

# Research on Cultivating Talents in Cross-border E-commerce in Colleges and Universities under the Background of Industry-Education Integration

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**Abstract:** With the in-depth development of the Internet economy, cross-border e-commerce has shown a promising trend of development and has become a new growth point for the Chinese economy. The cultivation of talents in cross-border e-commerce leverages the industry-education integration model to build a broad practical platform for talents, laying a solid foundation for students to adapt to the new round of technological revolution and industrial transformation in cross-border e-commerce. Therefore, exploring the cultivation of talents in cross-border e-commerce in colleges and universities under the background of industry-education integration has become a new research topic for higher education institutions. This paper analyzes talent cultivation in cross-border e-commerce under the industry-education integration model. It first analyzes the historical background and significance of talent cultivation in this field, then discusses the main problems existing in the current work, and finally proposes specific talent cultivation pathways. The paper aims to provide some references and insights for colleges and universities to carry out talent cultivation work.

**Keywords:** Cross-border e-commerce; Industry-education integration; Talent cultivation

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## 1. Introduction

The favorable development trend of cross-border e-commerce indicates that the demand for talent in this industry will continue to increase in the future. Especially with the construction of the “Belt and Road Initiative,” cross-border e-commerce is becoming a new driving force for economic development, providing a large number of jobs for talents. As a base for professional talent cultivation, colleges and universities build practical platforms for cross-border e-commerce talent cultivation based on the industry-education integration model, integrate practical teaching resources, and achieve an organic connection between the education chain, talent chain, and industry chain, as well as innovation chain<sup>[1]</sup>. This approach can better meet the needs of the cross-border e-commerce industry and its positions, comprehensively improving the quality of talent cultivation in education.

## **2. The historical background and significance of deepening industry-education integration in cross-border e-commerce majors**

### **2.1. Cross-border e-commerce faces new industry development trends and new talent demands**

With the upgrading of information technology, big data, cloud computing, the Internet of Things, and mobile e-commerce have driven the continuous development of cross-border e-commerce. Coupled with the policy dividends brought by the “Belt and Road Initiative,” cross-border e-commerce has become a new channel for trade smoothness. In urban electronic commerce comprehensive pilot zones, cross-border e-commerce is flourishing, providing impetus for urban economic development and numerous job opportunities. In the future, as China’s industrial structure undergoes transformation and upgrading to meet the strategic development needs of domestic and international dual circulation, the quality requirements for talents in the cross-border e-commerce industry will increasingly rise<sup>[2]</sup>. Colleges and universities must carry out talent cultivation according to the new characteristics and development trends of the cross-border e-commerce industry, aligning with the real situation of the transformation and upgrading of cross-border trade.

### **2.2. Deepening industry-education integration is the inevitable path for the construction of cross-border e-commerce majors**

The industry-education integration cultivation model is a typical talent cultivation model that has been widely applied in China’s educational work, demonstrating good talent cultivation effects. Leveraging the industry-education integration model, colleges and universities closely follow industrial and technological development trends, quickly understand the job demands of cross-border e-commerce positions, and cultivate new types of cross-border e-commerce talents. Industry-education integration strengthens the connection between educational institutions and industries and enterprises, effectively avoiding the phenomenon of talent cultivation and industrial demand being disconnected. At the same time, it integrates richer resources for talent cultivation work and plays an important role in promoting the integrated development of interdisciplinary studies<sup>[3]</sup>. Therefore, the industry-education integration model will contribute significantly to the cultivation of talents in cross-border e-commerce majors in colleges and universities, worthy of analysis and exploration by higher education institutions.

## **3. Issues existing in the deepening of the industry-education integration mechanism reform in cross-border e-commerce**

### **3.1. Imperfect school-enterprise collaborative education mechanism**

The nature of school-enterprise units differs significantly. Enterprises are economic entities oriented towards the market, focusing on economic benefits, while universities undertake the function of talent cultivation, concerning the long-term development of talents. Due to the differences in nature and goals between enterprises and universities, certain cooperation issues arise during the collaboration process. Industry-education integration requires enterprises to adapt to the pace of university cultivation, provide practical opportunities for students, participate in universities’ scientific research, teaching, and other work, and promote the industrialization and commercialization of scientific research results<sup>[4]</sup>. However, to ensure the normal operation of production and business activities, enterprises find it difficult to recruit students for large-scale internships, and the resources they can provide, such as technical talents and production equipment, are relatively limited. This hinders the in-

depth development of industry-education integration.

### **3.2. Unclear school-enterprise cultivation requirements**

The e-commerce industry develops rapidly, with fast updates in technology and models, while the talent cultivation plans, textbooks, and other materials in universities are updated slowly. In the process of industry-education integration cultivation, the information communication and cooperation between universities and enterprises are inadequate, leading to frequent occurrences of unclear cultivation directions. Furthermore, university teachers generally lack practical experience, and many teachers have a limited understanding of the development of the cross-border e-commerce industry, resulting in relatively backward talent cultivation efforts. Because the talent cultivation objectives do not align with enterprise needs, students' English communication skills, computer operation abilities, and professional qualities fail to meet the requirements of cross-border e-commerce enterprises, necessitating pre-employment training before entering the workplace<sup>[5]</sup>. This issue of unclear cultivation objectives leads to students being professionally mismatched in their work and requiring further learning based on their positions after graduation.

### **3.3. Unsystematic teaching evaluation mechanism**

Talent cultivation work under the industry-education integration model involves both universities and enterprises as subjects, making evaluation challenging. Universities often collaborate with multiple enterprises, and each enterprise has different assessment methods, resulting in a lack of unified standards in assessment methods and systems, which fail to incentivize personnel and dispel industry concerns about hiring. At the same time, unscientific evaluation index systems in some universities also lead to poor evaluation results<sup>[6]</sup>. The evaluation and incentive mechanisms for talent cultivation work need to be further standardized to provide direction for advancing industry-education integration.

## **4. Exploration and practice of deepening the integration of industry-education in cross-border e-commerce**

### **4.1. Establishing a long-term talent cultivation plan**

Due to the rapid updates in the cross-border e-commerce industry, based on the industry-education integration training mode, institutions should closely follow the talent needs of enterprises, adjust the curriculum system and training direction according to technological and modal updates in enterprises, build new training systems, promote the alignment of talent cultivation plans with industrial practice and market applications, and drive the balanced development of talent cultivation and social needs. Institutions should tailor courses and construct a curriculum system with distinctive and differentiated development based on the cross-border e-commerce talent needs of cooperating enterprises, highlighting the characteristics of the intersection between cross-border e-commerce and modern information technology, so that the cultivation plan is coordinated with the talent needs of the cross-border e-commerce industry<sup>[7]</sup>.

Schools and enterprises should collaborate to build a practical teaching system, integrate practical teaching resources, further strengthen the connection between theoretical learning on campus and enterprise practice off campus, and facilitate the integration of theory and practice. Practical teaching should regulate the direction of cross-border e-commerce talent cultivation, enhancing students' practical operating abilities, theoretical application abilities, and innovative and entrepreneurial abilities<sup>[8]</sup>. In summary, institutions should adjust the

curriculum system by benchmarking enterprise positions, integrate enterprise resources to construct a practical teaching system, and establish a long-term talent cultivation mechanism.

## **4.2. Building multi-functional training bases**

Schools and enterprises can collaborate to construct training bases that integrate production, learning, and research functions. By integrating funds, technology, and talent from both parties, they can advance reforms in production practice, scientific research achievement transformation, and practical teaching, enabling e-commerce research achievements to be quickly implemented and allowing students to understand the development trends of the cross-border e-commerce industry<sup>[9]</sup>. Schools and enterprises jointly undertake scientific research projects and guide students in practice and internships. Enterprises dispatch technical personnel to teach students and conduct scientific research projects together with university teachers; university teachers delve into enterprises to help solve practical problems. Based on this training base, an integrated practice platform is realized for internship and employment, industry-academia-research integration, and the combination of professional practice and innovation, and entrepreneurship.

Secondly, update the school's simulated training teaching work, and connect with the production practice of cooperating enterprises in open laboratories. Multimedia software simulates operational activities. The simulation software system has functions such as cross-border e-commerce and supply chain system analysis. Institutions can introduce practical data related to cross-border e-commerce enterprises, allowing cross-border e-commerce enterprise employees and supply chain system personnel to participate in virtual simulation training, simulating a practical training environment close to cross-border e-commerce production practices, and improving the quality of simulation training<sup>[10]</sup>.

## **4.3. Constructing a school-enterprise talent exchange mechanism**

Schools and enterprises jointly establish a talent mutual employment mechanism. Institutions invite senior managers and technical personnel from cross-border e-commerce enterprises to serve as part-time teachers, guiding practical teaching work and bringing students cutting-edge practical technologies, job experiences, industry rules, and design thinking in the field of cross-border e-commerce. Institutions strengthen the training of the part-time teacher team, improving their teaching abilities and ethics through course training and teaching observations, thereby enhancing the overall construction level of the school's teacher team<sup>[11]</sup>.

Institutions should also improve their teacher training efforts, encouraging teachers to engage in practical work in enterprises, requiring them to undertake internships in specific enterprise positions in full-time or part-time capacities to understand the development of the cross-border e-commerce industry and strengthen cross-border e-commerce operational capabilities. By improving the system of teachers participating in enterprise practice, teachers can stay updated on market trends while promoting the reform of "integration of teaching, learning, and doing."

## **4.4. Developing practical projects to serve enterprises and adapt to the market**

Industry-education integration provides students with abundant internship opportunities, effectively enhancing their practical abilities. Schools and enterprises should construct flexible training modes, flexibly adopting training modes such as "one teacher for multiple apprentices" and "one apprentice for multiple teachers," providing students with opportunities to participate in enterprise practical projects and job rotations, making full use of enterprise resources to obtain real industrial project experience and making it easier to meet professional



training needs <sup>[12]</sup>. Enterprises select skilled and experienced mentors to guide students in job practice, and these mentors can also guide students in their career development planning, which plays an important role in students' overall development. Enterprises participating in industry-education integration can obtain intellectual support from schools, reducing their human, technical, equipment, and intellectual costs. Students can gain work experience during their internships, which also aids their innovation and entrepreneurship, thereby achieving a seamless connection between work and learning. Institutions should continue to promote the alignment of talent cultivation plans with industrial practice and market applications, introduce enterprise practical projects, drive the balanced development of talent cultivation and social needs, highlight the concept of "student-centeredness," adhere to an outcomes-oriented approach, and carry out talent cultivation work.

#### **4.5. Jointly developing practical textbooks by schools and enterprises**

Under the industry-education integration framework, personnel from both schools and enterprises are assigned to participate in textbook development work, with knowledge and abilities complementing each other among enterprise backbones and school teachers to improve the quality of textbook development. Textbooks can also provide specialized explanations on difficult and painful points in cross-border e-commerce operations. Institutions should promote the alignment of professional group curriculum construction, textbook construction, and modern cross-border e-commerce, ensuring that new technologies, processes, and norms are promptly and accurately reflected in textbooks and courses, thereby creating practical textbooks that align with the entire lifecycle of modern cross-border e-commerce <sup>[13]</sup>. Schools and enterprises jointly develop textbooks, especially practical training textbooks, adapting production cases based on enterprise practical activities to make textbooks closer to practice and production, and reflecting issues in the production and operation process of enterprises. This allows students to have a clearer understanding of the development status of cross-border e-commerce and enhances their cross-border e-commerce operational capabilities. The update speed of practical training textbooks should be increased, with new industry standards, technologies, and norms being added on time.

#### **4.6. Building a diversified teaching evaluation system**

Schools and enterprises jointly participate in the teaching evaluation of cross-border e-commerce, integrate diversified evaluation methods, update evaluation indicators, and improve the scientificity and rationality of teaching evaluation to guide further teaching reform.

##### **4.6.1. Constructing evaluation indicators**

Schools and enterprises jointly discuss the evaluation index system, integrating the knowledge and skill requirements of different positions in the cross-border e-commerce industry, aligning with the talent cultivation goals and realities of institutions, and integrating internal employee evaluation indicators of enterprises to construct a more scientific and comprehensive evaluation index system, which also helps to improve the employment rate for targeted enterprises <sup>[14]</sup>.

Firstly, integrate the knowledge and skill requirements of different positions in the cross-border e-commerce industry, respectively setting evaluation indicators that reflect the characteristics of each position. Pay attention to skill requirements in different development directions of the major, and focus on students' development directions in the evaluation.

Secondly, integrate short-term and long-term evaluation indicators to comprehensively reflect the practical ability of cross-border e-commerce professionals. Short-term evaluation indicators include training grades

and practical performance; long-term indicators include computational thinking, innovation ability, and digital practical skills.

#### **4.6.2. Integrating multiple evaluation subjects**

Subjects such as schools, enterprises, and students jointly participate in the evaluation work to obtain more scientific evaluation results. Integrate multiple evaluation methods such as teacher assessment, student self-assessment, research institution assessment, and enterprise production unit evaluation. The evaluation focus of each subject is different, which is of great significance for promoting students' multidimensional development. To ensure the accuracy of assessment results, schools can also invite experts to score the assessment results<sup>[15]</sup>.

### **5. Conclusion**

In conclusion, based on the continuous development of the cross-border e-commerce industry and the talent gap, universities are promoting reforms in cross-border e-commerce talent training through the integration of industry and education. Aligning with job demands and integrating educational resources helps cultivate skilled talents who truly meet the needs of the industry and enterprises. In the future, with the further development of the industry-education integration model, universities will be able to cultivate more cross-border e-commerce talents with both theoretical and practical skills, injecting new vitality into the high-quality development of the industry and making greater contributions to the economic development of society.

### **Disclosure statement**

The authors declare no conflict of interest.

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