and talents between Guangdong, Hong Kong and Macao. As early as in the 1990s, domestic scholars realized the importance of strengthening the education cooperation between Guangdong, Hong Kong and Macao. They believed that it was necessary for Guangdong, Hong Kong and Macao to learn from each other in terms of teaching system, scientific research resources, theoretical research of higher education, joint education and other aspects. With Hong Kong funded enterprises going deep into the mainland to set up factories, a large number of enterprise management personnel, professional and technical personnel, and financial personnel flooded into the Pearl River Delta, Guangdong Hong Kong Macao Education and talent cooperation began to flourish, at the same time, the training of relevant management, technology and production personnel in the mainland was also widely carried out, and remarkable results were achieved.

3. Education and Talent Cooperation is the Only Way to Deepen the Cooperation between Guangdong, Hong Kong and Macao

The plan of the outline is ambitious and strategic, but based on the reality, there are still challenges and difficulties to be overcome. The development potential of Guangdong, Hong Kong and Macao as a close cooperation economy mainly depends on the cooperation and development of regional higher education and high and new technology[9]. However, the education cooperation of Guangdong, Hong Kong and Macao is still in the exploration stage, lacking in the breadth and depth of cooperation, institutional barriers and other outstanding problems that hinder the education cooperation of Guangdong, Hong Kong and Macao, which are difficult to form an effective joint force. The cooperative education in the three regions is still based on the regulations on Chinese foreign cooperative education issued in 2003. The relevant regulations are difficult to meet the needs of the current development of education cooperation between Guangdong, Hong Kong and Macao, which not only increases the difficulty of cooperative education in the three regions, but

also frustrates the enthusiasm of cooperative education. However, problems such as complicated talent introduction procedures, lack of supporting preferential welfare policies and insufficient funds for high-quality scientific research posts also exist. Leading to the loss of outstanding talents. Based on the above problems and the particularity of “one country, two systems” in Guangdong, Hong Kong and Macao, some scholars have proposed to build the education community in Dawan District, realize the integrated development, further promote the cooperation of education and innovation science and technology, realize the coordinated development of higher education and industry, connect regional innovation resources, improve the transformation mechanism of innovation achievements, and promote We will promote the integrated development of industry, learning and research, and form a comprehensive coordinated innovation system from knowledge creation to product development. In addition, Dawan district should absorb Hong Kong's development experience in the areas of rule of law, mechanism and security system, improve the mechanism construction of mutual recognition, introduction, training and exchange of talents, and realize the rational allocation of talents and market resources. It can be seen that to implement the requirements of the outline and achieve the goal of building a world-class Bay area, we should focus on in-depth exploration and innovation in the system and mechanism, and break down regional, industrial and institutional barriers.

4. Conditions for the Construction of Education and Talent Cooperation Mechanism in Guangdong, Hong Kong and Macao

4.1 Policy Guarantee

For a long time, the central government has attached great importance to and supported the education and people to people cooperation between Guangdong, Hong Kong and Macao. With the signing of CEPA agreement and Guangdong Hong Kong cooperation framework agreement, building the most dynamic and influential urban agglomeration has become the main goal of cooperation between Guangdong, Hong Kong and Macao. In February 2019, the Central Committee of the Communist Party of China and the State Council issued the outline of the development plan of the Great Bay area of Guangdong, Hong Kong and Macao, marking the formal promotion of strategic cooperation of the Great Bay area of Guangdong, Hong Kong and Macao. A series of policies issued by the state for the integrated development of education in Guangdong, Hong Kong and Macao have greatly promoted the development of cooperation among the three regions.

4.2 Mechanism Support

From the perspective of cooperation subject, the education cooperation subject of Dawan district is developing from enterprise and government to the direction of enterprise and government cooperation, social intermediary organizations are growing day by day, and promoting the deepening of cooperation in Dawan district. With the enhancement of the economic and innovation capacity of Dawan District, the mode of Guangdong Hong Kong Macao scientific and technological cooperation has gradually changed from the original one-way output to the coordinated development, with frequent interaction and expanding cooperation space. Among them, education and science and technology alliance organizations such as Guangdong Hong Kong Macao Vocational Education Alliance, Dawan District University Alliance, University Science and Technology Park alliance have emerged one after another. Under the guidance and support of Guangdong Hong Kong Macao three local governments, they have played an important role in promoting the joint development of scientific research and creative activities of scientific research institutes, universities, enterprises, social organizations, etc. In terms of capital guarantee for cooperation, in 2009, Guangdong Province set up a special fund for Guangdong Hong Kong Co construction innovation platform to support universities and scientific research institutions in both places to establish joint R & D centers and promote innovation and science and technology cooperation. In terms of content and means of cooperation, in March 2017, Shenzhen City and Dongguan city attracted international talents through talent subsidies, providing talent apartments

and other ways, actively promoted cooperation between Guangdong, Hong Kong and Macao, and promoted coordinated development of talent training and industrial R & D; in May 2019, Zhuhai City signed a framework cooperation agreement with Macao University of science and technology to further regional education, cooperative education and scientific and technological cooperation Step by step, we will work together to establish state key laboratories for construction and medicine, improve the R & D system of scientific and technological achievements, and build a quality education and innovation center in Guangdong, Hong Kong and Macao.

5. Practice Basis

Guangdong Hong Kong Macao Bay area has a good foundation for economic cooperation. It is one of the regions with the strongest comprehensive strength, the highest degree of openness and the most dynamic economy in China. It has outstanding advantages in capital, channels, talents and technology. Dawan district has many excellent scientific research institutions, such as Hong Kong University and Sun Yat sen University, with strong scientific research capacity and abundant scientific research funds. In 2004, Zhu Jingwu, President of the University of Hong Kong, and Liu Ying, deputy mayor of Shenzhen, jointly signed a high-level cooperation agreement on professional personnel training, and planned to open a graduate school of the University of Hong Kong in Shenzhen, in order to strengthen personnel training and scientific research cooperation between the two places. In the same year, the Department of science and technology of Guangdong Province and the government of Macao Special Administrative Region jointly signed an agreement on science and technology cooperation between the two places, which formulated development plans for science and technology cooperation between the two places from the perspectives of science and technology, technology, industry, talents and other aspects, so as to promote the normalized development of science and technology cooperation between the two places. In 2009, Guangdong Province set up a special fund for Guangdong Hong Kong Co construction innovation platform to support universities and scientific research institutions in both regions to establish joint R & D centers and promote innovation and science and technology cooperation. In recent years, the cooperation of higher education in Guangdong, Hong Kong and Macao has entered a new stage of development. Hong Kong University and Macao University have cooperated with the mainland in running schools. Hong Kong Baptist University and Beijing Normal University have cooperated to establish a joint international college. Macao University has moved to Hengqin, Zhuhai as a whole to run schools and started to innovate the “new special zone” development mode of higher education. With the development of regionalization, localization and the close combination of various related public organization networks, Guangdong, Hong Kong and Macao Bay area, in the process of education integration and development, relies on the excellent talent resources of universities, laboratories and research institutes, high-tech industries in three places, and jointly formulates cooperation objectives and development framework, and promotes the achievement of Guangdong, Hong Kong and Macao Bay area with the help of government, universities, enterprises and other social forces Become the strategic goal of building an international science and technology innovation center. In 2017, the Hong Kong SAR government and Shenzhen municipal government signed a cooperation agreement to jointly build “Shenzhen Hong Kong Innovation and Technology Park” in Luomazhou Hetao region. In January 2019, general secretary Xi Jinping inspected in Guangdong Province, stressed that we should deepen the scientific and technological cooperation between Shenzhen and Hong Kong, consolidate the power of innovation and development, create a “Shenzhen Hong Kong Innovation Circle”, and promote regional cooperation in Guangdong, Hongkong and Macau.

6. Conclusion

The construction of education and talent cooperation mechanism in Guangdong, Hong Kong and Macao Bay area is a systematic project, which is of great significance, and the bay area has mature conditions for cooperation. However, the difficulties and problems in the construction must be paid

great attention to, and solutions must be put forward to realize the collaborative innovation and development of Guangdong, Hong Kong and Macao. In terms of long-term development, the construction of education and talent cooperation mechanism in Guangdong, Hong Kong and Macao Bay area is the pillar of successful construction of Guangdong, Hong Kong and Macao Bay area, and also the basic step to promote the in-depth development of reform and opening up and realize national unity.

Acknowledgement

1) The research has been financed of Ideological and political education in Colleges and universities in 2019 of Guangdong Province “Research on labor education in Vocational Colleges and Universities under the background of Dawan district construction” (2019GXSZ146).

2) The research has been financed of Education research project of Zhaoqing Education Development Research Institute in 2019 “Research on the construction of labor education curriculum system in Vocational Colleges under the background of Dawan district construction” (20191024).

3) The research has been financed of Guangdong Higher Vocational College Ideological and political theory course construction project in 2019 “Research on labor education in Vocational Colleges under the background of Dawan district construction”(20191130).

References

- [1] QIN Shi-qiao. (2017). A Preliminary Study on the “1 + X + 1/X” Knowledge System for Talents Cultivation in Opto-electronics. *Journal of Higher Education Research*.
- [2] Siqing Tian, Qiang Hou, Yuenan Wang,. (2018). Research and Practice on the Cultivation of Innovative Talents in Automation Specialty Under the Background of Engineering Education. 2018 9th International Conference on Information Technology in Medicine and Education (ITME).
- [3] Pang Q. (2017). The Construction of Curriculum System of Artistic Design Professionals Cultivation and Practical Education Based on Simulation Experiment.
- [4] Zhang Lei, Shang Tao, Li Guichen,. (2017). Difference Study on Research-oriented Talents Cultivation in China and Australia--A Case Study of Mining Engineering. *Journal of Higher Education*.
- [5] Liang See Tan, Keith Chiu Kian Tan. (2017). *Theory, Research and Conceptions of Curriculum for High Ability Learners: Key Findings, Issues and Debates*. Springer Singapore.
- [6] Y. Wang, S. Zhang, J. Fu. (2017). A study on the optimization design of the training program of curriculum system for cross-border e-commerce talents in higher vocational colleges based on the CIPP model. *Revista de la Facultad de Ingenieria*, vol. 32, no. 8, pp. 589-596.
- [7] WU Hailin, XIAO Yining. (2018). Research on Integration Between Industry and Education of Local Undergraduate Colleges under “Double First-class” Construction--Taking Economy and Administration Majors as examples. *Journal of Higher Education*.
- [8] WU Hailin, XIAO Yining. (2018). Research on Integration Between Industry and Education of Local Undergraduate Colleges under “Double First-class” Construction--Taking Economy and Administration Majors as examples. *Journal of Higher Education*.
- [9] Rao Xuemei. (2017). Personalized Educational Mode in Tourism and Hotel Management Majors of Vocational College:the Perspective of Innovative Talent Training. *Journal of Higher Education*.