

Research on a Cross-border E-commerce Live Streaming Competency Cultivation Model for Business English Teaching

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Abstract: With the development of digital trade, new demands for interdisciplinary and compound abilities have arisen for Business English professionals in China. Based on the theoretical foundation of "Digital Intelligence Empowerment" and in conjunction with the mechanism of industry-education integration, this paper puts forward a three-dimensional cross-border e-commerce live-streaming competency cultivation model that combines "Language + Industry + Technology". In accordance with the iterative teaching closed-loop system of "practical training, practical operation and practical effectiveness", with the help of the school-enterprise co-built platform and multimodal resource database, all-round improvement will be made in students' abilities for intercultural communication, digital operation skills and innovative practical thinking. Based on the above evidence, it has been determined that this model can meet the needs of the industry for talent cultivation and offer an effective way to reform applied foreign language majors and build New Liberal Arts.

Keywords: Cross-border E-commerce Live Streaming; Digital Intelligence Empowerment; Competency Cultivation Model; Business English Teaching

1. Introduction

In recent years, with the development of globalisation and digitalisation, the direction of upgrading modern foreign trade has been moving towards digital trade. With the development of cross-border e-commerce live-streaming, many professionals with good foreign language skills, digital literacy and cross-cultural communication abilities are now in high demand.

The traditional problems of business English education are that the content is not practical, it is out of touch with changes in the industry, and digital-intelligent technology has not been introduced (Wang Lifei & Cui Can, 2020). Given that the problems mentioned above exist, this paper will take the business English course at our school as the application base for research and explore the digital-intelligent empowered training model for cross-border e-commerce live-streaming competencies in business English. The purpose of this paper is to study a Digital Transformation Training Model for Cross-border E-commerce Live-streaming. Based on theoretical innovation and practical exploration, we hope to meet the demand for talent in the industry and provide empirical support for reform in applied foreign language education and new liberal arts development.

This study is being carried out at the Business English Department of a university, and over the past three years, it has received support from the industry-academia-research collaboration platform, local university-enterprise cooperation, and many other preliminary studies and practical applications. The above work has achieved many results in the construction of the curriculum system, joint university-industry platforms, multimodal teaching resource repositories, student competition guidance and innovation/entrepreneurship project incubation. Systematic organisation and theoretical improvement of the construction logic, implementation path and early results of the model are presented in this paper.

2. Concept and Framework

In the course of promoting the live-streaming capabilities of cross-border e-commerce with digital intelligence, we need to clarify the main ideas and theoretical basis for this.

2.1 Main Idea: Data-driven and Precise Education

Based on the above data, intelligent cooperation, personalised education and a closed-loop lifelong learning system have been used to build the educational model of "Digital Intelligence Empowerment" (Zhu Zhitin and others, 2024; Shen Shusheng, 2024). The three corresponding forms of this idea in this paper are:

a. Data-Driven Decision Making: Based on actual data regarding the behaviour of users of cross-border e-commerce platforms, AliExpress and TikTok will modify the live-streaming scripts and plans. AI will be used to generate personalised scripts and analyse the data of customers; therefore, the teaching materials will also be updated in light of changes in the market. For example, in the "Big Data-Assisted E-commerce Live Streaming Training" project, the team analysed the data of the AliExpress Direct Train promotion to determine the impact of the product link on all kinds of indicators, such as impressions, click-through rates, add-to-cart/favorite rates and conversion costs. Based on the above data, the students will be able to learn the SKUs, prices and keywords themselves.

b. Process-oriented Assessment: Building an Assessment System for Learning Behaviour Data. Collect a large number of various indicators of students' operation data from the simulation platform, such as the frequency of questions and answers in live interaction, conversion rates of real projects, customer complaint resolution time, etc., to quantify the development path of students' abilities and solve the problem of traditional summative assessment. A detailed "Live-Streaming Record Template" will be provided in the project, and basic data on the number of viewers, likes, comments and inquiries for each live broadcast need to be collected to evaluate the performance of the students.

c. Precision Intervention: Based on the analysis of students' abilities, some training materials and teaching methods will be provided. Students who have difficulty with cross-cultural communication will be given scenario-based training materials based on the "Cross-border E-commerce Live-streaming Script Database" (Supporting Material 1), which contains many different scenarios and script examples, such as English live-streaming scripts for Chaozhou hand-pulled teapots and anime IP collectibles. Students who cannot interpret the data will be added to the extra training for the "International Market Research Process".

2.2 Three-dimensional Integration Structure: Platform - Module - Scenario

A Platform for 3D Teaching Areas has been constructed, and now modules and scenarios can be added to it.

a. Platform Layer: Based on the "Cross-border E-commerce Live Streaming Training Platform" and the "Intercultural E-commerce Live Streaming Training Platform", jointly developed with the industry by universities. In addition to the platform for popular live-streaming data, we have also released some AI-powered tools that can create a full set of mock-up exercises covering market research, product selection and launch, marketing and promotion, after-sales service, etc. It will offer full support for the development of data-driven teaching and learning. For example, there is a product database of local industries (ceramics, garments, crafts), glossaries of foreign trade terms and cross-cultural corpus materials, etc., on the platform that can be used as authentic teaching materials for the "English for Local Industrial Characteristics" course.

b. Module Layer: A series of curriculum modules at different levels of ability have been developed to cover basic operations, innovative planning ability, etc., and they follow a spiral progression path of "knowledge-skill-competence" (see Table 1). The three stages of the curriculum framework are beginner, intermediate and advanced, and they are in line with the closed-loop mode of "practical training-real-world application-practical results".

Table 1: Curriculum Framework for Cross-border E-commerce Live Streaming Competency Development

Course Level	Course Level	Core Modules	Competency Objectives	Outcome
Primary Level	Practical Course in Cross-border E-commerce	Platform Operation, International Market Research; Fundamentals of E-commerce Operations	Learning the Live-Streaming Backend and Some Basic Operation Skills.	Finished Platform Operation Tasks
Intermediate Level	English for Local Industry Characteristics	Data-driven product presentation, English scriptwriting, simulated live streaming exercises	Improve the foreign language communication and dissemination ability of local industries.	Module Work Presentation
Advanced Level	Industrial Innovation English	Live Data Analysis, Creative Live Streaming Operations, and Brand Overseas Expansion Planning	Live Data Analysis, Creative Live Streaming Operations, and Brand Overseas Expansion Planning	Innovation Project Scheme in Scenarios

c. Scenario Layer: According to the actual problems in the industry, build an ideal learning scenario for students. Integrate the local industrial resources of Chaoshan, such as Chaozhou hand-pulled clay teapots, Chaozhou wood carvings and toy and craft intellectual property, into all kinds of practical activities of the project, including the promotion of the "Xiangqiao (local area) Night Talks" intangible cultural heritage, TikTok brand overseas live-streaming campaigns, cross-border e-commerce innovation competitions, etc. Therefore, the teacher should give the students some chances to apply what they have learned in class. Students need to write live-streaming scripts in English for the "Dunhuang Flying Apsaras Teapot" and present all kinds of culture from Dunhuang in this way.

3. Teaching Implementation and Innovation Paths

3.1 Industry-Education Collaboration: The "Training-Operation-Effectiveness" Closed-Loop Model

According to the theory of situated learning, teachers can help students learn by activating the knowledge they have already gained through simulated real-world problems (Lavenger, 1991). Organize the company's resources and, in coordination with the industry-academia-research cooperation, establish a complete three-stage closed-loop system.

a. Training Period: AI Simulation Training for Cross-border E-commerce Live-streaming Platforms. Students will create multilingual live-streaming scripts for products such as "Chaozhou Hand-Pulled Teapots" and "Yuedong Toy IPs", and then optimise the structure of the script with big data tools. First, one needs to learn the standard process and tools for B2B/B2C workflows and market research methods mentioned in the "Cross-border E-commerce Live Streaming Comprehensive Skills Framework" (see case 3-1).

Case 3-1: Live-streaming Script for Hand-pulled Teapot Products (English-Chinese Bilingual Edition)

Product: Chaoshan Hand-Pulled Vermicelli Pot (Master Series by Intangible Cultural Heritage Masters Zhang Yanming and Zhang Haiyuan)

Platform: TikTok Shop / Amazon Live (English host and Chinese co-host)

Duration: 45-60 minutes

Rhythm: Explain one pot every 5-6 minutes, and alternate with lotteries, link sharing, Q&A, etc.

Live-streaming Theme: Oriental Aesthetics + Practical Tea Ware + Collectible Stories + Limited-Time Offers

Opening Warm-up Host

Host:

Hello, World Tea Drinkers! Tonight, we will take you to Chaozhou in China to see the world-famous and delicate hand-pulled teapots. If you like Kung Fu tea, art, or anything else that can make your tea time more colourful, please stay with us for another hour. We only have a total of 200; they will be gone in an instant!

Co-host: (Chinese bullet comments fill the screen)

Dear family, the master artisan of intangible cultural heritage has made some hand-pulled teapots! Limited-edition products around the world will be available at a special price in tonight's live broadcast.

Name of Teapot Work: Dunhuang Flying Apsaras Pot

Angle: Full-circle close-up shot of the body of the teapot with celestial patterns, and UV light is used to light up the double-coloured clay neck.

Host:

“First star of tonight—Dunhuang Flying Apsara. Look at the two-coloured clay swirling as desert silk. Each one is hand-painted; there is no mould. It is not a teapot; it is a portable Dunhuang mural. Drop a message in the chat if you have visited the Mogao Caves!

Selling Points:

2:1 Ratio of Dual-colour Clay: The world's only formula.

Intangible Cultural Heritage: Clay Blasting + Slapping + Integrated Forming

- 300ml of Pu-er and Oolong tea daily masterpiece

Advantage: The first 20 customers will be given a free Dunhuang-theme tea towel.

Linking words

Tap the small yellow basket; Link 1 is live and 15% off for the first 10 minutes.

Caotang Bamboo Rhythm Pot (#002)

Viewing Angle: Close-up of the mugwort pattern on the lid and the bamboo joint at the spout.

Host:

“Next up—Thatched Cottage teapot. Master Zhang went to Du Fu's house in Chengdu and carved the fine grass pattern on the lid. The Spout? A Living Bamboo Shoot. Brewing tea with it is to feel history.

Inertia:

Comment "poetry" if you know Du Fu's famous line "Rain washes the bamboo courtyard", and we will choose one of the comments as the mystery gift.

Selling Point:

- Empty Handle with Anti-scald Design

Strengths: There is a corresponding bamboo tea-stirrer.

b. Operation Period: In coordination with the industry, students will actually participate in the live-streaming activities of the company. In the past three years, the project team has consistently encouraged students to take part in many outstanding activities, such as the "Xiangqiao Night Talks" Intangible Cultural Heritage Salon, the National Cross-border E-commerce Innovation & Entrepreneurship Competition, the National Foreign Trade Competency Contest, and the National Business English Innovation & Entrepreneurship Competition, and has won many top prizes at the national level and first prizes. Based on the above, some new teaching methods have been introduced in practice. Based on the above statistics, the graduates of these programmes are more employable.

c. Effectiveness Stage: According to the results of the project, the value chain of "teaching-practice-social service" has been constructed. A group of students created a promotional video for "anime IP dolls"

on Facebook, and it has been liked more than 8,000 times. TikTok live-streaming shows of the "Dunhuang Flying Apsaras Pot" have spread Chinese culture around the world through "cultural technology". The above results indicate that students have acquired some skills and promoted the international spread of local industries and culture.

3.2 Technological Innovation: Multimodal Resource Database and Intelligent Evaluation System

According to the theory of multimodal discourse, many kinds of symbols are combined to create meaning (Kress & van Leeuwen, 2001). This paper demonstrates that the theory can be applied in teaching to build a repository of multimodal teaching materials. The repository has local industrial resources, including:

- a. Product database and live-streaming case library: Add multi-angle pictures, videos, technical data, cultural stories, etc., of products such as hand-pulled teapots, wood carvings and toys.
- b. Traditional Culture Translation Database: Bilingual Introductions to Chaoshan Intangible Cultural Heritage, Research Papers on English Translation Strategies for Characteristic Terms (e.g., the lead researcher's paper "Research on English Translation Strategies for Characteristic Terms in Chaoshan Traditional Arts from the Perspective of International Chinese Cultural Education").
- c. Live Teaching Resource Library: Detailed Live-streaming Scripts, Standard Operating Procedures (SOPs), Data Analysis Report Templates, etc.

At the same time, there has been a process-monitoring mechanism to continuously observe how well students can use their language skills and technology in group work; thus, the deficiencies of the old paper-and-pencil test have been addressed.

3.3 Cultural Empowerment: The International Spread of Chinese Culture

Byram (1997) put forward that the three parts of intercultural communication competence are knowledge, skills and attitudes. Through the practice of exporting cultural products, this paper hopes to enhance students' cultural confidence and foreign-language proficiency. Cross-border live-streaming e-commerce can be employed to showcase the intangible cultural heritage of Chaozhou, South China, such as hand-pulled teapots and wood carvings, to the English-speaking world and spread Chinese culture. For instance, in the live promotion of the "Dunhuang Flying Apsaras Teapot", the combination of intangible cultural heritage and Eastern aesthetics was liked more than 2,000 times per session. According to the promotion experiment conducted on the foreign social media platform TikTok, innovation and creativity are necessary; authentic cultural presentation is more attractive to the international audience, and music, copywriting and visuals should be used together effectively. Therefore, the goal of "cultural technology" is to promote each other.

4. Implementation Effectiveness and Academic Value

4.1 Talent Training Results

The following are some of the results of the cultivation process:

A High-Innovation Society will surely excel in the competition. In the past three years, the proportion of project students who have won awards at national cross-border e-commerce, international trade and innovation and entrepreneurship competitions has increased by 40%, and many national and provincial awards have also been obtained. Each year, the students' clubs will work with enterprises on new projects.

The Curriculum System and Teaching Materials are now mature. The three new school-based courses that have been added are the "Practical Cross-border E-commerce Course", and a multidisciplinary faculty team consisting of language, technology and innovation has also been established; separately, a teaching resource repository and platform have been set up. Relevant teaching papers have been published in journals.

Students have improved their employment competitiveness and social standing. Based on the above data, students in the new training mode are more employable and better liked by employers than those in the old system. Graduates will quickly learn how to work in cross-border e-commerce live-streaming operations, overseas social media marketing and foreign trade business.

4.2 Scholarly Achievements

The three parts of the training model are the "data-driven approach", "scenario integration" and "cultural innovation", and all have achieved good results in theory and practice.

Based on the idea of digital intelligence empowerment in education, we have collected and analysed real-time data from cross-border e-commerce platforms to teach business English in a data-driven manner. According to the behaviour of the students, we have modified the teaching plan and developed individualised learning materials to switch from experience-based teaching to evidence-based teaching.

The dimension of scenario integration in this paper is the combination of the theory of situational learning and connectivism to create a "real-simulation-virtual" tripartite teaching space that can help students develop all kinds of abilities in scenarios, such as spreading intangible cultural heritage in "Xiangqiao Night Talks" and simulating the operation of a live-streaming platform.

The two systems of cultural decoding and innovation diffusion are combined in the form of the cultural innovation theory and the theory of diffusion of innovations to provide a practical theoretical basis for the reform of applied liberal arts education. The practical method in this paper has good replicability and is organised into the following three parts: a modular curriculum system, standardised industry-education integration mechanisms and new evaluation methods. The three levels of the curriculum are: "basic knowledge", "specialised training" and "innovation development". According to the five steps of "school-enterprise cooperation", "faculty resource sharing", "project-based implementation", "technology transfer" and "quality assurance", industry-education cooperation is being carried out. The three kinds of teaching evaluation are: "process evaluation", "value-added assessment" and "outcome measurement".

5. Conclusion and Outlook

Build a digitally integrated business English cross-border e-commerce live-streaming competency development model to meet the demands of the industry and address the deficiency in the actual teaching of business English courses. Based on the above evidence, we can construct a three-dimensional integration framework of "language - industry - technology", and in accordance with the "platform - module - scenario architecture", build a closed-loop system for "practical training - real-world application - effective outcomes" to systematically and efficiently foster all-round, application-oriented and innovative foreign-language professionals in the digital era.

Going forward, the team will concentrate on the following three areas. First, we will improve the data-sharing mechanism among schools and enterprises to explore how to apply artificial intelligence technology more precisely in training for cross-cultural communication and so on. Secondly, we will strengthen cooperation with international e-commerce platforms in the Belt and Road countries to expand the scope of overseas market operation. Thirdly, we will continue to enhance and advance the standard toolkit and resource-sharing mechanism of this model, provide a full-chain implementation plan for the reform of business English programs and the development of new liberal arts in more similar institutions, and ultimately add educational strength to the globalisation of the China brand and boost the country's cultural soft power.

Fund Projects

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References

- [1] Wang, L. F., & Cui, C. (2020). *Core issues in the construction of business English programs under the new liberal arts background*. *Technology Enhanced Foreign Language Education*, (5), 3-8.
- [2] Zhu, Z. T., & Hu, J. (2024). *Digital intelligence enabling education: Connotation, framework, and pathways*. *E-Education Research*, 45(1), 15-22.
- [3] Shen, S. S. (2024). *Exploring pathways for educational transformation in the digital intelligence era*. *E-Education Research*, 45(3), 25-31.

- [4] Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press.
- [5] Kress, G., & Van Leeuwen, T. (2001). *Multimodal Discourse: The Modes and Media of Contemporary Communication*. Arnold.
- [6] Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters.
- [7] Guo, W. L. (2023). *A study on business English cross-border e-commerce teaching from the perspective of usage events*. *Knowledge Window*, (9), 18-20.
- [8] Guo, W. L. (2025). *A study on English translation strategies for characteristic terms of Chaozhou traditional arts from the perspective of international Chinese culture education*. *Journal of Heihe University*, 16(9), 109-112.