

A Study on Empathetic Communication of Ceramic Culture in International Social Media Based on Digital Intelligent Technology and English Writing

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ABSTRACT

This paper focuses on the application of digital intelligence technology and English writing in the empathetic communication of ceramic culture on international social media, and deeply explores the relevant theoretical and practical paths. The research first analyzes the application of digital intelligence technology in English writing teaching, including the personalized learning support, full-process assistance and intelligent evaluation functions brought by Artificial Intelligence Generated Content (AIGC) technology, as well as the advantages of digital teaching resource platforms in resource integration, interactive scene construction and teaching data utilization, while pointing out the potential risks in the application of technology. Secondly, it explores the empathetic elements in the material, technical and spiritual levels of ceramic culture, and proposes to integrate the cultivation of ceramic culture empathetic communication ability into college English writing teaching through a progressive teaching mode of content excavation, narrative training and communication practice, so as to realize the effective communication of ceramic culture on international social media. The research aims to provide theoretical and practical references for enhancing the international influence of ceramic culture and cultivating talents with cross-cultural communication capabilities.

KEYWORDS

English writing; Ceramic culture; Empathetic communication

1 Introduction

As a vital part of a country's soft power development, cultural communication has become more and more significant. Ceramic culture, a splendid treasure of Chinese civilization, carries profound historical heritage, unique artistic charm and rich humanistic connotations, serving as an important carrier to showcase Chinese culture to the world. However, in the context of international social media, the effective dissemination of ceramic culture is confronted with many challenges such as cultural differences and insufficient empathetic communication. How to break through these obstacles and achieve empathetic resonance between ceramic culture and international audiences has become an urgent and important issue. The rapid development of digital intelligence technology has brought new opportunities for solving this problem. The extensive application of digital intelligence technologies such as AIGC and digital teaching resource platforms in the field of education is profoundly transforming the teaching mode of English writing, providing technical support for cultivating talents with cross-cultural communication capabilities.

Based on this, this paper is rooted in the integrated application of digital intelligence technology and English writing, focusing on the empathetic communication of ceramic culture in the environment of international social media. By analyzing the specific applications of digital intelligence technology in English writing teaching and the changes it has brought, exploring the elements in ceramic culture that can arouse international empathy, and probing into the practical paths of integrating the cultivation of ceramic culture empathetic communication ability into college English writing teaching, this paper aims to provide theoretical basis and practical guidance for constructing an effective mode of international empathetic communication of ceramic culture.

2 Digital intelligent technology and english writing

Digital intelligence technology is integrating into English writing teaching scenarios in diverse forms. It not only directly assists the writing process through AIGC technology but also realizes the sharing of teaching resources via digital teaching resource platforms, promoting the transformation of English writing teaching from experience-driven to technology-empowered.

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2.1 Application of AIGC technology

With the rapid advancement of generative artificial intelligence, AIGC technology is profoundly transforming the education, particularly in college English writing instruction. Rooted in core capabilities of Natural Language Processing (NLP) and deep learning, AIGC technology offers intelligent and personalized solutions for English writing education, addressing the limitations of traditional teaching models and pioneering new frontiers for instructional innovation. Chen Qingbin (2016) identified challenges in traditional college English writing teaching, including monotonous content and the lack of personalized instruction, advocating for the reconstruction of teaching models through corpus-based sentence retrieval, automated essay scoring systems, and digital course videos ^[1]. Wang Haixiao (2024) explored how generative AI can empower reforms in college English teaching across eight dimensions: curriculum design, teaching plans, content, resources, methodologies, tools, and assessment, affirming its positive contributions to educational transformation ^[2].

The applications of AIGC technology in college English writing instruction encompass personalized learning support, full-process writing assistance and intelligent assessment. In traditional college English writing teaching, teachers often face the dilemma of large class sizes and heavy marking tasks, making it difficult to provide precise guidance to each student. However, AIGC technology can quickly identify issues such as grammatical errors, logical flaws, and inappropriate expressions in students' writing, and provide immediate feedback. Common AIGC models include DeepSeek, ChatGPT, Tongyi Qianwen, Doubao, and iFlytek Spark, etc. They not only effectively ease teachers' teaching pressure but also promote the transformation from unified teaching to personalized learning. AIGC technology shows significant advantages in providing full-process assistance throughout the writing process. It can offer background knowledge, argument references, and illustrative examples during the preparation stage; provide spelling checks and grammar error detection during the first draft writing stage; and evaluate the textual logic and argumentative rigor of the composition during the revision and polishing stage. In addition, by setting quantifiable evaluation indicators such as vocabulary complexity, sentence diversity, and content relevance, AIGC models can generate standardized assessment reports, enabling students to clearly understand their strengths and weaknesses.

However, the integration of AIGC technology in college English writing instruction necessitates vigilance against potential risks. On the one hand, excessive reliance on artificial intelligence tools may lead to the degradation of students' writing abilities, causing them to lose independent thinking skills or overly depend on AI-generated expression templates, thus forming a tendency of "mechanized writing". On the other hand, the controversy over the originality of AI-generated content may trigger academic integrity issues, as some students directly submit AI-generated articles as their assignments. Therefore, in college English writing teaching, it is necessary to clarify the assisting role of AI tools, emphasize the dominant position of students, and guide them to use technology reasonably rather than replace their own thinking. Teachers should strengthen the supervision of students' writing process, verify the originality of students' work through classroom discussions, elaboration of ideas and other methods, and cultivate their ability to use AI-generated content critically.

2.2 Application of digital teaching resource platforms

As an important carrier of digital intelligence technology in higher education, digital teaching resource platforms provide a three-dimensional support system for college English writing teaching by integrating massive high-quality resources, constructing interactive learning scenarios, and visualizing the teaching process. Based on the practice of college English classroom teaching reform driven by technology integration, Wang Na and Zhang Jingyuan (2018) reflected on the in-depth integration of information technology and foreign language teaching, noting that online course platforms can enrich the presentation of language learning resources, expand the time and space for language learning, and effectively make up for the insufficiency of language input and output in traditional classroom teaching ^[3]. Xu Jinfen and Liu Wenbo (2019) affirmed the positive role of MOOCs, Small Private Online Courses (SPOCs), and data-driven learning in foreign language teaching, including providing abundant online teaching resources, promoting the in-depth integration of online courses and traditional teaching, and offering a large amount of authentic language materials ^[4].

In terms of resource integration, such platforms break the limitations of traditional textbooks and gather multi-dimensional and multi-level teaching resources for college English writing. These resources form a complete chain from language elements to pragmatic competence, covering basic grammar knowledge, topic-based high-frequency vocabulary lists, synonym explanations, advanced model essay libraries (including argumentative essays, expository essays, practical writing, etc.), and extended cross-cultural knowledge. Digital teaching resource platforms can construct interactive learning scenarios. Through built-in online writing workshops, peer review systems, and real-time teacher-student Q&A modules, they realize multi-dimensional interaction in the writing process. Students can upload their first drafts to the platform, and the system automatically matches learning partners for mutual evaluation. This peer review mechanism not only exercises students' critical thinking but also helps them discover disadvantages in their writing from

others' perspectives. Teachers can view students' writing progress and peer review content in real-time and initiate online discussions on common problems.

In addition, these platforms can collect and store students' historical learning data. Teachers can analyze frequently made grammatical mistakes, high-frequency incorrect expressions, common logical coherence errors, and typical writing structure problems based on the data, providing a clear basis for designing targeted exercises and optimizing teaching content in the future. Students can review their revision trajectories through the comparison function, clearly seeing the optimization process from the first draft to the final version. This visualized growth record can enhance their confidence in writing and stimulate their motivation for continuous improvement.

3 Empathetic communication of ceramic culture

As an important carrier of Chinese civilization, ceramic culture integrates materiality and spirituality. Its timeless artistic expressions and humanistic connotations provide rich narrative materials for international empathetic communication. In the context of international social media, the empathetic communication of ceramic culture requires exploring universally resonant emotional elements, integrating cross-cultural communication principles with digital intelligence tools, and constructing a dual-path communication framework of emotion and cognition to achieve the transformation from cultural display to value recognition.

3.1 Exploration of empathetic elements in ceramic culture

Xu Minghua and Li Hong (2022) categorized national narratives, media narratives, and folk narratives into "asymmetric empathy", "weak empathy" and "shared empathy" in international communication, affirming the positive role of empathetic communication in international dissemination^[5]. Zhou Xiaoding and Li Xiaojing (2022) analyzed audience comments on Beijing 2022 videos from CGTN's official YouTube channel, identifying sportsmanship, sports culture, athletes, and daily life as empathetic elements that effectively promoted cross-cultural communication during Beijing Winter Olympics^[6]. Ceramic culture contains universal emotions and value cores that transcend cultural differences, with its empathetic elements of three levels: material, technical, and spiritual.

The shapes, colors, and patterns of ceramics embody humanity's shared pursuit of beauty, which can break linguistic barriers through visual language and directly trigger emotional empathy. This aesthetic resonance, rooted in universal preferences for symmetry, harmony, and texture, operates through a bottom-up emotional mechanism that quickly enters the cognitive domain of audiences from different cultures, awakening instinctive aesthetic experiences. The craftsmanship spirit in ceramic production embodies values shared by all humanity. The focus on details, dedication to perfection, and intergenerational skill inheritance in processes like clay throwing, glazing, and firing evoke recognition of values such as "persistence", "creation" and "heritage". Ceramics' deep integration with human life makes them vessels of emotional memory. From daily bowls and plates to ritual vessels, from the "Maritime Ceramic Road" in trade to contemporary art installations, ceramics have always recorded human migration, communication, and emotions.

3.2 Practical paths for empathetic communication of ceramic culture

In college English writing teaching, the cultivation of ceramic culture empathetic communication ability can be integrated into English writing training through a progressive teaching model of content excavation, narrative training, and communication practice, enabling students to become cross-cultural communicators. By transforming the empathetic elements of ceramic culture into a writing material library, teachers can guide students to carry out theme-based writing exercises around the three-level empathetic elements of ceramics: material, craftsmanship, and spirit. In descriptive writing, students are trained to use visual metaphors to convey aesthetic empathy; in argumentative writing, with craftsmanship spirit as the starting point, students are cultivated to extract the common values of "persistence and innovation". In the writing process, students' English writing can be assisted with the help of AIGC technology, digital teaching resource platforms, and corpora. The peer review function of digital teaching platforms can be used to simulate international communication scenarios. Students evaluate their peers' English writing from the perspective of audiences, and whether emotional resonance is felt is also part of the evaluation, forcing writers to shift from self-expression to the audience's perspective.

Connecting classroom writing with international social media communication scenarios, students are organized into groups to create content suitable for platforms such as Instagram and Twitter based on the English texts about ceramic culture completed in class. At the same time, platform data feedback, such as the number of likes and comment keywords, is used to evaluate the empathetic effectiveness of English writing. Through such micro-communication practices, students can not only master English writing skills but also understand the essence of "writing as

communication", gradually forming the ability to internationally communicate ceramic culture with "empathy as the core, English as the tool, and technology as the assistance". Through systematic training in college English writing teaching, students can transform the regional knowledge of ceramic culture into a universal expression. Their writing results can not only become high-quality communication materials on international social media but also cultivate talents with cross-cultural communication capabilities for the international communication of ceramic culture.

4 Conclusion

This study explores the integrated application of digital intelligence technology and English writing in the empathetic communication of ceramic culture on international social media. The research shows that digital intelligence technology has brought revolutionary changes to college English writing teaching. AIGC technology can provide personalized learning support, full-process writing assistance, and intelligent evaluation, while digital teaching resource platforms realize resource integration, interactive scenario construction, and effective utilization of teaching data. Together, they promote English writing teaching towards a more efficient, precise, and personalized direction, but potential risks caused by over-reliance on technology need to be warned. Ceramic culture contains rich empathetic elements, from visual aesthetics at the material level, craftsmanship spirit at the technical level to emotional memory at the spiritual level, which provide a solid foundation for international empathetic communication. By integrating the empathetic elements of ceramic culture into college English writing teaching and adopting a progressive teaching model of content excavation, narrative training, and communication practice, students' ability to empathetically communicate ceramic culture can be effectively cultivated, making them qualified cross-cultural communicators.

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