

The “Competition” for Training Cross Border E-commerce Talents in China on the Background of “Internet Plus”

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Under the background of “Internet plus,” more and more traditional industries have been integrated into the Internet through information technology. The international trade (foreign trade) industry has constantly been networked, informalized and electrolyzed. Based on the statistical analysis of the current development trend and market demand for cross-border e-commerce talents, this paper attempts to find out the causes of the current multidisciplinary “competition” for cross-border e-commerce talent training, analyze the advantages and disadvantages of this “competition,” and put forward the development strategies of multidisciplinary cross-border e-commerce talent training. This study will be of essential reference and significance for applied universities, colleges and higher vocational colleges to adjust the cross-border e-commerce talent training positioning, orientation and professional layout.

Keywords: cross border e-commerce, talent training, professional transformation

INTRODUCTION

"Internet plus" represents a new economic form and a way of thinking that Internet information technology is widely used to improve production efficiency and capacity in all sectors. Cross-border e-commerce (CBEC) has emerged as a new industry in the "Internet plus" era with the networking, informatization and e-commerce of the traditional international trade industry through the Internet. According to the "China E-commerce Report 2018" issued by the Department of E-commerce and Information Technology of the China Ministry of Commerce, the CBEC industry has witnessed growth in recent years. In 2018, the total import and export CBEC transactions across the country increased by 50% year-on-year, of which E-commerce exports volume has increased by 67%. However, this industry faces a shortage of 4.5 million professionals with an annual growth rate of 30%. Even if an average of 100 CBEC graduates are produced from each of 2,956 colleges and universities listed by the China Ministry of

Education in 2019, the annual total talent supply will not exceed 1 million, including graduates from relevant majors such as foreign languages, e-commerce, international trade, business. Therefore, the CBEC talent supply-demand gap remains very large in China.

Due to the shortage of talent supply, the CBEC job positions in China offer professionals high salaries and promising promotion opportunities. As CBEC hasn't been listed on the major directories of universities, vocational colleges or vocational high schools, many colleges, especially employment-oriented vocational colleges, try to fill the talent gap by setting up CBEC as a sub-major under such majors as international economics and trade, international business, e-commerce, business English, minor languages, marketing, logistics management, business management. CBEC courses are even offered in some majors with little relation with CBEC, including information management and systems, financial management, accounting, exhibition economy and management, and human resource management. However, these efforts to cultivate CBEC talents under the background of "Internet plus" are criticized for the lack of adequate investigations, rigorous proof, and accurate positioning.

In June 2019, CBEC was included among the 46 amended and additional middle vocational major directory by the China Ministry of Education. Later in October 2019, it was listed as one of 9 amended and additional higher vocational majors shown in Table 1.

TABLE 1
ADDITIONAL MAJORS IN “MAJOR CATALOGUE OF CHINA HIGHER VOCATIONAL EDUCATION IN 2019”

No.	Category	Sub-category	Code	Name
1	53 Energy power and materials	5303 New energy power generation project	530309	Hydrogen energy technology application
2	60 Transportation	6001 Railway transportation	600114	High-speed rail comprehensive maintenance technology
3	61 Electronic information	6101 Electronic Information	610120	Integrated Circuit Technology Application
4	61 Digital information	6102 Computer	610217	Artificial Intelligence Technology Service
5	63 Finance and economics	6308 E-commerce	630805	Cross-border e-commerce
6	64 Tourism	6401 Tourism	640107	Research travel management and service
7	64 Tourism	6401 Tourism	640108	Wine Marketing and Service
8	67 Education and sports	6704 Sports	670412	The operation, maintenance and management of ice and snow facilities
9	69 Public administration and service	6903 Public service	690307	Cemetery Service and Management

But CBEC affiliates to e-commerce and international business majors before the release of this amended and additional list.

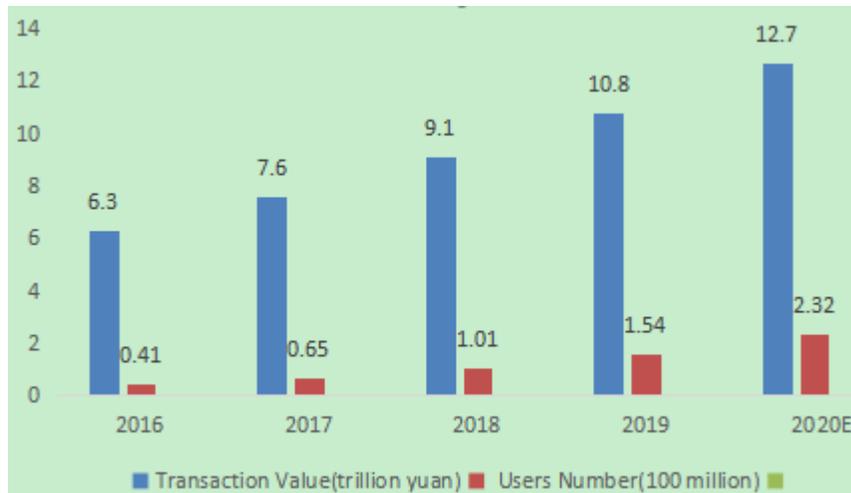
CBEC DEVELOPMENT AND TALENT DEMANDS IN CHINA

CBEC Development Status

CBEC is an international business activity in which transaction entities from different countries complete cross-border transactions and payments within e-commerce platforms and deliver goods through cross-border logistics(Wang, 2018). In the narrow sense, cross-border e-commerce refers to all cross-border transaction procedures fulfilled through e-commerce platforms. In the broad sense, it refers to the Application of Internet technology in international trade. In the initial period, this unique form of foreign trade or a new type of economic activity was called foreign e-commerce trade or foreign trade e-commerce academically (Dai & Chen, 2019). It has now been officially defined as cross-border e-commerce. It has experienced a budding period initiated by Alibaba, Made-in-China.com, Global Sources, HC.com, etc., a development period led by DX (Yibao), Lanting Gathering, and AliExpress and the boom period led by Tmall International, NetEase Koala, Jumei Youpin, Ocean Terminal, Xiaohongshu, etc.

The CBEC policies in China have evolved from pilot initiatives to nationwide promotion. In 2012, the Chinese government designated Zhengzhou, Shanghai, Chongqing, Hangzhou, and Ningbo as five pilot cities to carry out cross-border e-commerce. Since the government policy is not clear, most investors hold a wait-and-see attitude to this industry. The CBEC started to boom in May 2014 after Chinese president Xi Jinping inspected the Zhengzhou CBEC pilot project. Therefore, 2014 was regarded as the first year when China's CBEC development took off. China's State Council immediately carried out comprehensive CBEC pilot zones in 35 cities, including Hangzhou and Tianjin, in three batches in March 2015, January 2016, and July 2018. On December 24, 2019, the State Council approved 24 cities to pilot CBEC, including Shijiazhuang, making the number of pilot cities reach 59.

FIGURE 1
2016-2020 CHINA CBEC TRANSACTION VALUE, USERS NUMBER AND FORECAST



The CBEC has witnessed year-on-year growth in recent years. According to the "2018-2019 China CBEC Market Research Report" released by the well-known iiMedia Consulting, from 2016 to 2018, China's CBEC transaction value rose from 6.3 trillion yuan to 9.1 trillion yuan thanks to the contribution of more than 100 million users. The number of transaction value and users is expected to rise continuously to 10.8 trillion yuan and 149 million in 2019 and 12.7 trillion yuan and 211 million in 2020(Figure 1).

THE DEMAND FOR CBEC TALENTS

Demand Quantity

With the advent of the "Internet plus" era, CBEC has sprung up globally in a short period, with the scale of transactions increasing exponentially. It has become a new engine for China's foreign trade and a new crucial economic growth impetus. CBEC has almost occupied half of the pie both in traditional import or export trade. There is an urgent demand for 4.5 million talents with an annual growth rate of 30%.

Job Position Distribution

In May 2017, under the National E-commerce Vocational Education and Teaching Steering Committee's guidance, the RW-17-03-01 project of the Ministry of Education's Higher Vocational Education Innovation Development Action Plan (2015~2018) achieved significant results. It issued the "Cross-border "Research Report on E-commerce Talent Demand." A total of 1,149 questionnaires were collected, and 158 cross-border e-commerce companies were interviewed.

The report shows that current CBEC positions mainly consist of management, business, and technical positions. The specific job position distribution is shown in Table 2.

TABLE 2
CBEC JOB POSITION DISTRIBUTION

Management Positions	Business Positions	Technical Positions
Marketing planning director	International marketing personnel	Web development staff
Director of operations	Promotion personnel	
Logistics chief	Customer service personnel	UI designer
	Product personnel	Web editor
	Purchase personnel	
	Overseas warehouse staff	

Academic Qualification Requirements

The distribution of talents' academic qualifications in import and export CBEC companies tends to be consistent (Table 3). At present, CBEC companies tend to employ talents with undergraduate and higher vocational qualifications, followed by postgraduate qualifications and other secondary vocational qualifications. Their distribution ratios in export companies are 45%, 32%, 7%, and 2% respectively; and 42%, 34%, 14%, and 4%, respectively in import companies.

TABLE 3
QUALIFICATION REQUIREMENTS OF CBEC COMPANIES

Qualification Requirements	Export CBEC Companies	Import CBEC Companies
Middle vocational	2%	4%
Higher vocational	32%	34%
Undergraduate	45%	42%
Postgraduate	7%	14%
Others	14%	6%

The academic qualification and knowledge structure requirements set by enterprises for CBEC talents can be roughly satisfied by domestic colleges and universities' training programs. Undergraduate and higher vocational graduates with good operation skills and language competence are most popular among enterprises.

Professional Background of CBEC Candidates

Before EBEC was added to the higher vocational education major catalog by the China Ministry of Education in 2019, there were very few or no EBEC graduates. Enterprises have to recruit talents from relevant majors. As shown in Figure 2, the top three majors popular among EBEC enterprises' recruit program are international trade, E-commerce, and foreign languages, with a corporate choice willingness rate of 70.1%, 59.9%, and 44.1%, respectively.

FIGURE 2
CBEC ENTERPRISES' CHOICE WILLINGNESS RATES OF RECRUITMENT MAJORS



Source: Ali Research Institute" 2018 China Cbec Talent Report"

WHY NON-CBEC MAJORS COMPETE FOR TRAINING CBEC TALENTS

The non-CBEC majors that compete for CBEC talents training are mainly international trade (business), e-commerce, and foreign languages. The three majors have different interpretations of the emerging CBEC, as is shown in Table 4.

TABLE 4
CONNOTATIONS OF CBEC INTERPRETTEDBY THREE MAJORS

	International Trade(Business)	E-commerce	Foreign Languages
CBEC connotation	E-commerce of international trade	The extension of e-commerce business scope	Communication with International clients through e-commerce platforms

The different CBEC definitions represent the inevitable controversy on CBEC talents training. As is shown in Table 5, the first type of definition indicates that cross-border e-commerce is the e-commerce of international trade; the second type of definition affirms that CBEC is an extension of the scope of e-commerce transactions; the third type of definition explains that cross-border e-commerce is a cross-discipline between international trade and e-commerce.

TABLE 5
MAIN CBEC DEFINITIONS

	Focus	Digitization of international trade procedures
	Adopter	The Ministry of Commerce
Type1:E-commerce as the auxiliary means for international trade(trade-centric)	Definition, view or description	Cross-border e-commerce is a new type of import and export trading method for manufacturing and trading companies to digitize and electronic the traditional ways of the display, negotiation and transaction in the international trade procedures through e-commerce platforms
	Statistical scope	Total trade volume and indirect statistics of cross-border e-commerce transaction volume, number of merchants and platforms
	Applicable context	Description of the technical motivation, primary conditions, and fundamental forms of cross-border e-commerce in terms of import and export
	Problem	The electronization of traditional trade procedures is only the initial stage of cross-border e-commerce.
	Focus	Conclusion of transactions between cross-border entities through e-commerce platforms
Conceptual Connotation	Adopter	Some scholars and media
	Definition, view or description	Cross-border e-commerce refers to the transactions and follow-up activities of transaction entities belonging to different countries/customs areas on the e-commerce platforms
	Statistical scope	Direct statistics of relevant data on cross-border e-commerce platforms
	Applicable context	Reflection of the main body of e-commerce applications extended to different countries/customs areas
	Problem	Participants and their relationships are relatively few
Type 2: Extension of e-commerce business to international trade(e-commerce- centric)	Statistical scope	Direct statistics of relevant data on cross-border e-commerce platforms
	Applicable context	Reflection of the main body of e-commerce applications extended to different countries/customs areas
	Problem	Participants and their relationships are relatively few

		and direct without highlighting cross-border peculiarities
	Focus	Subversion of the intermediate links of cross-border trade by selling directly to overseas buyers and even directly 2C
	Adopter	eBay and PayPal's foreign trade e-commerce report, cross-border retail export report, Nielsen report
	Definition, view or description	Through the Internet, CBEC breaks through the constraints of traditional international trade sales models by selling products directly to global merchants or consumers
	Statistical scope	Cross-border e-commerce sellers' sales volume, cross-border online shopping consumption/retail export volume
	Applicable context	Reflecting the replacement of the traditional model by the relevantly new cross-border e-commerce model
	Problem	This definition emphasizes the buying and selling channels but ignores other participants' types, the complexity of relationships, and the two-way nature of import and export.
Type 3:Reorganize international trade with an e-commerce model (change-centric)	Focus	Formation of a cross-border integrated e-commerce business ecosystem, including applications, services, and environment
	Adopter	Alibaba
	Definition, view or description	CBEC refers to information exchange, transaction and other applications for import and export through the Internet, as well as various services and the environment associated with these applications
		Statistics of participants including businesses, customers, and various service providers; relationships including information, transactions and

Statistical scope	services (with broader amount statistics); areas including multi-country/customs regions to global scope
Applicable context	Description of the overall restructuring trend of e-commerce for cross-border business and trade participants and activities
Problem	The extensive cross-border e-commerce "application, service, environment" ecosystem is still evolving.

There are five main reasons for multi- majors' competition for the CBEC talent training:

Cbec Cross-Composite Major Attributes

E-commerce major is a new cross-discipline integrating computer science, marketing, management, economics, law and modern logistics. Cross-border e-commerce, a typical cross-composite major, integrates more disciplines such as language, customs, etc. Cross-composite majors need a teaching team composed of teachers with multidisciplinary backgrounds. In the absence of CBEC listed on the major catalog of China's higher education, fewer colleges and universities set up CBEC as a major, let alone constructing a multidisciplinary teaching team. As a result, disciplines related to cross-border e-commerce have set foot to cultivate cross-border e-commerce talents.

Natural Response of Vocational Education to Market Changes

According to market changes, vocational education needs to adjust the professional structure in real time and subdivide the professional training direction. The rapid development of CBEC with its advantages of good employment opportunities, high starting salary, fast promotion and high demand triggers many CBEC related majors to adjust their talent training direction and embark on CBEC talent training. This is the result of vocational education's rapid response to market demand.

The Need to “Rejuvenate” Old Majors

With the development of society and technological advancement, several majors that have made outstanding contributions to the cultivation of high-skilled talents in society have gradually begun to decline in the past few decades. Their enrollment and employment have gradually shrunk for different reasons. For example, the demand for pure foreign language talents has been reduced due to the highly integrated modern economy and the reform of its functioning system. Those who have strong foreign language communication skills and a good knowledge of information technology, foreign trade, law or marketing are pretty popular among enterprises. The computer application major experiences the same destiny with smaller and smaller market demand for this major's talents. Companies need a professional network of technology, artificial intelligence, big data and other specific application technologies. It's evident that old majors are in urgent need of revival and "rejuvenation." Therefore, traditional disciplines and majors related to CBEC have set foot in the cultivation of CBEC talents.

CBEC Talents in Short Supply

CBEC talent training lags far behind the explosive growth of the CBEC industry, resulting in a shortage of talents. Under this circumstance, many majors rush to rapidly transform their talent training programs and blindly meet the demand's significant CBEC professionals.

Vagueness of Major Catalogs

In the 2015 China General Higher Vocational Education (Academy) Major Catalog, CBEC is not an independent major but a subordinate section of e-commerce and international business. However, business English, which has trained the most significant number of CBEC practitioners, is not authorized to include CBEC talent training as its subordinate part. The ambiguity of this major catalog leads to the competition for CBEC talent training. After CBEC major was listed as a major in the catalog in 2019, CBEC teaching standards, curriculum system, and teaching behaviors are gradually improved and standardized.

THE PROS AND CONS OF "COMPETITION" FOR CBEC TALENT TRAINING

Based on rational analysis, the multidisciplinary "competition" has its pros and cons for CBEC talent training, especially before the CBEC appears as a major catalog member.

The Pros of "Competition"

Satisfaction of the Market Urgent Needs

In response to the explosive growth in the demand for CBEC talents, many related majors responded quickly and promptly adjusted the direction of talent training by carrying out CBEC talent training. Their efforts have alleviated the current shortage of CBEC talents.

Improvement of CBEC Knowledge System

It's believed that establishing a new major needs such three prerequisites as vast social demands, back-up of similar secondary disciplines, mature knowledge system, and theoretical foundation. In the process of exploring CBEC talent training, many related majors have accumulated experience, condensed and improved CBEC professional knowledge system, laying the foundation for CBEC included in China's vocational education major catalog.

Exploration of CBEC Talent Training Model

Through the practice of CBEC talent training by international trade, e-commerce and foreign language majors, various talent training models such as "e-commerce + foreign trade," "foreign trade + e-commerce," "foreign language + foreign trade + e-commerce" have been explored and established.

Cons of "Competition"

Poor CBEC Talent Quality

In the competition for CBEC talent training, different majors have different training objectives and curriculum systems. Therefore, it is difficult to guarantee the quality of talents.

Harm to College Reputation

Several majors have been devoted to CBEC talent training under different talent cultivation specifications and quality standards in some colleges. It's no doubt that the college talent training quality and management standards will be questioned.

Low College Talent Training Efficiency

When various majors compete for CBEC talent training, the original major's resources are squeezed out, lowering the college talent training efficiency.

Obstacles to Multidisciplinary Integration

If various majors undertake CBEC talent training independently, they will inevitably become competitors, setting obstacles to multidisciplinary integration. This is the biggest taboo in the cultivation of inter-disciplinary talents.

MULTIDISCIPLINARY CBEC TALENT TRAINING STRATEGIES

Actively Apply for CBEC Major

CBEC has been added to the China higher vocational education major list in 2019, which has been implemented in 2020. It's the best time for colleges to apply for this new major. Two issues should be considered: who will apply and how to apply?

Who to Apply

The new major applicants should be those majors that can meet CBEC positions' requirements and have CBEC talent training foundations, including international trade (business), e-commerce, and foreign languages majors.

One of the best solutions is to set up a CBEC teaching and research section. The teaching and research team can consist of teachers selected from these three majors based on these three majors' contribution in terms of the course number(see table 6). This section can be subordinate to the School of Business (or School of Economics and Trade, School of Economics and Management).

TABLE 6
CONTRIBUTION OF COURSES TO THE TRAINING OF CBEC TALENTS

Logistics courses	International trade courses	E-commerce courses	Foreign language courses
International logistics	International trade practice	Internet marketing	Business English
E-commerce logistics management	International trade documents practice	E-commerce basics	Cross-border E-commerce English
Warehouse techniques and management	English correspondence for international trade	Cross-border e-commerce practice	Business English translation
	Business negotiation and promotion	Visual design(art)	Cross-cultural communication
	International market survey and analysis	Foreign trade clients management	Oral foreign trade English
	Customs declaration practice	Cross-border platforms operation and management	Minor language (optional)
	International business law		

The compromise solution is that the new majors should be set up in the following secondary colleges with at least one of the three majors like international trade, e-commerce or foreign languages. If based on international trade, the new major should focus on improving students' business and foreign language abilities; If based on e-commerce, the new major should intensify the training of students' foreign trade skills; If based on foreign languages, the new major should highlight the cultivation of students' foreign trade and e-commerce techniques.

How to Apply

Based on the sufficient research, necessity and feasibility, the colleges with accurate major positioning, a good foundation and scientific planning can apply for CBEC major under the guidance of critical points shown in Table 7.

TABLE 7
NEW MAJOR APPLICATION KEY POINTS

Application reasons	"One Belt and One Road" Strategy Structural reforms on the supply side of foreign trade Status quo Talent demand College overall positioning and layout Transformation and upgrading of old traditional majors	Foundations	Experience of similar majors Established major cluster Reserve of strong teaching teams Complete teaching facilities Comprehensive system
Talent training program	Major positioning Talent training specifications and objectives The scientific and reasonable course curriculum	Major leaders and teachers	Equipment of leaders and teachers of e-commerce, international trade and English majors
Conditions	List of existing, usable and sharing conditions	Planning	Interdisciplinary integration of e-commerce, international trade and English

Clear Positioning for New Major

Accurate positioning and multidisciplinary integration should be the focuses to promote the CBEC major development and construction according to this discipline's characteristics.

Survey of Demands for CBEC Talents

The survey of market demands for CBEB professionals should be conducted through ample samples to specify the major objectives and requirements of CBEC positions. An analysis of CBEC professional competence should be made to construct a course curriculum and formulate a talent training scheme.

Construction of Accurate Curriculum System

The three types of courses should be included in the curriculum: introductory courses such as foreign trade and foreign languages, core courses such as CBEC practice, platform operations and extensive courses such as culture, history, and different countries' laws.

Multidisciplinary Integration

Cross-border e-commerce has a wide range of knowledge requirements involving language, technology, marketing, and business. Teachers with a single major background can not meet the cross-disciplinary requirements if they don't integrate multidisciplinary knowledge. Disciplinary barriers must be broken by establishing the integrated network of teachers, courses, and training programs for CBEC.

Enhancing Teaching Team's CBEC Practice Skills

Full-time teachers from different disciplines are encouraged to practice their CBEC skills by undertaking enterprises or running a CBEC account. Outstanding CBEC company professionals are recruited as part-time teachers to improve the teaching faculty's CBEC operation competence.

Co-Built Experimental Training Base

Colleges and enterprises jointly construct CBEC experimental and training base by authorizing students or teachers to run an actual CBEC workshop or companies' real CBEC accounts.

Co-Developed Courses

CBEC teaching faculty should cooperate with enterprises in formulating teaching and curriculum standards to expand major construction achievements, improve major knowledge systems and standardize management of the major operation.

Outstanding Characteristics and Firm Training Direction

Suppose the education authority does not approve the CBEC major, or some colleges don't plan to apply for CBEC as a new major. In that case, the CBEC program can remain a sub-major of three CBEC-related majors international trade, e-commerce and foreign languages. To supply qualified CBEC professionals, the CBEC program should differentiate and specify students' target employment positions, training objectives, professional curriculum and talent training models.

It's recommended that the international trade (business) major offers two professional training programs. One is the traditional trade program, mainly for large and medium-sized enterprises. They have many international business partners and still have a large number of traditional foreign trade businesses. This program focuses on cultivating foreign trade merchandisers, declaration clerks and vouching clerks. The other is the CBEC program, mainly for small and medium-sized enterprises, targeting international procurement clerks and customs clearance clerks.

E-commerce majors are recommended to set up two professional programs. One is the online store operation (business) mainly devoted to training CBEC operation, promotion, and marketing staff. The other is CBEC (technology) program centering on online Editing, web production and website development.

Foreign language major can offer CBEC customer service program and CBEC minor languages program. The advantages of foreign language communication, cross-cultural communication and business translation can be given full play to train "golden CBEC customer service staffs" with zero barriers to communicate with foreign customers. Besides, students will be offered computer operation, international trade, marketing and other courses to compensate for their lack of CBEC professional knowledge. It can be significant for a foreign language major to explore a CBEC talent training model by teaching language courses in the business context and business courses bilingually.

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