

The Cultivation of Cross-Cultural Communication Skills in the Era of Artificial Intelligence -- a New Model for College English Education

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ABSTRACT

This study explores a new model for cultivating cross-cultural communication skills in college English education in the era of artificial intelligence. It constructs a teaching framework centered on "AI empowerment". The framework systematically elaborates on the specific application paths of artificial intelligence as an environment builder, personalized mentor, and cultural analysis tool, emphasizing the realization of teaching innovation through contextualized task-driven approaches, online/offline blended learning, and real project exploration. The study further points out that the successful implementation of this new model relies on the transformation of the teacher's role into a learning designer and guide, as well as the integration of a multi-dimensional evaluation system that combines process, outcome and reflective elements. It provides theoretical references and practical solutions for promoting college English teaching reforms and cultivating international talents with critical cultural awareness and digital competence.

KEYWORDS

Artificial intelligence; Cross-cultural communication competence; College English teaching; Generative Artificial Intelligence (GenAI); Critical thinking

1 Introduction

The deep integration of globalization and intelligentization is profoundly reshaping the paradigms of cross-cultural communication, posing new requirements for the global competence of college graduates ^[1-2]. Artificial intelligence technologies, particularly large language models and immersive reality tools, demonstrate significant potential in creating realistic contexts and providing personalized feedback, offering a historic opportunity for reforming college English teaching. However, traditional teaching models have long faced bottlenecks such as insufficient contextual authenticity, weak interactivity, and simplistic evaluation methods in cultivating students' cross-cultural competence, struggling to meet the new challenges of human-AI collaborative communication ^[3]. Consequently, exploring new AI-empowered cultivation models has become an urgent issue in college English education reform.

In light of this, this paper aims to systematically explore pathways for cultivating cross-cultural communication skills within college English education in the AI era. It first analyzes the inherent synergies between AI technology and cross-cultural pedagogy, along with potential risks ^[4]. Then it focuses on constructing a practical model that integrates contextualized tasks, blended learning and project-based inquiry. Finally, it delves into the necessary transformation of the teacher's role and the innovation of a multi-dimensional evaluation system required to effectively support this model, intending to provide a theoretical reference and practical framework for advancing college English teaching to a higher level.

2 AI and cross-cultural communication: synergies and challenges

2.1 Context construction

Context construction represents a core advantage of AI-empowered cross-cultural teaching, aiming to break the spatiotemporal and cultural boundaries of the traditional classroom by providing students with high-fidelity, repeatable, low-risk immersive communication environments. Specifically, Virtual Reality (VR) and Augmented Reality (AR) technologies can simulate complex scenarios such as international conferences, business negotiations, or social gatherings. Utilizing Artificial Intelligence-Generated Content (AIGC) and intelligent conversational agents, it is possible to create virtual interactants with diverse cultural backgrounds, language habits, and behavioral patterns. This multi-dimensional contextual stimulation effectively addresses issues inherent in traditional teaching, such as the singularity of authentic materials and the rigidity of communication scenarios, thereby laying a technical foundation for stimulating students' on-the-spot responses and emotional engagement.

Building on this, the design of teaching activities should shift from "knowledge transmission" to "experiential reflection". The teacher's task is to meticulously design driving tasks that guide students to observe, analyze, and respond

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to potential cultural misunderstandings and communication conflicts within highly simulated dynamic interactions. For instance, students could engage in a difficult conversation with an AI character involving a sensitive cultural topic; the system would record their linguistic choices and non-verbal behaviors, subsequently generating an analytical report. This shift from "static observation" to "dynamic participation" not only significantly enhances learning immersion but, more importantly, aims to cultivate students' acute perception of cultural differences, immediate judgment skills, and adaptive behavioral adjustment capabilities, thereby facilitating the deep internalization of cross-cultural awareness.

2.2 Personalized guidance

The realization of personalized guidance relies on AI's adaptive learning technologies and big data analytics capabilities, with its core value lying in overcoming the difficulty of addressing individual student differences within the traditional class-teaching system. By continuously tracking and analyzing students' learning behaviors, cognitive styles, and knowledge mastery levels, AI systems can accurately identify each student's specific knowledge gaps and skill deficiencies in cross-cultural communication, such as pragmatic failures, cultural stereotyping, or non-verbal communication barriers. Based on this diagnosis, AI can act as a tireless personal tutor, dynamically highly customized learning resources—like targeted cultural background readings, micro-lessons on communication strategies, or tiered language exercises—thus achieving a paradigm shift from uniform instruction to precise, targeted support.

Within this personalized intervention mechanism, the focus of teaching transitions from one-way knowledge delivery to empowering students' metacognitive abilities. The immediate, descriptive feedback provided by the system not only helps students detect subtle issues in their own communication patterns but also guides them to reflect on the cultural causes underlying these problems. For example, after a student completes a simulated cross-cultural negotiation, the AI could specifically point out how their overly direct proposal style might cause misunderstanding and offer alternative expressions for comparative learning. This continuous feedback loop, grounded in data-driven insights, not only accelerates the knowledge internalization process but, more crucially, fosters students' self-monitoring and adjustment abilities, enabling them to become autonomous and efficient cultural learners.

2.3 Cultural analysis

Teaching focused on the dimension of cultural analysis aims to move beyond the superficial transmission of cultural knowledge, instead leveraging artificial intelligence as a powerful cognitive tool to cultivate students' capacity for in-depth interpretation of cultural phenomena and critical thinking. Unlike the limited, often curated materials found in traditional textbooks, AI-powered analytical tools can guide students in processing massive, real-time, authentic world multimodal materials, such as global social media trends, news comments, and film/TV dialogue. Using Natural Language Processing (NLP) and big data analysis techniques, AI can assist students in identifying the high-frequency contexts of specific cultural keywords, the discourse patterns of different groups regarding specific issues, and even underlying sentiment tendencies, thereby transforming abstract cultural concepts into observable, quantifiable data evidence.

The key to achieving this transformation lies in designing inquiry-based learning tasks. Teachers should not merely have students use the tools but should guide them to transition from "information consumers" to "researchers of cultural phenomena." For instance, a project like "A Comparative Discourse Analysis of the Concept of 'Success' in China and the US" could be assigned, requiring students to use AI tools to collect, filter, and preliminarily analyze two corpora, then critically examine the potential cultural biases inherent in the AI's own analysis results, and finally write an analytical report. This process not only trains students' information literacy and academic thinking skills but also leads them to a profound understanding of the dynamic and complex nature of culture, ultimately shaping a critical cultural consciousness and cultural sensitivity that is neither overly reliant on technology nor bound by preconceptions.

3 Implementation Pathways for AI-empowered college English teaching

3.1 Scenario-based task-driven approach

The scenario-based task-driven approach is the core pathway for translating the technical advantages of "context construction" into tangible teaching outcomes. The key to its instructional design lies in abandoning reliance on fabricated contexts and instead creating "quasi-authentic" tasks with clear objectives, complex elements, and challenging demands, such as simulating international project collaboration, cross-cultural customer service, or transnational dispute mediation. In this model, the immersive environments built by AI are no longer isolated environments but are transformed into practical fields where students must comprehensively apply linguistic knowledge, cultural insight, and communication strategies to solve practical problems. The authenticity of the tasks significantly enhances students' cognitive engagement and emotional investment, shifting their learning motivation from being externally driven to an intrinsic need to learn for solving real-world problems.

To ensure teaching effectiveness, task design must follow the "scaffolding" principle. Teachers need to plan a sequence of tasks progressing from simple to complex and embed AI support at critical junctures. For example, before a complex

negotiation task, students can first engage in targeted communication practice with AI characters, receiving immediate feedback to adjust their strategies. Post-task debriefing and reflection, based on behavior data recorded by the AI, are crucial. This guides students to analyze the cultural assumptions behind their decisions and their effectiveness. Through the "practice-feedback-reflection" cycle, students systematically construct their cross-cultural communication competence within "sociocultural practices" that approximate real-life situations.

3.2 Integration of online AI and offline facilitation

The organic combination of online AI and offline facilitation forms the core of blended learning, aiming to fully leverage the respective strengths of machine intelligence and teacher-led human interaction. This model typically follows a process of "online self-directed learning, offline internalization and extension." In the online phase, students use AI platforms for personalized foundational language training and cultural knowledge acquisition, such as targeted practice with AI conversational agents or completing modules pushed by adaptive learning systems. This front-loads knowledge transfer and some skill training, thereby freeing the offline classroom from traditional knowledge instruction.

Consequently, the focus of the offline classroom shifts to deep interaction and competency elevation. Based on the learning analytics reports provided by the AI, teachers can accurately identify common difficulties and individual differences among students, and then design higher-order thinking activities such as group discussions, role-playing, and case analysis. For instance, addressing common pragmatic failures identified in online exercises, the teacher can organize students to comparatively analyze multiple communication versions provided by the AI, discuss the underlying cultural reasons, and collaboratively develop optimal strategies. This division of labor not only optimizes the allocation of teaching resources but, more importantly, refocuses instruction from low-level knowledge memorization to the cultivation of high-order critical thinking and complex communication skills, ensuring both the depth and breadth of teaching effectiveness.

3.3 Authentic world-based inquiry

Authentic world-based inquiry learning aims to place students in a broader and more complex field of cross-cultural cognition. Its core lies in guiding students to transition from being passive recipients of cultural knowledge to active researchers and interpreters of cultural phenomena. This model is typically driven by open-ended questions with real-world significance, such as "Analyze the differences in media framing of a specific global event across different countries" or "Develop a cross-cultural communication plan for a local brand planning to enter an overseas market." In this process, students need to independently utilize AI tools (e.g., for information retrieval, corpus analysis, data visualization) to collect, process, and analyze multilingual, multimodal authentic information, thereby completing the full inquiry cycle from information acquisition to knowledge construction.

The profound value of this learning model lies in cultivating the core competencies needed to address future uncertainties. Faced with a massive amount of raw information, students must employ critical thinking to evaluate and assess the search results and analyses provided by AI tools, scrutinizing their potential algorithmic biases. By collaboratively producing final deliverables such as research reports, solutions, or multimedia presentations, students not only systematically hone their skills in information synthesis, cross-cultural analysis, and creative problem-solving but also gain a deep appreciation for the fluidity and complexity of cultural concepts. Ultimately, this helps them build a sustainable capacity for cross-cultural inquiry and adaptation capable of thriving in genuine globalized environments.

4 Reshaping the teacher's role and innovating the evaluation system

4.1 Teacher role transformation: from knowledge deliverer to learning designer

The application of artificial intelligence does not diminish the teacher's role but rather drives a profound transformation from being an authoritative knowledge deliverer to becoming a macro-level designer and facilitator of the learning ecosystem. This shift signifies that the teacher's primary responsibility is no longer the one-way transmission of fixed knowledge, but the careful architecture of learning experiences that stimulate active student inquiry. Their focus shifts to tasks such as: selecting and integrating AI tools, designing challenging, real-world tasks, planning teaching processes that seamlessly connect online and offline activities, and reserving space for deep collaboration and reflection in the classroom. The teacher's value thus manifests in the overall conception of the teaching system and the guidance of higher-order thinking activities.

Specifically, the teacher's role is embodied at three levels. First, as a learning experience designer, they need to construct task scenarios integrated with AI resources, clearly defining learning objectives and assessment criteria. Second, as a facilitator of deep learning, after AI handles foundational knowledge and skill practice, classroom time can be concentrated on organizing debates, facilitating reflection, and guiding thinking to cultivate students' critical thinking and cultural insight. Third, as a provider of humanistic care, they focus on elements irreplaceable by AI, such as emotional interaction, sustaining learning motivation, and shaping academic integrity. Consequently, teachers' professional development must expand beyond mere language proficiency enhancement to include the comprehensive cultivation of

instructional design capabilities, educational technology integration skills, and the ability to collaborate with AI, thereby establishing their indispensable core value within the intelligent educational environment.

4.2 Evaluation system innovation: integrating process, product and reflection

To adapt to the new model, the evaluation system must transition from single, outcome-oriented testing to a comprehensive assessment integrated throughout the entire learning process. The core of this innovation lies in organically combining process-oriented, product-oriented, and reflective assessment. Leveraging the advantages of AI technology, process-oriented assessment continuously tracks students' language choices, use of communication strategies, and task completion paths within simulated contexts, generating precise behavioral data reports that provide teachers with objective formative feedback.

Product-oriented assessment, meanwhile, focuses on students' ability to integrate and creatively apply knowledge, emphasizing the evaluation of final deliverables like project reports or design solutions for their cultural appropriateness, logical rigor, and innovative value.

These quantitative and qualitative assessments need to be deeply integrated with reflective assessment to form a complete evaluation loop. Reflective assessment requires students to regularly submit learning journals, conduct self-assessments, or participate in peer reviews, prompting them to deeply analyze the evolution of their cross-cultural understanding, challenges encountered, and the effectiveness of their strategies. For example, after completing a virtual collaboration project, students would not only submit a group product (product-oriented) and receive interaction data analysis of their collaborative process from the system (process-oriented), but also write a personal reflection report explaining their renewed understanding of cultural differences and the role AI tools played in their learning. This multi-dimensional evaluation system aims to shift the focus of assessment from "what was learned" to "how learning occurs and how it can be continuously improved," ultimately fostering the development of students' metacognitive abilities and lifelong learning competencies.

5 Conclusion

In summary, college English education in the era of artificial intelligence must undergo a strategic transformation—from solely imparting language skills to fostering deeply integrated cross-cultural communication competence. The new "AI-empowered" model constructed in this study systematically integrates implementation pathways such as scenario-based tasks, blended learning, and authentic inquiry, supported by the coordinated innovation of the teacher's role and the evaluation system. It aims to cultivate students' core competencies, including critical cultural awareness and the ability for human-AI collaborative communication. This model provides a theoretical framework and practical guidance for addressing the dual challenges of globalization and intelligentization.

In light of this, the core of college English education reform lies in constructing a dynamic, open, and learner-centered educational ecology. In the future, educators need to continuously explore cutting-edge applications of AI technology while maintaining cautious reflection on its ethical implications. This transformation is not merely about enhancing teaching efficacy; it is crucial for shaping a new generation of talent capable of effectively participating in global dialogue and bearing cultural responsibility.

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