

DEVELOPMENT OF FINANCE AND COMMERCE MAJORS IN GUANGDONG HIGHER VOCATIONAL COLLEGES: SYNERGISTIC DEVELOPMENT OF POLICY, INDUSTRY AND MARKET

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Abstract: This paper takes the finance and commerce majors in Guangdong higher vocational colleges as the research object, and systematically analyzes the synergistic development path of policy drive, industrial demand and market orientation. The study finds that Guangdong Province has constructed a policy-driven vocational education system through key policies such as the "14th Five-Year Plan for Vocational Education", industry-education integration policies, and special fund support policies. Under the background of industrial upgrading, the demand for talents in cross-border e-commerce, logistics, financial technology and other fields continues to grow. Higher vocational colleges have gradually achieved precise docking with market demand through professional optimization, curriculum reform and school-enterprise cooperation. The deep integration of policy, industry and market in Guangdong higher vocational colleges is the key to improving the quality of talent training in finance and commerce majors. In the future, it is necessary to further strengthen the cultivation of digital skills and the expansion of international vision.

Keywords: Higher vocational colleges; Finance and commerce majors; Policy; Industry; Market

1 INTRODUCTION

As an important engine of China's regional economic development, Guangdong Province's regional GDP reached 14,163.381 billion yuan in 2024, an increase of 3.5% over the previous year. From the analysis of industrial structure, the added value of the tertiary industry reached 8,143.131 billion yuan, accounting for 57.5% of the regional GDP, making it the main contribution to economic growth. It is worth noting that the added value of high-tech manufacturing increased by 10.2%, accounting for 32.0% of the added value of industries above designated size, highlighting the remarkable effectiveness of industrial upgrading[1]. Against the backdrop of the in-depth advancement of the Guangdong-Hong Kong-Macao Greater Bay Area national strategy, strategic emerging industries such as modern service industries and digital economy are showing a rapid development trend, prompting the talent demand structure of finance and commerce majors to evolve in the direction of "highly skilled, composite and international". As the main position for training technical and skilled talents, the construction level of finance and commerce majors in higher vocational colleges directly affects the efficiency of regional economic transformation and upgrading and the improvement coefficient of industrial core competitiveness. Based on the three-dimensional analysis framework of policy supply, industrial demand and market feedback, this study systematically explores the development characteristics, existing bottlenecks and optimization strategies of finance and commerce majors in higher vocational colleges in Guangdong Province, so as to provide decision-making basis for the reform and innovation of vocational education in the Guangdong-Hong Kong-Macao Greater Bay Area.

2 POLICY DRIVE: BUILDING A NEW ECOLOGY FOR VOCATIONAL EDUCATION DEVELOPMENT

2.1 Synergistic Promotion of National Strategies and Local Policies

In recent years, the state has successively issued the National Vocational Education Reform Implementation Plan and the Opinions on Promoting the High-quality Development of Modern Vocational Education, which clearly emphasize deepening the integration of industry and education and school-enterprise cooperation, and are committed to improving the education system of combining morality and technology and combining work with study. Guangdong Province has actively responded to the national strategy. According to the Guangdong Province "14th Five-Year" Plan for Vocational Skills Training, Guangdong Province plans to carry out a total of 7 million person-times of various vocational skills training by 2025, and the number of high-skilled talents will reach 5.8 million[2]. Compared with the current number of 4.43 million high-skilled talents in Guangdong Province, this goal shows a significant increase. In 2025, Guangdong Province further issued the Guangdong Province Vocational Skills Training Subsidy (Guidance) Standard Catalogue (2025 Edition), which included 14 digital occupations such as big data and artificial intelligence in the subsidy scope, focusing on supporting the training of digital technology and skilled talents.

In terms of financial support policies, Guangdong Province plans to invest 11.6 billion yuan in special funds during the "14th Five-Year Plan" period to fully support the development of vocational education, and raise the subsidy standard for tuition-free secondary vocational education to 3,500 yuan per student per year[3]. In 2025, Guangdong Province

plans to arrange 460 million yuan in special funds, of which 400 million yuan will be used for higher vocational colleges to "improve their level", focusing on building 300 provincial-level high-level professional groups[4] to strengthen the quality improvement of professional group construction. These policies have strongly supported the vigorous development of finance and commerce majors, providing a solid institutional backing and sufficient financial support.

2.2 Deepening of Industry-Education Integration and School-Enterprise Cooperation

Guangdong Province has promoted the in-depth development of industry-education integration through policy guidance. By the end of 2024, a total of 1,223 industry-education integration enterprises have been successfully put on the record in the province, higher vocational colleges have joined hands to build 146 modern industrial colleges, and more than 4,000 order classes have been opened[5]. For example, a vocational and technical college in Guangdong Province has established the "JD Smart Logistics Supply Chain Industrial College" in cooperation with JD Logistics, carried out the 1+X certificate pilot, and trained intelligent logistics talents; a vocational school in Guangzhou has carried out modern apprenticeship pilots with Guangdong Cosmo Lady, TCL and other enterprises, and jointly built an e-commerce network marketing industrial college.

The implementation of tax preferential policies has further stimulated the enthusiasm of enterprises to participate in industry-education integration. Some enterprises in Guangdong Province have obtained tax relief such as education surcharges as industry-education integration enterprises, effectively reducing the cost of enterprises participating in vocational education. In addition, the Regulations on the Development of Skilled Talents in Guangdong Province (the first in the country) clarifies the interconnection of career development paths between skilled talents and professional and technical talents, and promotes vocational school graduates to enjoy the same treatment as ordinary college graduates in terms of household registration, professional title evaluation, etc.[6], providing institutional guarantee for the development of finance and commerce talents in higher vocational colleges.

3 INDUSTRIAL UPGRADING: GIVING BIRTH TO NEW DEMANDS FOR FINANCE AND COMMERCE MAJORS

3.1 Industrial Structure Optimization and Talent Demand Characteristics

The industrial structure of Guangdong has been continuously optimized. In 2024, the added value of the tertiary industry reached 8.14 trillion yuan, accounting for 57.5% of GDP, among which modern service industries and digital economy have become core development fields. As an emerging business form, cross-border e-commerce achieved import and export volume of 427.34 billion yuan in the first half of 2024, accounting for 10% of the province's total foreign trade volume, and the annual import and export volume of Guangzhou, Shenzhen and Foshan all exceeded 100 billion yuan[7]. Driven by both e-commerce and manufacturing, the market demand for the logistics industry continues to rise. In 2024, the average monthly salary of logistics management graduates reached 5,113 yuan, and the professional counterpart rate was as high as 86.35%.

Fields such as financial technology and digital commerce show the compound characteristics of "technology + business" in terms of talent demand. For example, in the 2025 campus recruitment of China Post, candidates for logistics, finance, e-commerce and other positions are required to master big data analysis, intelligent warehousing and other skills, with a salary range of 8,000 to 12,000 yuan. The intelligentization of the service industry has significantly improved the employment quality of individuals[8]. A vocational college in Guangdong has established a digital finance college in cooperation with Alibaba Cloud and Huawei, and developed courses such as blockchain finance and financial big data analysis to cultivate financial talents adapting to the digital economy.

3.2 Analysis of Talent Demand in Key Industries

3.2.1 Cross-border e-commerce

The scale of cross-border e-commerce in Guangdong ranks first in the country. In 2023, the import and export volume reached 843.3 billion yuan, 74.6 times that of 2015. The development of the industry has given birth to the demand for cross-border e-commerce operation, international logistics, cross-border payment and other positions. A vocational school in Guangzhou has set up a new cross-border e-commerce major, and joined hands with Beijing Zhanchuang Technology to cultivate cross-border e-commerce elites through the mode of "online training + offline special training". A technical college in Guangdong has officially integrated cross-border e-commerce skills training into the curriculum system, and built a training base with SHEIN cross-border e-commerce, so that students can have the opportunity to participate in real project operations.

3.2.2 Modern logistics

The intelligent and digital transformation of Guangdong's logistics industry has accelerated, and the gap of intelligent logistics talents exceeded 200,000 in 2024. The modern logistics management major of a vocational and technical college in Guangdong has cooperated with well-known enterprises such as Suning.com and JD Logistics, introduced advanced training equipment such as intelligent warehousing and UAV distribution, carried out the 1+X certificate pilot, and the graduate employment rate has remained above 98% for many years, the graduate placement rate is as high as 97.28%, and the average monthly income is 3,932.72 yuan. According to the 2023 graduate employment quality annual

report of a vocational college in Guangdong, the employment rate of logistics management majors in the School of Business Administration reached 91.04%, and most of the graduates went to logistics enterprises and supply chain management positions in manufacturing enterprises. In addition, graduates of logistics management major also have the ability to work in many fields such as commercial circulation enterprises, government agencies, educational institutions and consulting management companies.

3.2.3 Digital finance

Digital technology has reshaped the pattern of the financial industry, and technologies such as blockchain and artificial intelligence have been widely used. A vocational college in Guangdong has built an industry-education integration project with the Guangzhou Digital Finance Association, developed digital finance industry standards, applied for 15 software copyrights and invention patents, and promoted the leapfrog upgrading from "technology application" to "ecological empowerment". Graduates of financial services and management majors can be engaged in financial product marketing, investment and financial consulting and other work. According to the latest data, the average monthly salary of graduates of this major in 2024 reached 8,900 yuan.

4 MARKET ORIENTATION: OPTIMIZING PROFESSIONAL CONSTRUCTION AND TALENT TRAINING

4.1 Docking of Professional Settings and Industrial Demand

Higher vocational colleges in Guangdong flexibly respond to industrial needs and dynamically adjust the professional structure. For example, a vocational and technical college in Guangdong has opened 11 finance and commerce majors including modern logistics management, e-commerce, and big data and accounting, covering accounting and finance, e-commerce logistics and other fields in an all-round way, which is highly consistent with the economic development needs of the Guangdong-Hong Kong-Macao Greater Bay Area. A vocational school in Guangzhou has actively included emerging majors such as business data analysis and application and mobile business in the enrollment plan, and its graduates are widely serving in the core data operation positions of e-commerce platforms and Internet enterprises.

The through training mode of secondary and higher vocational education has effectively strengthened the continuity of talent supply. By 2025, the number of three-two segmented degrees provided by a vocational school in Guangzhou will reach 1,700, which is closely connected with 15 higher vocational colleges such as a vocational and technical college in Guangdong Province, unblocking the students' further study path. The 2024 enrollment plan of a vocational and technical college in Guangdong shows that majors such as business English and financial services and management continue to expand enrollment, with tuition fees of 5,250-10,000 yuan/year, meeting the market demand for high-quality financial talents.

4.2 Curriculum Reform and Teaching Innovation

4.2.1 Integration of digital skills into curriculum system

Facing the impact of digital economy on finance and commerce industry, higher vocational colleges actively promote curriculum reform. A technical vocational college in Guangdong has integrated new technologies such as big data and artificial intelligence into finance and commerce courses, developed an "AI + finance" curriculum system, reconstructed the contents of courses such as cost accounting and financial robots, and added digital technology application modules. A vocational and technical college in Guangdong has joined hands with Huawei to introduce the domestic DeepSeek large model, and jointly built an artificial intelligence platform for smart campus, which has strongly promoted the digitization process of teaching scenes.

4.2.2 Practical teaching and industry-education integration

The school-enterprise cooperation in building training bases has become an important carrier of practical teaching. A vocational and technical college in Guangdong is equipped with a series of advanced facilities such as accounting comprehensive training room and financial engineering training base, and has cooperated with Suning.com, Weiyigou and other enterprises to build an on-campus distribution center and entrepreneurship center, so that students can have the opportunity to participate in the operation of real businesses. A vocational school in Guangzhou has cooperated with Guangdong Baodao Glass and Guangdong Huimei Group to establish off-campus internship bases and carry out order-based training, with the student employment rate exceeding 95% for many consecutive years.

4.2.3 Construction of teaching staff and teaching materials

Higher vocational colleges optimize the teaching staff structure through the training of "double-qualified" teachers and the introduction of enterprise experts. A technical vocational college in Guangdong has set up a teaching staff database composed of experts from 90 enterprises such as SF Express, 211 teachers have taken turns to exercise in enterprises, and 130 enterprise experts have undertaken teaching tasks, realizing the role integration of "teachers are engineers and engineers are teachers". In terms of teaching material construction, school-enterprise cooperation has developed characteristic teaching materials such as RPA Development and Application and Digital Intelligence Customer Service, integrating the latest industry technologies and cases into the teaching content.

A vocational and technical college in Guangdong has implemented the "Hundreds of Teachers Entering Thousands of Enterprises" plan. In 2024, a total of 243 professional teachers were sent to work in enterprises such as Tencent Financial Technology and SF Supply Chain, and participated in practical projects such as cross-border e-commerce

digital marketing and intelligent logistics system optimization, so that the teachers' practical teaching ability has been significantly improved. A vocational and technical college in Guangdong has built a "three-stage progressive" training system. Newly recruited teachers need to complete 200 hours of enterprise practice training, intermediate title teachers need to participate in 6 months of industrial practice every three years, and senior title teachers must take the lead in completing more than 2 industry-education integration projects.

The construction of teaching materials highlights the characteristics of "post, course, competition and certificate" integration. Shenzhen Institute of Information Technology, in conjunction with Shenzhen Cross-border E-commerce Association, has developed 12 loose-leaf teaching materials such as Cross-border E-commerce Big Data Analysis and RPA Financial Robot Application, and supporting the construction of a library of 278 real enterprise project cases. The Intelligent Financial Sharing Practice textbook developed by a vocational and technical college in Guangdong in cooperation with Kingdee Software has integrated 18 cutting-edge technologies such as financial robot process automation and electronic invoice blockchain deposit, and has been adopted by 67 vocational colleges across the country.

In order to improve the international applicability of teaching materials, the Teaching Steering Committee for a Certain Professional of Higher Vocational Education in Guangdong Province has taken the lead in formulating the International Curriculum Certification Standard for Cross-border E-commerce Professionals, and jointly developed 6 regional teaching materials such as Business Data Analysis in the Guangdong-Hong Kong-Macao Greater Bay Area (Bilingual Edition) with the Hong Kong Vocational Training Council. A vocational and technical college in Guangdong has even introduced the certification standards of the German Chamber of Industry and Commerce (IHK), and embedded international teaching contents such as EU CE certification and cross-border customs compliance into courses such as International Logistics Management, so that the construction of teaching materials can be in line with international vocational standards.

5 CHALLENGES AND COUNTERMEASURES

5.1 Main Challenges

5.1.1 Uneven Policy Implementation and Resource Allocation

Studies have shown that some higher vocational colleges in Guangdong have problems of insufficient efficiency in policy implementation, specifically manifested in the formalization of the industry-education integration mechanism, the decline of enterprise main body participation momentum, the insufficient depth of the school-enterprise collaborative education mechanism construction, and the low utilization rate of the practical teaching resource platform and other outstanding contradictions. It is worth noting that there is a significant gap in the allocation of vocational education resources in the eastern, western and northern regions of Guangdong. Key indicators such as per student funding, teaching staff construction and training base density form obvious inter-regional resource endowment differences with the Pearl River Delta economic belt. This development gradient difference has seriously restricted the balanced development of the supply system of high-skilled talents in finance and commerce.

5.1.2 Disconnection between curriculum system and industrial demand

In the process of continuously promoting the reform of the curriculum system in higher vocational colleges in Guangdong, some majors still have problems such as lagging curriculum content update and relatively weak practical teaching system. Taking the accounting major as an example, its core curriculum system has not systematically integrated the cutting-edge digital contents such as financial robots (RPA) and blockchain technology. The main reason for this is that the curriculum content has a generational gap with the development of industry technology, resulting in the significant feature that graduates show insufficient job adaptability under the background of digital financial transformation.

5.1.3 Insufficient practical ability of teaching staff

Some professional teachers have the problem of relatively scarce industry practice experience, resulting in difficulty in effectively integrating cutting-edge technological achievements and real business scenarios into the teaching system. Empirical studies have shown that among the teaching staff of finance and commerce majors in higher vocational colleges in Guangdong Province, the proportion of teachers with more than three years of front-line work experience in enterprises is less than 30%. Moreover, the current teacher enterprise practice period is generally short, resulting in teaching content lagging behind industrial development needs, and it is difficult to effectively achieve the dynamic connection between teaching and industry required by industry-education integration.

5.2 Optimization Countermeasures

5.2.1 Strengthening policy implementation and resource coordination

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The government urgently needs to construct a systematic and normalized supervision and evaluation system for vocational education policy implementation, establish a quantitative index-based assessment mechanism for the effectiveness of industry-education integration, and incorporate the breadth, depth, and effectiveness of enterprises' participation in vocational education into the corporate social responsibility credit evaluation system. Meanwhile, implement preferential policies for fiscal transfer payments, focus on strengthening the special fund guarantee for vocational education in the eastern, western, and northern regions of Guangdong, and rely on the "Strong Teachers Project" for precise teacher cultivation and the "Training Base Construction" modern facility upgrading project to systematically improve the balance and development quality of vocational education resource allocation in these regions.

5.2.2 Deepening curriculum reform and industry-education integration

Against the backdrop of the new "Double High" construction, higher vocational colleges should establish a scientific and efficient dynamic curriculum adjustment mechanism, deepen school-enterprise cooperation, and regularly revise talent training programs in conjunction with industry enterprises to ensure that educational content remains consistent with market demand. For example, introduce the "post-course-competition-certificate" integration model, embed vocational skill level certificate training content into the curriculum system, and achieve the docking of curriculum content with professional standards. At the same time, strengthen in-depth cooperation with leading enterprises, jointly build industrial colleges and research centers, and promote the integrated development of "teaching-scientific research-industry".

5.2.3 Improving teachers' practical ability and international vision

Implement a teacher enterprise practice system, clearly requiring professional teachers to complete no less than six months of targeted enterprise practice training within a five-year cycle. Encourage teachers to actively participate in enterprise technology research and development projects and social service work to promote the effective transformation of scientific research achievements into teaching resources. Deepen strategic cooperation with overseas universities and enterprises, systematically introduce international advanced educational concepts and standardized curriculum systems, and strive to cultivate composite finance and commerce professionals with a global vision.

6 CONCLUSIONS AND OUTLOOK

The innovative development of finance and commerce majors in higher vocational colleges in Guangdong presents a three-dimensional collaborative driving mechanism of policy guidance, industrial transformation, and market regulation. From the policy dimension, national strategic planning and regional development outlines constitute the top-level institutional design. The continuous investment guarantee mechanism of provincial fiscal special education funds and industry-education integration policy incentives form a multi-dimensional linkage institutional framework. At the industrial transformation level, the clustered development of modern service industries and the innovative breakthroughs of the digital economy in the Greater Bay Area have given rise to compound talent demands that integrate digital capabilities and industry knowledge. In terms of market regulation, higher vocational colleges have significantly improved talent training quality and market adaptability by establishing a dynamic professional adjustment mechanism, innovating curriculum development models, and deepening school-enterprise collaborative education systems.

The main achievements in the development of finance and commerce majors in higher vocational colleges in Guangdong are reflected in three aspects: policy synergy, industry-education integration, and quality optimization. The policy support system has effectively stimulated the vitality of running schools, and the depth and breadth of industry-education integration have continued to expand. Professional construction is closely aligned with new digital economy formats, and curriculum content has achieved dynamic connection with industry technical standards. The quality of talent training has been widely recognized by employers.

In response to the new trends in regional economic development, it is recommended to build a systematic development path. The curriculum system needs to improve digital literacy and international competence training modules to form a hierarchical and progressive capability matrix. Industry-education integration should establish a school-enterprise standard conversion mechanism and two-way talent flow channels to enhance the efficiency of technical skill accumulation. International training needs to strengthen docking with international rules and cross-border education cooperation to build an open training system. Through multi-dimensional systematic construction, the strategic support efficiency of professional clusters in serving regional economic transformation and upgrading can be comprehensively improved.

COMPETING INTERESTS

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