

Research on AI-Enabled Foreign Language Classroom Teaching Model in Higher Vocational Colleges: Innovation of Classroom Teaching Model for Business English Major in Guangzhou South China Business Vocational College

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Abstract: With the rapid development of artificial intelligence technology, its deep integration with the field of education is reshaping traditional teaching models. As a highly application-oriented interdisciplinary discipline, Business English generally faces problems such as low student participation, single teaching methods, and insufficient classroom interaction in its classroom teaching. At the same time, it confronts the challenge of synergistically improving language skills, practical business capabilities, and cross-cultural communication skills. Therefore, leveraging artificial intelligence technology to promote systematic innovation in teaching models has become an urgent priority. Taking the Business English major of Guangzhou South China Business Vocational College as an example, combined with the application practice of the “Teaching Intelligent Language Learning System,” this study explores how AI technology can empower Business English classroom teaching, and systematically constructs a new AI-enabled foreign language classroom teaching model characterized by human-machine collaboration, precision, and efficiency. It provides theoretical references and practical paths for the reform of Business English teaching, and promotes the evolution of foreign language education towards personalization, efficiency, and intelligence.

Keywords: AI; Foreign language classroom; Business English; Teaching model

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1. Introduction

Currently, the in-depth restructuring of the global industrial chain and value chain has placed higher demands on international business talents ^[1]. The talent training goal of the Business English major is transforming from single language ability imparting to comprehensive ability construction ^[2]. Talents in the new era need to simultaneously possess solid English application ability, systematic international business knowledge, agile

cross-cultural communication ability, and practical literacy to face real business environments. However, traditional Business English classrooms are still constrained by multiple structural contradictions: in teaching organization, “emphasizing knowledge infusion while neglecting ability construction”; in resource allocation, “imbalance between homogenized supply and personalized needs”; in practical links, “single simulated scenarios and insufficient authenticity of business situations”; and in feedback mechanisms, prominent problems such as “long cycle and low accuracy”^[3]. These contradictions not only restrict the improvement of teaching effects but also highlight the limitations of traditional teaching models in adapting to the talent training needs of the new era.

In March 2025, the Ministry of Education clearly proposed to “promote the integration of artificial intelligence technology into all elements and the entire process of education and teaching” at the “Artificial Intelligence and Education Reform” deployment meeting, marking that the integration of AI and education has entered a new stage of systematic reshaping from the stage of instrumental application^[4]. Looking at the research history, the application of AI in foreign language teaching has experienced a transformation from initial exploration of computer-assisted language learning, to personalized evaluation supported by intelligent teaching systems, and then to the current “human-machine collaboration” paradigm driven by generative AI represented by large models. Although existing research has made significant progress in the application of technologies such as intelligent speech evaluation and AI writing revision, most of them remain at the level of “single-point empowerment,” lacking systematic restructuring of all elements and the entire process of the teaching model. How to go beyond fragmented tool application and construct a new classroom model centered on learners with AI deeply integrated into the teaching closed loop has become a core problem to be solved in the current reform of Business English teaching.

2. Problems existing in AI-enabled foreign language classroom teaching

Despite the new possibilities brought by AI technology to foreign language teaching, in the teaching practice of the Business English major, AI empowerment still faces prominent problems in the following four aspects.

2.1. Two sides of technology and teaching, insufficient in-depth integration

Most current AI teaching applications still remain at the superficial stage of “technology for technology’s sake,” failing to form organic integration with the core links of Business English teaching. Taking the “Intelligent Language Learning System” widely used in our college as an example, the system performs well in daily oral training, but the proportion of content related to professional scenarios such as “business negotiation,” “exhibition communication,” and “cross-border marketing planning” in its dialogue scenario library is less than 20%, and the complexity and authenticity of scenario design are far lower than the actual business environment. In the process of use, most teachers only use it for basic pronunciation correction and simple dialogue practice. Nearly 70% of teachers admit to only using the follow-up and scoring functions of the system, while the usage rate of its in-built in-depth functions, such as “learning path analysis” and “weakness identification,” is less than 30%. This disconnection between technology and teaching makes it difficult for AI to truly serve the cultivation of core professional abilities such as business negotiation and cross-border marketing planning^[5].

2.2. Convergent functions of intelligent products, lack of professional adaptability

AI language learning products on the market generally have a serious homogenization phenomenon. Through functional analysis of 10 mainstream AI English learning products such as “Lingji Language Teaching System” and “Kouyu Xia” (Oral English Partner), it is found that their core functions are mainly concentrated in general

fields such as vocabulary memory, grammar correction, and basic conversation, while the proportion of characteristic functions targeting the needs of the Business English major is less than 30%. Taking the “Teaching System” as an example, its business terminology database is updated lagging behind, lacking terms in emerging fields such as “blockchain” and “cross-border e-commerce independent stations”; its practical case library mostly consists of fictional scenarios, lacking practical materials from real environments such as the Canton Fair and cross-border e-commerce parks. In simulated international trade negotiations, the system is difficult to identify communication differences under different cultural backgrounds. For example, in Sino-US business negotiation scenarios, it cannot provide effective feedback on the cultural dislocation between students’ direct communication and the indirect communication expected by the US side ^[6].

2.3. Lack of human-machine collaboration mechanism, ambiguous role orientation of teachers and students

In the teaching environment with in-depth AI intervention, the role boundaries and collaborative relationships among teachers, students, and AI have not been clearly defined ^[7]. Classroom observations on the use of the “Teaching System” in our college found that about 40% of teachers over-rely on the AI system, completely handing over classroom leadership to automatic scoring and path recommendation of the system, ignoring the unique teaching wisdom and contextual guidance of teachers. At the same time, nearly 50% of students stated that when using the system for oral practice, they “pay more attention to the scores of immediate feedback rather than the language logic or business etiquette behind the mistakes”. More notably, there is currently a lack of effective human-machine collaborative teaching models, making it difficult to achieve effective complementarity between teachers’ emotional guidance, creative thinking cultivation, and AI’s technical advantages.

2.4. Single evaluation system, difficulty in measuring comprehensive ability improvement

The evaluation mechanisms of existing AI teaching systems have an obvious tendency of “emphasizing three aspects while neglecting three others”. Taking the current evaluation system of the “Teaching System” used in our college as an example, its evaluation is mostly limited to easily quantifiable basic indicators such as vocabulary accuracy (accounting for 40%) and grammar correctness (accounting for 35%), while the weight of higher-order literacy crucial to the Business English major, such as cross-cultural communication ability (accounting for 15%) and practical business ability (accounting for 10%), is too low ^[8]. Among some surveyed AI teaching platforms, only a few have simple business scenario evaluation modules with single evaluation dimensions. For example, when simulating “international procurement negotiations,” the system only focuses on whether the language form is correct, but cannot evaluate key business literacy, such as students’ negotiation strategies and interest coordination abilities.

3. Countermeasures for AI-enabled foreign language classroom teaching

In response to the aforementioned problems, this study puts forward the following countermeasures and suggestions to promote the in-depth integration of AI technology and Business English teaching.

3.1. Construct a “Teaching-Technology” dual-driven model to achieve in-depth integrated development

Establish a curriculum development team composed of professional teachers, technical experts, and enterprise representatives. Set up a “Working Group for Optimizing Business English Functions of the Teaching System”,

and jointly design AI teaching plans oriented to the ability requirements of core courses such as International Trade Practice and Cross-Border E-Commerce. For example, cooperate with the Guangzhou Cross-Border E-Commerce Association to import real case data such as “overseas warehouse location negotiations” and “cross-border brand rights protection” into the “Teaching System”, and develop practical simulation training modules. At the same time, construct a teacher AI teaching ability development system, and regularly hold “in-depth application workshops of the Teaching System” to improve teachers’ ability to use AI data analysis functions to identify students’ weak links and adjust teaching strategies ^[9].

3.2. Develop professional intelligent teaching products to improve industry adaptability

Jointly develop professional AI products suitable for Business English teaching with the joint efforts of industry enterprises, technology suppliers, and professional teachers ^[10]. Focus on promoting the upgrading of the “English Professional Teaching System” in the following directions: build a dynamically updated business terminology database, and update terms in emerging fields such as “digital economy” and “green trade” with industry experts every quarter; develop an intelligent writing assistance system with business context recognition capabilities, and embed evaluation models trained based on actual business documents in the “Teaching System” for professional genres such as business reports and foreign trade correspondence; construct a cross-cultural business communication simulation platform, implanting business cultural characteristics and communication taboos of major trading partner countries (such as the United States, Germany, Japan, etc.).

3.3. Establish a “Teacher-AI-Student” ternary collaborative mechanism to clarify the role orientation of all parties

Construct a new teaching community with teachers as the leading role, AI as the auxiliary role, and students as the main body. Pilot the “hierarchical teaching model assisted by the Teaching System” in the International Business Negotiation course of our college: teachers are responsible for core knowledge explanation and higher-order thinking guidance, organizing real negotiation simulations and commenting on students’ strategy choices; the “Teaching System” provides personalized basic training, generating customized terminology exercises and speech training for different students’ problems; students should transform from passive acceptance to active construction under the guidance of teachers and the assistance of AI, and then use the system’s video playback function for self-reflection and peer evaluation ^[11].

3.4. Construct a multi-dimensional intelligent evaluation system to comprehensively measure student development

Break through the limitations of single language knowledge evaluation, and establish a multi-dimensional intelligent evaluation system covering language skills, business literacy, and cross-cultural abilities. Technically, the evaluation module of the “Teaching System” can be upgraded to conduct an in-depth evaluation of students’ comprehensive performance in business scenario simulations using natural language processing technology. For example, in “cross-border e-commerce customer service simulation”, the system not only evaluates language accuracy but also evaluates the appropriateness of customer service speech through sentiment analysis technology and the effectiveness of problem-solving through intent recognition. At the same time, establish a “process evaluation file” to record students’ growth trajectories in different AI teaching scenarios, and generate personal ability development curves through data visualization technology. In addition, introduce enterprise evaluation dimensions, and connect the system to real customer service dialogue data of cross-border e-commerce

enterprises to make teaching evaluation more in line with industry standards^[12].

4. Path for constructing AI-enabled classroom teaching model for the business English major

Based on the aforementioned problem analysis and countermeasure suggestions, this study systematically constructs a “three-layer, four-dimensional, dual-driven” AI-enabled Business English teaching model. Guided by constructivist theory and situational learning theory, with the concept of human-machine collaboration as the core, it aims to create a full-process, personalized, and intelligent smart teaching ecosystem^[13]. The specific implementation paths are as follows (Table 1).

4.1. Construct a three-level curriculum system of “Basic layer - Core layer - Expansion layer”

At the basic layer, rely on the intelligent speech recognition and real-time feedback technology of the “Teaching System” to build a language skill training module, focusing on improving students’ basic English listening, speaking, reading, writing, and translation abilities. At the core layer, use the virtual simulation technology of the “Teaching System” to develop professional course modules such as business negotiation, foreign trade practice, and cross-border marketing. For example, in the Foreign Trade Document Operation course, use the AR technology of the system to simulate the document filling and review process. At the expansion layer, provide expansion courses such as cross-cultural management and international commercial law through the big data analysis of students’ personalized needs by the “Teaching System”, forming a progressive curriculum structure of “basic consolidation-professional deepening-personalized expansion”^[14].

4.2. Establish a Four-Dimensional Teaching Mechanism of “Situation – Interaction – Data - Evaluation”

In the situation dimension, use the “Teaching System” to construct immersive business scenarios, such as intelligently simulating real working environments such as Canton Fair booth negotiations and cross-border video conferences. In the interaction dimension, carry out multi-round, multi-role business communication training through functions such as human-machine dialogue and virtual role interaction of the “Teaching System”, simulating price negotiations with purchasers from different cultural backgrounds. In the data dimension, use the learning analysis technology of the “Teaching System” to record students’ learning behaviors throughout the process, establish personal learning portraits, and real-time track students’ development in dimensions such as “business terminology mastery” and “cross-cultural sensitivity”. In the evaluation dimension, adopt the multi-modal data analysis technology of the “Teaching System” to comprehensively evaluate students’ language expression, business literacy, cross-cultural abilities, etc., forming a closed-loop system of “integration of teaching, learning, and evaluation”.

4.3 Form a “Teacher Wisdom + AI Technology” dual-driven teaching process

Pre-class: Precise diagnosis and adaptive preview. Teachers accurately design teaching objectives and content based on the learning situation analysis report generated by the “Teaching System”; the “Teaching System” pushes personalized preview materials according to individual differences of students, providing terminology explanations for students with weak foundations and case background knowledge for advanced students. In-class: Higher-order thinking and real-time scaffolding. Teachers lead higher-order thinking activities such as project-based and case-based learning, organizing discussions on real business planning schemes; the “Teaching System” provides technical support such as real-time language support and scenario simulation, intelligently

recommending professional expressions when students have difficulty in expression. Post-class: Intelligent consolidation and precise intervention. The “Teaching System” automatically generates personalized exercises, and teachers implement precise tutoring through data analysis, designing special training for links where students generally perform weakly in simulated negotiations.

4.4. Build a “School – Enterprise – Research” Ternary Collaborative Support Platform

Enterprises provide real case libraries and the latest industry standards, schools are responsible for the design and implementation of teaching content, and technology enterprises provide AI platform support and maintenance. Co-build a “Business English AI Teaching Laboratory” with teaching system companies to develop teaching resource libraries in line with professional characteristics; set up “Teaching System Teaching Application Research Projects” to promote the continuous optimization of teaching models; establish a “Teaching System Certified Lecturer” training mechanism, regularly organizing teachers to participate in AI teaching ability improvement training to ensure the effective implementation and dynamic improvement of the teaching model.

4.5. Implement a teaching optimization mechanism of “Diagnosis - Early warning - Intervention”

Establish a teaching quality monitoring system based on the teaching process data collected by the “Teaching System.” Identify prominent problems in the teaching process through intelligent diagnosis; when the system detects that more than 30% of students continue to perform poorly in the “cross-cultural business etiquette” module, it automatically issues an early warning to the teaching team; the teaching team conducts special discussions based on the early warning information to formulate targeted intervention strategies; and verifies the intervention effect through methods such as A/B testing, forming a continuous improvement closed loop of “monitoring-diagnosis-intervention-improvement.”

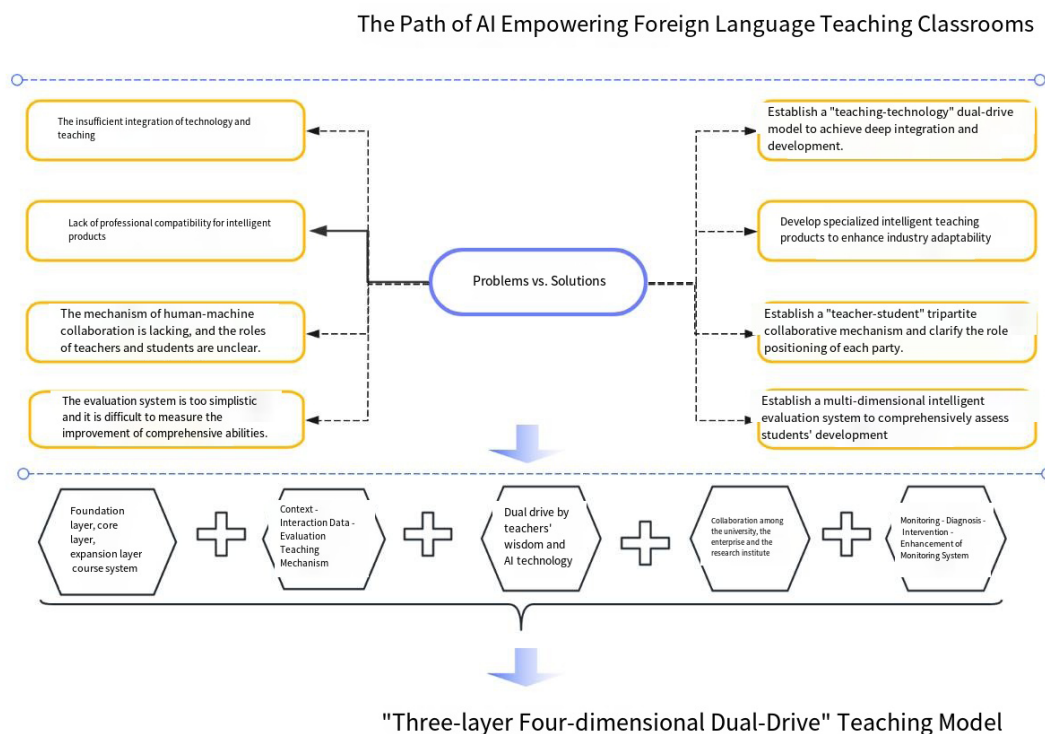


Figure 1. Path of AI-enabled foreign language teaching classroom.

5. Conclusion

The in-depth integration of AI technology and Business English education is reshaping traditional teaching models. By constructing a “three-layer, four-dimensional, dual-driven” teaching model and designing specific implementation paths with the “Intelligent Language Teaching System” as the technical carrier, this study not only provides a systematic solution to the practical dilemmas currently faced by AI-enabled Business English teaching but also depicts a new picture of education featuring human-machine collaboration and intelligent symbiosis^[15].

In the wave of digital transformation, we must clearly recognize that technology is always just a means, and talent cultivation is the fundamental goal. The core of AI empowerment does not lie in the sophistication of technology, but in its return to the essence of teaching, teaching students in accordance with their aptitude, so that every student can receive the most suitable education. The particularity of Business English teaching requires us to take a distinctive path of in-depth integration of technology and professionalism. We must not only give full play to the technical advantages of AI in students’ personalized learning and intelligent evaluation, but also always maintain the leading position and professional judgment of teachers in the teaching process.

In the future, with the continuous evolution of AI technology and the in-depth integration of educational concepts, Business English teaching will pay more attention to human-machine collaboration, data-driven, and personalized development. The “three-layer, four-dimensional, dual-driven” model constructed in this study provides a feasible path for AI-enabled foreign language teaching, but it also needs to be continuously tested and optimized in the continuous collaboration with technical platforms such as the “Teaching System,” ultimately achieving the fundamental goal of cultivating new-era international business talents with a global perspective, professional capabilities, and humanistic feelings.

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Disclosure statement

The authors declare no conflict of interest.

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