

Exploration and Practice of the "BOLD" Model for International Business Talent Cultivation in the Context of the Digital Economy—Based on Visual Analysis of CiteSpace

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Abstract: The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) has a strong demand for international business talents, but the increasingly complex global economic environment and the rapidly evolving digital technology make it urgent to reform the talent cultivation model. Based on the visualization analysis of research trends in international business talent cultivation using CiteSpace software and combined with years of teaching and practical experience in Shenzhen Polytechnic University, this paper proposes the "BOLD" talent cultivation model. Under the concept of "Business as the platform, Operation as the core, Language as the support, and Digit as the empowerment", this paper extracts the four core professional capabilities that international business talents need to possess in the new era: business skill, operational skill, language skill, and digital skill. The paper also explores the practice of BOLD model from two dimensions: collaboration among government, schools, enterprises, and industries, as well as comprehensive education through jobs, courses, contests, and certifications. The BOLD model can provide references for the talent cultivation of related majors in China and across the world.

1. Introduction

The report of the 20th National Congress of the Communist Party of China clearly states that China should firmly pursue a win-win strategy in promoting high-standard opening up. The release of the "Guangdong-Hong Kong-Macao Greater Bay Area Development Plan Outline" has laid a solid foundation for the Greater Bay Area to enhance its international competitiveness and participate in international cooperation at a higher level. As a pioneer of reform and opening up, Shenzhen has always been an export-oriented city, with its export volume ranking first in China for 31 consecutive years. With the booming development of digital economy, Shenzhen has gathered the largest number of cross-border e-commerce companies in China. Against this backdrop, the market calls for more international business talents who are familiar with international trade rules and the latest trends of the digital economy. In response to market demands, the International

Business major at Shenzhen Polytechnic University (hereinafter referred to as "SZPU") shoulders the mission of cultivating compound and innovative international business talents. We continuously explores and practices a talent cultivation model that meets the needs of the market.

With the vigorous development of the digital economy and the rapid progress of digital technologies, the transformation of talent cultivation models has become an urgent task. Emerging technologies such as artificial intelligence (AI) and big data have brought about revolutionary challenges and impacts in the field of international business. These technologies endow enterprises with more efficient data analysis and decision-making capabilities. In particular, the application of AI not only helps enterprises reduce costs and increase efficiency but also transforms business models. This has put forward new requirements for the cultivation of international business talents, prompting us to promote the digital transformation of the talent cultivation model. Students need to master advanced technologies such as AIGC and data analysis to adapt to this industry full of opportunities and challenges.

Based on the visual analysis of relevant literature on the cultivation of international business talents using CiteSpace software and drawing on the years of teaching practice of the International Business major at Shenzhen Polytechnic University (SZPU), this paper proposes the "BOLD" talent cultivation model, which stands for "Business as the platform, Operation as the core, Language as the support, and Digit as the empowerment" and elaborates on the specific implementation methods. The International Business major at SZPU boasts a long history and ranks the first in Chinese higher vocational institutions. Its experience can serve as a reference for related majors in China and across the world.

2. Analysis of the Research Trends in the Cultivation of International Business Talents

2.1. Methodology and data

In order to systematically and objectively summarize the research trends in the cultivation of international business talents, this paper conducts a bibliometric analysis of relevant literature. The time span of the research data is from 2014 to 2024, and the retrieval time is up to December 2024. The retrieved data comes from CNKI, which includes Peking University Core Journals, CSSCI Journals, etc. The search keywords are set as "International Business" + "Talent Cultivation", and the retrieval method is "Precise Matching". After eliminating invalid and duplicate literature, 778 valid papers are obtained.

This paper uses CiteSpace, a literature visualization software, as a research tool to generate a knowledge map of keyword co-occurrence based on relevant literature. Based on this, it reveals hot research topics and trends related to the cultivation of international business talents, providing a solid data foundation and theoretical support for the exploration of the talent cultivation model.

2.2. Keyword co-occurrence and frequency analysis

Keywords reflects the core content of research papers. Therefore, keyword co-occurrence analysis can display the occurrence frequency of keywords in the literature, and uncover the hot topics in the research field. Through the keyword co-occurrence analysis of 778 papers related to the cultivation of international business talents, a keyword co-occurrence map is drawn, as shown in Figure 1. At the same time, through the statistical analysis of the frequency of keyword co-occurrence, a list of high-frequency keywords for the cultivation of international business talents is obtained, as shown in Table 1.

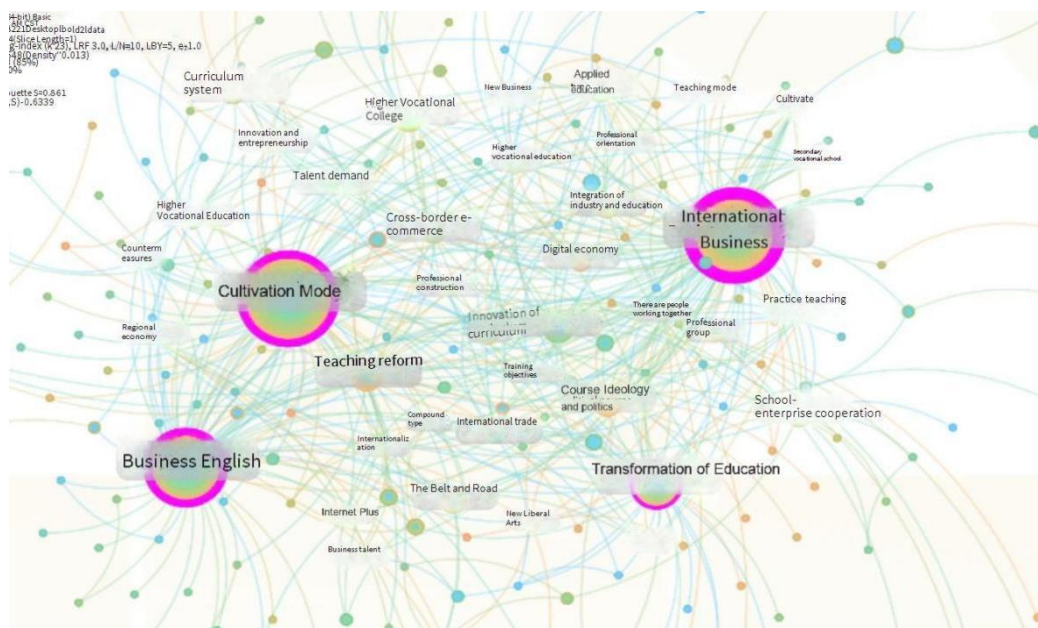


Figure 1 Keyword co-occurrence map

The keyword co-occurrence map presents 291 nodes (core keywords) and 548 links. The larger the circle of a node, the higher the frequency of occurrence of the keyword, indicating that it is a hot topic in the research field. The centrality of a node represents the role of the node in connecting and transmitting information within the research network. The higher the centrality, the more it represents that the word is a core hot keyword [1]. The words with a relatively high centrality of keyword co-occurrence frequency include: "International Business", "Business English", "Cultivation Model", "Teaching Reform", "Curriculum System", "Higher Vocational Institutes", "Cross-border E-commerce", etc.

Table 1 Key word frequency and centrality

No.	Keyword	Frequency	Centrality	First appear
1	International Business	132	0.5	2014
2	Business English	105	0.35	2014
3	Cultivation Model	48	0.18	2014
4	Teaching Reform	31	0.05	2014
5	Curriculum System	28	0.03	2014
6	Higher Vocational Institutes	23	0.08	2016
7	Cross-Border Electronic Commerce	20	0.02	2016
8	School-Enterprise Cooperation	18	0.06	2014
9	Course ideology and Politics	17	0.07	2021
10	Practical Teaching	16	0.01	2014
11	Applied Education	16	0.03	2015
12	Innovation	15	0.03	2014
13	Belt and Road	15	0.04	2016
14	International Trade	14	0.02	2014
15	Integration of Industry and Education	12	0.01	2018
16	Demand for Talents	10	0.01	2014
17	Innovation and entrepreneurship	10	0.04	2017
18	Major Cluster	10	0.06	2015
19	Digital economy	9	0	2021
20	Internationalization	9	0.01	2017

Among the high-frequency words presented in Figure 1 and Table 1, excluding some commonly

used proper terms such as "Cultivation Model", "Curriculum System", and "Higher Vocational Institutes", some keywords closely related to the talent cultivation and teaching content of international business major, such as "Business English" and "Cross-border E-commerce", and their corresponding research findings are particularly worthy of attention.

(1) Business English (with a frequency of 105 times): Foreign language learning and cross-cultural communication skill play a central role in the cultivation of international business talents. As a bridge for communication, Business English is an indispensable tool in international business activities, helping students to conduct cross-cultural communication, business negotiations, contract writing, etc. [2]. Therefore, Business English is crucial for cultivating business talents with international competitiveness. Some scholars have even proposed the great potential of cultivating multi-lingual talents in engaging in international business activities [3].

(2) Cross-border E-commerce (with a frequency of 20 times): As the digital economy has become an important engine for the high-quality development of China's economy, cross-border e-commerce, as a new format of international trade, is of great significance for promoting the transformation and upgrading of China's foreign trade [4]. Therefore, incorporating content related to cross-border e-commerce into the teaching curriculum of the international business major is the key to cultivating talents who meet the needs of the market [5]. The rapid development of cross-border e-commerce requires international business talents to not only be familiar with traditional international trade rules but also master emerging knowledge and skills such as the operation of e-commerce platforms, cross-border e-commerce marketing strategies, international logistics and payment.

(3) Practical Teaching (with a frequency of 16 times): The teaching objectives of vocational education should be closely linked to the need of relevant industries, and the teaching process should be highly integrated with the actual work processes of relevant jobs[6]. In view of this, practical teaching occupies an indispensable position in the cultivation of international business talents [7]. Through teaching modes such as simulation operations, entrepreneurial projects, and school-enterprise cooperation, students can directly participate in the actual operations of international business activities [8]. These teaching activities help to improve students' ability to solve practical problems, narrow the gap between theoretical knowledge and workplace practice, and enhance their employment competitiveness.

(4) International Trade (with a frequency of 14 times): As the cornerstone of the international business major, the theoretical framework, rules, and operation process of international trade still remain the core of international business teaching [9]. "International Trade Practice", "International Freight Forwarding Practice", "International Marketing", etc. are important core courses [10]. International trade teaching helps students to understand the operation mechanism of the global economy, analyze international market trends, and formulate effective international business strategies. It is the foundation for cultivating business talents with an international perspective and strategic thinking.

(5) Digital Economy (with a frequency of 9 times): The vigorous development of the digital economy has accelerated the transformation of traditional foreign trade. Forming a digital mindset is the key to ensuring the sustainable development of international business talents [11]. Therefore, international business education needs to incorporate the teaching of digital technologies such as big data analysis, cloud computing, and artificial intelligence to cultivate students' digital literacy and innovative capabilities [12]. In this way, students can use digital technologies to optimize business processes, improve business decisions, and achieve personal growth in future international business activities.

In conclusion, these keywords reflect multiple important dimensions of the cultivation of international business talents. Ranging from **BUSINESS** knowledge and **OPERATIONAL**

capabilities to the cultivation of **LANGUAGE** skills and **DIGITAL** capabilities to adapt to future trends, they jointly form a comprehensive framework for the cultivation of international business talents, and also serve as the theoretical foundation for proposing the "BOLD" model.

3. Exploration and practice of "BOLD" talent cultivation mode

3.1. Connotation of the model

Based on the above visual analysis, and combining with years of teaching practice experience of SZPU international business major, we propose the talent cultivation concept of "Business as the platform, Operation as the core, Language as the support, and Digit as the empowerment". We also extract the four core vocational capabilities that international business talents in the digital era need to possess, namely: international trade **Business skill**, cross-border e-commerce **Operational skill**, **Language and international communication ability** and **Digital skill**. By choosing the initial letters of the above four abilities, we propose the "BOLD" model for cultivating talents in international business major (as shown in Figure 2).

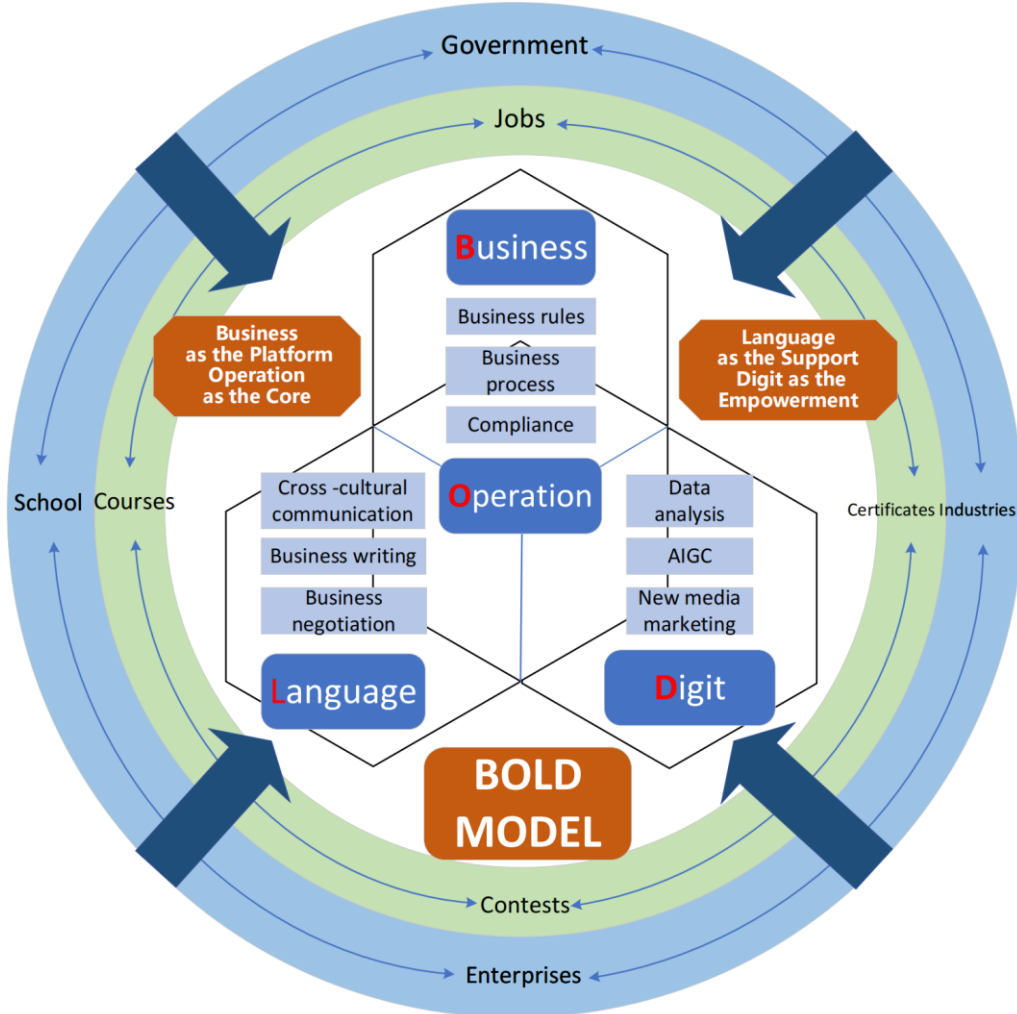


Figure 2. The "BOLD" model of international business talent cultivation

The "BOLD" model is practiced at both macro and micro levels. At the macro level, the model emphasizes the four-party linkage among the government, schools, enterprises and industry associations. At the government level, through policy guidance and resource allocation, a solid

foundation is provided for talent cultivation. Schools, on the other hand, create a highland for talent cultivation by integrating educational resources, optimizing the curriculum system and improving teaching quality. Enterprises deeply participate in talent cultivation in the form of building training bases and introducing real projects. Industry associations play the role of a bridge, promoting informational and technical exchanges, and jointly creating an open and collaborative educational ecosystem.

At the micro level, centered around the four core vocational capabilities, the "BOLD" model adopts the integrated design of "jobs, courses, contests and certificates", adhering to the concept of "determining courses according to jobs, educating people through courses, improving skills through contests, and verifying courses through certificates". Firstly, through detailed market research, the market needs and core job skills are identified. Then, the curriculum system is adjusted to be closely connected with the industry. At the same time, various contests are actively organized to promote teaching and learning. Finally, by integrating course contents and professional certificates, the learning results are tested.

3.2. Practice of the BOLD model

3.2.1. Design the curriculum system based on the jobs and clarify the core capacities

The target job positions are the logical starting point and the ultimate destination of talent cultivation in higher vocational institutes. Through a survey of the graduates of international business major in the past three years, it is shown that the target job positions mainly focus on: cross-border e-commerce positions, traditional foreign trade positions, logistics and freight forwarding positions. It is particularly worth noting that with the vigorous development of new media, the demand for talents in new media marketing positions such as short video operation, online marketing, and live streaming hosts is increasing.

While conducting the survey of graduates, we also carried out a survey on the key vocational capabilities required by enterprises. Among them, 64.71% of the enterprises believe that having customer service ability is very crucial, and 60.78% of the enterprises attach great importance to employees' ability in business data analysis. Foreign language proficiency is the third most concerned ability, accounting for 50.98%. The above feedback of the enterprises can be classified into the four vocational capabilities categories of the "BOLD" model. This result also proves that the "BOLD" model is in line with the current market demand and can effectively enhance students' employment competitiveness. Combining the survey results, we summarize the four major professional abilities of the "BOLD" model as follows:

Understand Business (International Trade Business Ability): It refers to the professional knowledge and practical abilities that students need when conducting international trade activities, involving international trade rules, processes, compliant operations, and risk management. It is a key factor determining whether employees can carry out international trade affairs in a compliant and efficient manner in actual work.

Be Proficient in Practical Operations (Cross-border E-commerce Platform Operation Ability): It refers to the practical operation abilities in the cross-border e-commerce field, such as using various e-commerce platforms and independent websites for product display, promotion and transaction processing, etc. It is an important indicator for enterprises to evaluate whether employees can use e-commerce platforms for business expansion and customer service.

Be Skilled in Language (Language and International Communication Ability): It refers to the ability to use a foreign language for oral and written communication in international business. It determines whether employees can communicate effectively with customers and partners, thus establishing and maintaining good business relationships.

Have **Digital** proficiency (Data Technology Application Ability): It refers to the ability to use data analysis tools and technologies to mine and analyze business data in the digital age, as well as the ability to use social media and short video platforms for brand promotion and marketing. Data-driven mindset and skill are the key to optimizing business processes and improving market competitiveness in the digital era.

3.2.2. Educate students through updated curriculum system and courses

This curriculum system as shown in Figure 3 is closely constructed around the four core "BOLD" capabilities, and its difficulty is set in a progressive manner. In the stage of fundamental courses, emphasis is placed on laying a solid foundation for students in aspects such as professional cognition, theories, digital technologies, and language proficiency. For example, the "Fundamentals of International Business" course covers the basic concepts, rules, and theories of international trade, providing a basis for the subsequent study. As to language, "College English" and "Cross-cultural Communication" are taught, aiming to strengthen students' cross-cultural communication skill.



Figure 3 BOLD Curriculum system of International Business major

In the crucial stage of core courses, the curriculum increases the knowledge density and raises difficulty. Teaching is carried out with the concept of school-enterprise cooperation and project-driven, as well as the mode of online-offline integration. For example, in the course "Cross-border E-commerce Data Analysis", teachers collaborate with a leading Cross-border E-commerce company and conduct in-depth analysis of the job requirements and systematically reconstruct the course logic. Through 6 projects and 14 tasks, students can systematically learn the analysis of key data in the operation processes such as product selection, promotion, sales, and supply chain. Teachers have also developed online MOOC courses and digital textbooks for the implementation of online-offline blended teaching.

In the stage of extended courses, four categories of course are provided for students to choose according to their personal interests and career plans. These course groups respectively correspond

to four categories of target positions. For example, students who choose the international trade course group will further study foreign trade-related knowledge in their final year of college. The courses cover "Import and Export Customs Declaration" and "International Business Law," etc. After graduation, they can be competent for positions such as foreign trade salespersons and international freight forwarders. And students who choose the extended course group of cross-border e-commerce operation will focus on in-depth learning in this area. The courses include "Operation of Cross-border E-commerce B2B" and "Visual Design of Cross-border E-commerce" etc. After graduation, they can engage in jobs such as cross-border e-commerce operation specialists.

We have also carried out the digital transformation of the curriculum, incorporating the latest digital knowledge and skills that are in line with the industry. We have strengthened the education of digital technologies such as AIGC, big data, artificial intelligence and block-chain. For example, in the course "AIGC and Digital Content Marketing," AIGC is introduced to assist students in generating multilingual marketing content. In the course "Cross-border E-commerce data analysis" big data and business intelligence are introduced to enhance students' data analysis capabilities.

3.2.3. Improve vocational capability and comprehensive competency through contests

Aligning with the four core vocational capability, we carefully select four major categories of contests closely related to the talent cultivation objectives. The aim is to create a positive atmosphere of promoting learning and improving skills through contest. Specifically, for the cultivation of business capabilities, we choose highly valuable competitions such as the National Customs Declaration Skills Contest and the National Foreign Trade Professional Ability Contest. Regarding the practice of cross-border e-commerce operation capabilities, contests like the National Cross-border E-commerce Contest and the Internet + International Trade Comprehensive Business Contest have been introduced. In addition, we also attach great importance to the cultivation of students' foreign language abilities and actively encourage and organize students to participate in various foreign language competitions.

Under the macro framework of the BOLD model, the design of the curriculum system takes full account of the requirements of the major contests, ensuring that the curriculum content can support the knowledge and skills required to participate in contests. During the preparation process, the major has implemented the "dual-teacher guidance" model, that is, a guidance team composed of full-time teachers within the school and enterprise mentors from the Cross-border E-commerce Association and cooperative enterprises provides all-round guidance to students. With their rich industry experience and first-line operation skills, enterprise mentors can bring the most cutting-edge industry information and practical skills to students, thus quickly and effectively improving students' core skills.

More importantly, by participating in contest with fierce competitions, students not only exercise and improve their professional skills but also achieve significant progress in their comprehensive competency in many aspects such as teamwork, communication and coordination, public expression, and stress resistance.

3.2.4. Verify Courses through Certificates, Align with Industrial Demands and Emerging Business Forms

To examine the effectiveness of the courses and assess students' mastery of the four core capacities, we select a series of vocational certificates and language certificates. As shown in Figure 4, in the design of the curriculum system, we have achieved an organic integration of vocational skill standards and professional teaching standards. Our four course groups can fully support the

learning content of the key certificates. For example, the assessment content of business certificates such as the International Business Document Specialist is embedded in the form of modules into courses such as "Import and Export Business" and "International Marketing". The assessment content of language certificates is integrated into courses such as "College English" and "Foreign Trade English", eliminating the need for students to receive additional tutoring and training.

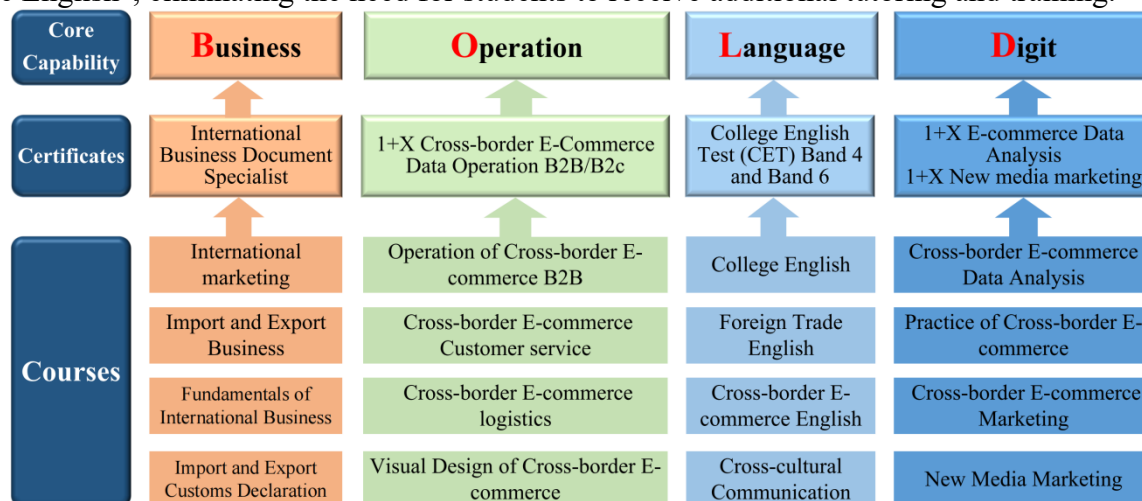


Figure 4: The "BOLD" Certificate System for the International Business Major

In addition to business and language certificates, this major also actively responds to the requirements of the "20 Vocational Education Policies" regarding the promotion of the "1+X" certificate system. We carefully select four "1+X" certificates that are most closely related to the professional talent cultivation, aiming to comprehensively reflect students' vocational skill levels and provide useful supplements and expansions to academic education. These four certificates are: E-commerce Data Analysis (Intermediate), Cross-border E-commerce B2B Data Operation (Intermediate), Cross-border E-commerce B2C Data Operation (Intermediate), and New Media Marketing (Intermediate). Taking the "1+X" pilot work as an opportunity, this major keeps up with the development trends of the cross-border e-commerce and new media marketing industries and the talent demands of the industry, and introduces new business forms and new technologies at the forefront of the industry into the teaching process, with the aim of improving the quality of talent cultivation.

4. Conclusion

Through the visual analysis of relevant literature on the cultivation of international business talents and in combination with the teaching practices of the International Business major of Shenzhen Polytechnic University (SZPU) over the years, this paper innovatively proposes the "BOLD" talent cultivation model and elaborates in detail its connotation and practical approach. The "BOLD" model emphasizes "Business as the platform, Operation as the core, Language as the support, and Digit as the empowerment", aiming to cultivate compound international business talents who understand business, are capable of practical operation, proficient in communication, and possess digital quotient. Through the four-party linkage of "government-school-enterprise-industry" at the macro level and the integrated design of "job- course-contest-certificate" at the micro level, the "BOLD" model closely conforms to the current market demand and effectively improves students' comprehensive abilities and employment competitiveness.

With the continuous development of the digital economy and the continuous changes in the international trade environment, the cultivation of international business talents will face more new

challenges and opportunities. We need to continuously optimize and innovate the talent cultivation model for the International Business major, promote digital transformation, further strengthen in-depth cooperation with the industrial community, and introduce more teaching content related to cutting-edge technologies and emerging business forms to adapt to the new trends in the future development of international business.

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