

Talent Development Practices and Exploration for Cross-Border E-commerce in the Guangdong-Hong Kong-Macao Greater Bay Area

-- A case study of the cross-border e-commerce industry college of Guangdong university of science and technology

Dan Gao*

Guangdong University of Science and Technology, China

* Corresponding author: Dan Gao (Email: 244593610@qq.com)

Abstract: In response to the economic development and growing demand for talent in cross-border e-commerce within the Guangdong-Hong Kong-Macao Greater Bay Area, the Cross-Border E-commerce Industry College at Guangdong University of Science and Technology has undertaken several initiatives. These include optimizing professional focus and curriculum design, enhancing faculty development, prioritizing practical teaching both on and off-campus, and improving assessment quality. By promoting collaborative education between academia and industry, the college aims to cultivate competitive, versatile talents in cross-border e-commerce. This practice serves as a valuable reference for reforming the talent development model in the Bay Area's cross-border e-commerce sector.

Keywords: Guangdong-Hong Kong-Macao Greater Bay Area; Cross-Border E-commerce Talent; Practice and Exploration.

1. Introduction

In recent years, cross-border consumption has experienced remarkable growth. According to customs statistics in 2023, China's total import and export volume in cross-border e-commerce reached 2.38 trillion yuan, marking a 15.6% increase. This includes exports of 1.83 trillion yuan (up 19.6%) and imports of 548.3 billion yuan (up 3.9%). The Guangdong-Hong Kong-Macao Greater Bay Area possesses a well-established cross-border e-commerce ecosystem characterized by a strong manufacturing base, diverse product sources, robust industrial clusters, and a deep-rooted tradition in foreign trade. These elements provide significant advantages for the region's development. As the economy in the Bay Area rapidly evolves, the demand for cross-border e-commerce talent has surged. To capitalize on the leading role of universities in Dongguan in driving innovation within the Bay Area, our institution has integrated both internal and external resources, emphasizing hands-on training and practical experience for students while establishing seamless connections with enterprises. Our goal is to build a distinctive and high-quality talent cultivation system in cross-border e-commerce, contributing to the supply of application-oriented, versatile, and skilled professionals for the region's innovative development.

2. Challenges in Talent Development for Cross-Border E-commerce in the Guangdong-Hong Kong-Macao Greater Bay Area

As cross-border e-commerce flourishes in the Guangdong-Hong Kong-Macao Greater Bay Area, enterprises are increasingly in need of composite talents in this field. However, there are several challenges in talent cultivation

within the region.

(1) Mismatch Between Talent Supply and Rapid Industry Development

The pace at which theoretical knowledge in university e-commerce programs is updated is lagging, and the curriculum does not adequately align with the swift evolution of cross-border e-commerce. Key issues include:

Curriculum Relevance: The curriculum fails to keep pace with local economic developments and lacks practical application.

Limited Practical Experience: Students have insufficient opportunities for hands-on experience with enterprises, resulting in low operational competencies.

Insufficient Qualified Instructors: There is a shortage of frontline educators with real-world experience in cross-border e-commerce, and few dual-qualified faculty members exist.

Lack of Workplace Education: Universities offer limited career education, leading to a deficiency in professional skills among students.

These factors culminate in a substantial number of graduates from Bay Area universities in cross-border e-commerce being unable to meet the rapidly growing demands of the industry.

(2) Insufficient Emphasis on Interdisciplinary Integration in Cross-Border E-commerce Programs

Cross-border e-commerce positions primarily target graduates from fields such as Business English, International Economics and Trade, and Cross-Border E-commerce. However, many universities do not emphasize the essential feature of "interdisciplinary integration" in their teaching and practical training aimed at cultivating versatile talents. Current surveys indicate that cross-border e-commerce talents can be broadly categorized into business roles and platform operation roles. The core knowledge and skills required for both roles include foundational knowledge and

practical abilities in cross-border e-commerce, proficiency in foreign languages, and basic computer skills. Business roles necessitate expertise in cross-border e-commerce operations, cross-cultural communication, and international business negotiation skills; whereas platform operation roles demand skills in online marketing, data analysis, and information technology applications. Therefore, the implementation of application-oriented talent cultivation in cross-border e-commerce presents significant challenges to traditional curricula, requiring a thorough restructuring of the course system, which many application-oriented universities find difficult to navigate.

3. Talent Development Pathways and Outcomes of the Cross-Border E-commerce Industry College at Guangdong University of Science and Technology

The Cross-Border E-commerce Industry College at Guangdong University of Science and Technology has actively explored and practiced the cultivation of cross-border e-commerce talents by fully integrating resources from schools, enterprises, and society.

(1) Reasons for Talent Development in Cross-Border E-commerce

1) Urgent Demand for Cross-Border E-commerce Talent Due to Local Economic Development in Dongguan

Located in Dongguan, at the heart of the Guangdong-Hong Kong-Macao Greater Bay Area and the Pearl River Delta economic circle, the school enjoys significant geographical economic advantages. Data shows that in 2023, Dongguan's cross-border e-commerce imports and exports reached 90.72 billion yuan, a year-on-year increase of 10.8%, ranking fourth in the province. With traditional foreign trade being substantial and new forms of foreign trade like e-commerce growing rapidly, Dongguan is in urgent need of a large number of cross-border e-commerce professionals.

2) Practical Needs for Cultivating Business English Professionals

2) Optimization Needs for the Talent Development Program in Cross-border E-commerce-related Majors at School

The talent development program for cross-border e-commerce-related majors at school must align closely with industry demands, emphasizing the enhancement of students' practical skills and comprehensive capabilities. At first, the program should prioritize school-enterprise collaboration by building an integrated "industry-university-research" model. Leveraging industry resources, the program should include practical training projects, company visits, and internships to help students accumulate real-world experience and enhance their employability. Then the course design should take into account the dynamic changes and emerging trends in the cross-border e-commerce industry. Core courses such as cross-border e-commerce platform sales and operations, cross-border regulations and international payment settlements, and international logistics and supply chain management should be introduced. Moreover, digital technology and data analysis should be integrated into the curriculum. By guiding students to use relevant e-commerce tools and platform data for hands-on practice, they can apply knowledge in real business scenarios, solve practical problems, and strengthen their overall cross-border e-

commerce competencies.

3) A Strong School-enterprise Partnership Lays the Foundation for Talent Development.

The Cross-Border E-commerce Industry College places greatly emphasis on school-enterprise cooperation, mainly through business alliances as a collaboration channel. Currently, the college collaborates with three business alliances: the Dongguan E-commerce Alliance, which has 370 member enterprises; the Dongguan Industry and Trade Development Promotion Association, with 1,200 member enterprises; and the Shenzhen E-commerce Alliance, with 350 member enterprises. These alliances cover multiple industries, mainly focusing on exports, providing a good opportunity for cross-border e-commerce talent cultivation. To enhance the competitiveness of talent training and address the shortage of skilled workers in enterprises, our university jointly established the Cross-Border E-commerce Industry College with the Dongguan Industry and Trade Development Promotion Association in December 2018. The college customizes its curriculum based on local employment demands, forming a talent cultivation model in cross-border e-commerce that aligns with local economic development characteristics.

(2) Implementation of Cross-Border E-commerce Talent Development

1) Initial Phase of Cross-Border E-commerce Talent Cultivation (September 2014 - July 2016)

The initial phase of cross-border e-commerce talent cultivation marks the preliminary establishment of talent demand and enterprise cooperation. In September 2014, the Foreign Languages Institute reached a consensus with the Dongguan E-commerce Alliance to initiate a pilot project for talent cultivation in cross-border e-commerce, titled the "Foreign Trade Elite Class," based on the principle of "mutual benefit and common development."

Establishment of Cooperation Mechanism: After several discussions with the Dongguan E-commerce Alliance, both parties jointly determined the establishment of two Foreign Trade Elite Classes. Based on the principle of voluntariness, 100 students from the 2011 cohort were selected through a talent decoding test.

Practical Skills Training: Managers and supervisors from alliance enterprises provided 32 hours of foreign trade skills training for students during weekends, significantly enhancing their practical operational capabilities. This practice-oriented training approach effectively bridges the gap between school education and industry demand.

Pre-Employment Program: Through the Foreign Trade Elite Class of the Dongguan E-commerce Alliance, students gradually became acquainted with the actual operational processes of enterprises. In subsequent training, the model was improved by adding elective courses in "E-commerce," taught by enterprise managers.

In the early stages of talent development, the cross-border e-commerce industry was still in its infancy, and enterprises had not yet systematized their talent needs. However, the market's demand for high-quality professionals provided opportunities for collaboration between schools and enterprises. Through cooperation with the Dongguan E-commerce Alliance, talent cultivation in cross-border e-commerce started from scratch, quickly seizing industry opportunities and laying a foundation for subsequent training. This phase reflects a typical development trend: the talent cultivation system continually evolves and explores under the

impetus of industry demand.

2) Advancement Phase of Cross-Border E-commerce Talent Cultivation (September 2016 - July 2018)

After achieving initial success in the starting phase, cross-border e-commerce talent cultivation entered the advancement phase, focusing on deepening the school-enterprise cooperation model and innovating training formats. In September 2016, the Foreign Languages Institute collaborated with the Dongguan Industry and Trade Development Promotion Association and the Shenzhen E-commerce Association to initiate a new model of school-enterprise cooperation.

Innovative Class Models: Based on students' career development aspirations, innovative classes were established with the Dongguan Industry and Trade Development Promotion Association and the Shenzhen E-commerce Association. Students could only be selected after on-site interviews with enterprises and signed a tripartite internship agreement with the college and enterprises. This method ensures that students possess certain professional qualities before entering the enterprise and can receive customized training.

Advanced Classes and Credit Exchange: To better support students in innovative classes during their enterprise internships, the Foreign Languages Institute conducted classes in the seventh semester in advance and explored credit exchange and flexible assessment methods, enabling students to successfully complete both academic and internship tasks.

Multi-Batch Training: Since 2016, new students have participated in the cross-border e-commerce innovation class each year. In the 2014 cohort, 32 students were selected for the Dongguan Industry and Trade Development Promotion Association's innovation class, and 18 were selected for the Shenzhen E-commerce Association's innovation class. Students from the 2015 cohort continued to be selected through interviews. This flexible training mechanism significantly enhances the efficiency of talent cultivation.

This phase reflects the gradual trend of cross-border e-commerce talent cultivation towards personalization and specialization. This not only aligns with the upgraded talent demands of the industry but also highlights the importance of innovative educational models in promoting students' career development. Through "advanced classes" and "credit exchange," the school-enterprise joint innovative classes provide students with flexible, practice-oriented training pathways, better meeting the rapidly changing market demands. From a macro perspective, the demand for talent in the cross-border e-commerce industry drives educational model innovation, which in turn enhances the market adaptability of talents, creating a virtuous cycle.

3) Adjustment Phase of Cross-Border E-commerce Talent Cultivation (September 2018 - Present)

Since September 2018, cross-border e-commerce talent cultivation has entered an adjustment and optimization phase to respond to changes in industry development and talent needs, focusing on resource integration and upgrading training models.

Establishment of the Cross-Border E-commerce Industry College: In September 2018, the Foreign Languages Institute signed a cooperation agreement with the Dongguan Industry and Trade Development Promotion Association to officially co-build the Cross-Border E-commerce Industry College. This initiative marks the transformation of talent cultivation from a single class model to a comprehensive industry college,

integrating high-quality enterprise resources with multidisciplinary resources (foreign languages, computer science, finance, management, etc.), forming a multidisciplinary collaborative training system.

"3+1" Training Model: The college adopts a "3+1" training model, where students study on campus for the first three years and then participate in full-time internships at enterprises in the fourth year. In terms of course arrangement, the courses of the seventh semester are moved forward to the sixth semester, ensuring students have sufficient practical time in their final year. This model enables students not only to accumulate enterprise practical experience but also to clarify their career development direction before graduation.

Adapting to Digital Economy Adjustments: In the post-pandemic era, the global economy is accelerating its digital transformation. To respond to this change, the Cross-Border E-commerce Industry College has strengthened its curriculum system in digital skills and sustainable development concepts, introducing courses on big data analysis and the application of artificial intelligence in cross-border e-commerce to help students master cutting-edge technology and enhance their competitiveness in the new era of cross-border e-commerce.

By establishing the Cross-Border E-commerce Industry College, the school not only deepened its cooperation with enterprises but also further integrated multidisciplinary resources, demonstrating the trend of transforming the talent cultivation system towards "multi-entity collaborative training." This phase signifies a comprehensive upgrade of the talent cultivation model. The "3+1" model, in which both enterprises and schools participate, not only provides students with opportunities to combine theory with practice but also allows students to engage more deeply in enterprise operations through extended internship periods. From a macro perspective, this collaborative training model addresses the urgent need for high-level, versatile cross-border e-commerce talents in the digital economy era and represents the transformation direction of future talent cultivation systems.

(3) Achievements in Cross-border E-commerce Talent Development

The Cross-border E-commerce Innovation Class seamlessly integrates student training with corporate needs through a "dual mentor" system and a "quasi-employee" plan. After years of exploration and practice, the following achievements have been made:

Dual Mentor Mechanism Enterprises are deeply involved in the design of the talent development plan and course content, taking responsibility for demand analysis, practical training, and providing internship positions. The college arranges full-time or part-time class instructors to manage and coordinate, ensuring the quality of training. Currently, the college has hired 32 enterprise mentors, with 10 teachers dedicated each semester to the development of cross-border e-commerce talents, facilitating smooth operation of the school-enterprise cooperation mechanism.

Enhancement of Student Abilities Students in the Innovation Class have excelled in practical experience accumulation and career positioning. Some students completed business orders within two months of their internship. In 2019, the Innovation Class was divided into groups based on business and operational directions, transitioning from a "3.5+0.5" model to a "3+1" model, which proved effective, the students created real economic benefits

for enterprises. Additionally, students have achieved remarkable results in various cross-border e-commerce competitions, enhancing their practical skills and self-presentation.

Breakthroughs in Industry-Academia Collaboration Through the Innovation Class, the college collaborated with the Dongguan Industrial and Commercial Association and the Shenzhen Trade Association to develop three textbooks and ten foreign trade courses, successfully completing provincial and several school-level projects. The college has also published ten papers in provincial and above journals, receiving multiple academic awards. In 2019, the project "Innovation and Practice of Industry-Academia-Research Education in Business English Majors in the Guangdong-Hong Kong-Macao Greater Bay Area" was awarded the first prize for educational and teaching achievements at Guangdong University of Science and Technology. In August 2024, the provincial quality engineering construction project "Cross-border E-commerce Industry College" was successfully completed.

This training model not only promotes the rapid growth of talent but also establishes a solid foundation for the college's integration of industry, academia, and research.

4. Problems and Strategies on Cross-border E-commerce Talent Development

Based on previous explorations and practices in cross-border e-commerce talent development and considering the current demands of the cross-border e-commerce industry in the Guangdong-Hong Kong-Macao Greater Bay Area, the author has actively contemplated how to cultivate high-quality cross-border e-commerce talents that meet enterprise needs.

(1) Problems on Cross-border E-commerce Talent Development

1) **Limitations of Training Design:** The talent cultivation model for cross-border e-commerce often remains confined to a specific major or single college, lacking interdisciplinary linkage and integration. Cross-border e-commerce encompasses multiple fields, such as foreign languages, e-commerce, international trade, and logistics, necessitating collaboration among different majors. Currently, the talent cultivation system does not comprehensively cover the demands across these areas, leading to deficiencies in students' overall capabilities. Moreover, some practical details concerning students' internships, such as accommodation arrangements, have not been adequately addressed, resulting in negative feedback that affects students' engagement.

2) **Lack of Responsibility Awareness:** In the context of cross-border e-commerce talent development, some students exhibit insufficient awareness of responsibility, as evidenced by a lack of initiative after beginning internships and even refusal to accept reasonable work assignments from enterprises. This not only disrupts the work arrangements of enterprises but also negatively impacts students' future professional attitudes. The existing management mechanisms are weak in cultivating and enforcing students' sense of responsibility, necessitating improvements. Additionally, some enterprise mentors fail to provide timely feedback on students' learning outcomes, indicating that the responsibility of enterprises in the educational process also requires

enhancement.

3) **Monotony of Assessment and Credit Transfer Mechanisms:** Current assessment methods are quite traditional, overly reliant on written tests and theoretical evaluations, which do not adequately reflect students' performance in actual cross-border e-commerce operations.

4) Furthermore, the credit transfer mechanism is relatively rigid, lacking flexibility in adjusting credits based on students' practical achievements during internships or projects, thereby affecting students' motivation to learn and their actual benefits.

(2) Strategies for Cultivating Talents in Cross-Border E-Commerce

1) Improve the Working Mechanism of the Cross-Border E-Commerce Industry College

Relying on school-enterprise cooperation, further enhance the management system of the Cross-Border E-Commerce Industry College to form an efficient and stable working mechanism. It is suggested to establish a management committee jointly participated by the school and enterprises, responsible for formulating regulations, management systems, and implementation details to ensure a win-win cooperation. This mechanism will promote deep involvement of enterprises in curriculum design and practical teaching, and regularly organize joint school-enterprise meetings to assess the progress of talent training implementation and dynamically adjust training programs.

2) Build a Modular Curriculum System to Promote Multidisciplinary Integration

The cross-border e-commerce industry involves multiple disciplines, so it is necessary to integrate resources and construct a modular curriculum system. This can be achieved by integrating resources from business English, e-commerce, marketing, logistics management, and computer science, designing teaching modules around the core job requirements of the industry. For example, setting up foundational knowledge, foreign trade practice, computer operation, and professional competence modules for cross-border e-commerce operational talents. The modular curriculum allows students to flexibly choose electives based on their career development direction, cultivating composite talents with professional depth and broad skills.

3) Strengthen School-Enterprise Collaborative Research Innovation and Application

Establish a Research Institute for Cross-Border E-Commerce Industry Development to promote industry growth and talent training. The institute should be jointly funded by schools and enterprises, where enterprises propose needs and research topics, while school professionals and students participate in the research. The research outcomes will not only solve practical problems for enterprises but also feedback into the teaching content, achieving seamless integration of research and teaching. Students will gain research practice opportunities in real enterprise scenarios, enhancing their innovative abilities and facilitating the joint development of teaching materials and new courses.

4) Improve the Assessment and Credit Replacement Mechanism for Practical Components

It is recommended to introduce a flexible, practical-based assessment approach that explores the direct replacement of practical experience with academic credits. The assessment criteria can be linked to corporate projects, evaluating student performance based on actual operational data and project outcomes. Students who excel in their projects can convert

their experience and results into corresponding course credits, encouraging more active participation in practical activities. By optimizing the credit replacement mechanism, student motivation to engage in practice and learning effectiveness can be enhanced.

5) Establish a Long-term Tracking and Feedback Mechanism to Promote Continuous Improvement

A systematic graduate tracking and feedback mechanism should be established. This can be achieved through regular follow-ups, surveys, and alumni activities to understand graduates' career development trajectories and skill enhancement needs. Based on the feedback results, the talent training programs should be adjusted in a timely manner to ensure that the content remains aligned with industry demands. Additionally, graduates are encouraged to participate as alumni mentors in school-enterprise cooperation, providing guidance and advice to subsequent students.

5. Summary

This article uses the talent training practices of the Guangdong University of Science and Technology's Cross-Border E-commerce Industry College as an example to explore the talent cultivation strategies for cross-border e-commerce in the Guangdong-Hong Kong-Macao Greater Bay Area. In the process of talent training, higher education institutions must focus on "professional ability + undergraduate standards + local characteristics," fully leveraging the regional advantages of the Greater Bay Area to cultivate high-quality, application-oriented talents in cross-border e-commerce with practical skills and innovative spirit. To enhance the quality of education, institutions should adopt various approaches to build a faculty with international perspectives and innovative qualities, timely adjust course offerings and teaching content in response to industry needs, improve teaching methods and assessment systems, strengthen practical teaching, and emphasize capability orientation and diversified development. Moreover, by solidifying the integration of industry and education and promoting learning through competitions, collaborative platforms for school-enterprise cooperative education can be established, effectively enhancing students' overall quality and practical skills. At the same time, higher education institutions should keep pace with the rapid development of the cross-border e-commerce industry in the Greater Bay Area, constructing an interdisciplinary and cross-professional

collaborative training model, creating distinctive professional clusters, and developing a faculty team with outstanding practical abilities, ultimately forming an innovative talent cultivation system for cross-border e-commerce that is adaptable to the economic development of the Guangdong-Hong Kong-Macao Greater Bay Area.

References

- [1] Wang L. F., Ye X. G., Yan M., et al. Interpretation of Key Points of National Standards for Undergraduate Teaching Quality in Business English Major [J]. Foreign Language Teaching Forum, 2015, (2): 297-302.
- [2] Li J. Q. Issues and Countermeasures in the Cultivation of Application-oriented Talents in Business English in Higher Education Institutions [J]. Journal of Hubei Open Vocational College, 2019, 32(21): 31-32 + 37.
- [3] Ye R. X., Pei S. M. Discussion on the Reform Path of Talent Cultivation in Business English Major under the Background of Cross-Border E-commerce [J]. English Square, 2019(10): 105-106.
- [4] Feng J. H. Research on the Application-oriented Business English Talent Cultivation Model to Serve the Economic Development of the Guangdong-Hong Kong-Macao Greater Bay Area [J]. Modern Education, 2019, 6(75): 4-6.
- [5] He X. Y. Construction of Application-oriented Undergraduate Business English Talent Cultivation Model under the Perspective of School-Enterprise Cooperation [J]. Journal of Taizhou University, 2019, 41(04): 85-88.
- [6] Li Y. Research on Application-oriented Business English Talent Cultivation Model under the Background of Transformation [J]. Journal of Zhejiang Wanli University, 2019, 32(04): 96-101.
- [7] Liang Y. Exploration of Teaching Mode for Talent Cultivation in Business English Major with a Focus on Cross-Border E-commerce [J]. Think Tank Times, 2019(29): 123 + 127.
- [8] Li Y. Research on the Practice of "Industry-Education Integration" in Business English Major [J]. Journal of Anshun University, 2019, 21(03): 69-72 + 86.
- [9] Chen Y. C., Shen Y. L. Exploration of Practice Teaching in English Major Based on "1+N+1" Talent Cultivation Model [J]. Journal of Inner Mongolia Normal University (Education Science Edition), 2016, 29(09): 133-135.
- [10] Liu X. J., Zhang B. Collaborative Development of Cross-Border E-commerce Logistics between China and Countries along the "Belt and Road" [J]. China Circulation Economy, 2016(5): 115-120.