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Integrating Large Language Models into EFL classrooms in China: Pedagogical innovations and critical reflections

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Abstract

This paper investigates the application of Large Language Models (LLMs), specifically DeepSeek, in foreign language education, focusing on the university course "Chinese Culture". It highlights the advantages of LLMs in enhancing personalized learning, instructional design, and immediate feedback. Through a systematic examination of pre-class preparation, classroom teaching, and post-class extension, the paper demonstrates how LLMs can transform traditional teaching methods by facilitating information retrieval, promoting critical thinking, and offering tailored support to students. The study reveals that the application of LLMs still encounters risks such as technological dependence, which can obscure students' actual proficiency levels, issues of information credibility, and various ethical challenges. Teachers must address these concerns through curricular restructuring and critical guidance. The research underscores the necessity for foreign language education to strike a balance between technological empowerment and humanistic values. It advocates for teachers to evolve into "AI collaborators" and value guides, enabling them to harness the supportive capabilities of LLMs while preserving the humanistic essence of education.

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Introduction

LLMs, as deep learning-based natural language processing models, not only understand human language but also possess the ability to generate natural language. Consequently, they have been widely applied in fields such as text generation, machine translation, logical reasoning, and intelligent question-answering systems. Since the release of ChatGPT in 2022, the potential of LLMs in language education has gradually garnered attention from educational researchers (Rudolph et al., 2023b). Studies have shown that LLMs exhibit significant advantages in supporting personalized learning, assisting instructional design, and providing immediate feedback (Luckin & Holmes, 2016). As an emerging educational technology, LLMs not only offer innovative teaching tools for educators, driving the digital transformation of education, but also prompt new reflections on existing teaching models.

In China, university foreign language courses, as an integral part of the higher education system, bear the dual mission of cultivating students' language proficiency and cultural literacy (Byram, 2021; Liddicoat & Scarino, 2013). Introducing LLMs into university foreign language teaching can not only enrich teaching methods and optimize instructional activity design but also deepen students' understanding and mastery of the target language and culture. Taking DeepSeek as a representative of LLMs, this paper systematically explores its specific applications in foreign language education. The selection of DeepSeek as the platform in this study is based on two key considerations: Firstly, internationally dominant large language models such as ChatGPT and Claude face usage restrictions in the researcher's country, making direct application unfeasible. Secondly, DeepSeek, as an emerging large language model, has demonstrated performance comparable to or even surpassing that of models like ChatGPT in multiple evaluations. Specifically, in nine core metrics for English language processing, DeepSeek outperformed ChatGPT-4o in seven; in three Chinese language metrics, DeepSeek consistently led. This significant performance advantage has caused a market stir upon its release, with the resulting decline in US tech stocks and market capitalization losses reaching historic highs, a phenomenon widely covered by authoritative media outlets (Goldman & Egan, 2025; *The Economist*, 2025).

Focusing on the application of LLMs in the "Chinese Culture" course, the paper analyzes their impact on content restructuring and teaching model innovation through case studies of their use in pre-class preparation, classroom teaching, and post-class extension. It also examines the main challenges and coping strategies in their application. The research aims to provide theoretical and practical references for the effective application of LLMs in foreign language teaching, thereby promoting innovative development in foreign language education.

Literature review

Research on the relationship between artificial intelligence and education has existed for decades (e.g., Brown et al., 1975; Carbonell, 1970), though early findings

were primarily published in computer science journals, reflecting the field's initial technical orientation (Selwyn, 2019). With technological advancements, research on artificial intelligence and education has gradually attracted widespread attention from educational researchers. Studies by Popenici and Kerr (2017), Camilleri (2018), Zawacki-Richter et al. (2019), Chen et al. (2020), and Holmes (2020) mark the continuous development of this field. In November 2022, OpenAI released ChatGPT, a significant milestone in AI research. Given its exceptional performance in natural language processing, researchers have extensively explored the impact of LLMs like ChatGPT on education, including teaching, learning, and research dimensions.

Current research on the impact of LLMs on educational reform primarily focuses on the following aspects: At the macro level, scholars such as Akinwalere and Ivanov (2022), Fuchs (2023), and Rahman and Watanobe (2023) have discussed the overall impact of LLMs on higher education, analyzing both their advantages and potential risks, and proposing corresponding coping strategies. In specific dimensions, scholars like Álvarez-Álvarez and Falcon (2023), Firat (2023), and Pack and Maloney (2023) have focused on the transformative role of LLMs in scientific research. While many scholars (e.g., Sajja et al., 2024) affirm the positive role of LLMs in promoting learning, others (e.g., Nguyen et al., 2023; Stolz et al., 2024) emphasize the ethical issues and potential risks associated with their application in education, which have become important topics in academic discussions.

Regarding the impact of LLMs on foreign language teaching, Kohnke et al. (2023) explored the functions of generative AI chatbots in language teaching, analyzing the controversies and limitations in their application, and proposed the digital competencies required for teachers and learners to use this technology effectively and ethically. Feng and Zhang (2024) analyzed the capabilities of ChatGPT-4o and Wenxin Large Model 4.0 in language services, affirming the strong potential of AI in assisting foreign language teaching and research. Zhang and Hong (2023) discussed how LLMs promote autonomous learning among foreign language learners and the transformation of teacher roles, revealing potential issues in the field of foreign language teaching and proposing strategies for cultivating critical thinking. Li (2024) explored the application scenarios and potential problems of ChatGPT in foreign language teaching based on an analysis of its functional characteristics, proposing macro-level coping strategies. Jiao and Chen (2023) analyzed the application of LLMs in English teaching from four major business scenarios: inspiring teaching wisdom through brainstorming, providing timely feedback for personalized teaching, creating conditions for cultivating higher-order thinking skills, and reducing the burden of automated assessment.

Additionally, some studies have examined LLMs in specific courses or teaching scenarios. For example, Kong (2024) investigated the impact of generative AI on teaching content and models with the intensive reading course as an example. Hou (2019) focused on a new oral English teaching model supported by LLMs, arguing that it promotes the intelligent transformation of oral English teaching and effectively

enhances teaching outcomes.

In summary, existing research reveals the potential value, practical challenges, and future impact of LLMs in education, providing important insights for their effective application in the field. However, most of these studies focus on the macro level. While several investigations address the use of LLMs in specific courses or scenarios, they often lack in-depth reflection based on practical experience. Moreover, most research focuses on ChatGPT, with limited studies on emerging LLMs like DeepSeek. Therefore, this study focuses on the application of DeepSeek in the course “Chinese Culture” where English is taught as the foreign language for Chinese students, exploring the impact of LLMs on foreign language teaching content and organization, and demonstrating their potential application value and considerations through specific practices.

Integrating LLMs into foreign language teaching

LLMs learn language patterns and features through massive data, endowing them with exceptional language understanding and generation capabilities. This technological foundation makes them ideal for empowering foreign language teaching. In the field of natural language processing, LLMs demonstrate significant advantages, providing diversified resource support for foreign language teaching and undertaking various auxiliary teaching tasks, allowing educators and learners to experience the convenience and value brought by AI technology. Foreign language teaching, with its core goal of cultivating cross-cultural communication skills and its focus on language skill training, naturally becomes an ideal application scenario for LLMs.

This study examines the “Chinese Culture” course, a 12-chapter program exploring philosophy, religion, literature, art, science and technology, festivals, traditional attire, and related themes. Focusing on the chapter dedicated to traditional Chinese art, the research uses Beijing Opera as a case study to demonstrate how LLMs, specifically DeepSeek, can be integrated into the teaching process, covering pre-class preparation, classroom teaching, and post-class extension. With the assistance of LLMs, students can complete tasks such as basic information retrieval, vocabulary, and grammar mastery through human-computer interaction outside the classroom. The core classroom tasks shift to solving complex higher-order problems, emphasizing the cultivation of learners’ critical and innovative thinking skills.

Pre-class preparation stage

In the pre-class preparation phase, the teacher uses DeepSeek to assist in generating course outlines, designing discussion topics, and planning classroom activities. Additionally, the teacher leverages the platform to create quiz questions and devise creative classroom tasks, effectively improving teaching preparation efficiency. Furthermore, DeepSeek is also used to recommend supplementary materials such as videos, articles, and cultural stories to enrich teaching

resources and stimulate student interest. For example, the electronic version of the textbook is uploaded to the platform, and DeepSeek generates a detailed teaching plan. This generated plan includes teaching objectives, required materials, course outlines, assessment methods, and extension activities. The course outline is further divided into six modules: warm-up activities, reading comprehension, vocabulary building, role-playing, comparative analysis, and summary reflection, each with specific implementation plans, ensuring strong operability. Additionally, DeepSeek generates Chinese and English introductions to Chinese opera, which are accurate and primarily used for post-class translation exercises to reinforce vocabulary and expressions learned in class. The platform also helps generate three classroom discussion questions to guide students in deeper thinking.

From the students’ perspective, they use DeepSeek to obtain summaries of cultural concepts and historical events, laying the foundation for classroom learning. The platform’s language processing capabilities help students understand technical terms, expand background knowledge, and enhance learning outcomes. Through interaction with DeepSeek, students can overcome language barriers during pre-class preparation, practice professional vocabulary and expressions, and improve their language application skills.

Classroom teaching stage

Since most language issues are resolved before class through DeepSeek, classroom teaching primarily focuses on cultivating students’ critical thinking and value systems. The teacher uses the three critical thinking questions generated by DeepSeek (See Table 1) to guide students in in-depth discussions. These questions accurately capture the core content of the chapter and provide entry points for thinking and potential new vocabulary, helping students better express their views.

These questions are moderately challenging, progressively structured, and aligned with teaching principles. The first two questions are based on textbook content but require deeper thinking; the third question is closely related to real-world society, offering strong practical significance and appeal.

Classroom teaching is primarily interactive between teachers and students, focusing on issues that students were unable to resolve during pre-class preparation. Although LLMs can enhance interactivity in the classroom, their role is mainly supportive, such as providing vocabulary support or assisting in brainstorming. During discussions, the teacher guides students to use DeepSeek to obtain relevant information or case studies, enhancing the depth of discussion. Additionally, this course has a distinct value orientation, aiming to deepen students’ understanding and identification with their own culture. This goal transcends what mere technical tools can achieve, so the teacher always plays a central guiding role in the classroom.

Table 1. Critical thinking questions generated by DeepSeek.

<p>1. Question 1:</p> <p><i>How do the symbolic elements in Beijing Opera (e.g., facial makeup, costumes, and gestures) reflect the values and social structures of traditional Chinese society?</i></p> <p>o Discussion Points:</p> <ul style="list-style-type: none">▪ The use of colors in facial makeup (e.g., red for loyalty, white for treachery) reflects moral values.▪ Costumes indicate social status and profession (e.g., yellow for emperors, blue for scholars).▪ Gestures and movements symbolize actions and emotions, showing how non-verbal communication plays a key role in storytelling. <p>2. Question 2:</p> <p><i>In what ways do regional operas like Sichuan Opera and Kunqu Opera differ from Beijing Opera, and what might these differences tell us about the cultural diversity of China?</i></p> <p>o Discussion Points:</p> <ul style="list-style-type: none">▪ Sichuan Opera is known for its face-changing stunts and humor, reflecting the lively and playful culture of Sichuan.▪ Kunqu Opera, with its gentle and refined style, reflects the elegance and sophistication of Jiangnan culture.▪ These differences highlight how regional operas adapt to local tastes, dialects, and cultural traditions. <p>3. Question 3:</p> <p><i>What challenges do traditional Chinese operas face in the modern world, and how can they be preserved and promoted for future generations?</i></p> <p>o Discussion Points:</p> <ul style="list-style-type: none">▪ Modern entertainment (e.g., movies, TV shows) competes with traditional operas for audience attention.▪ Younger generations may find traditional operas less relatable due to their historical themes and slow pacing.▪ Solutions could include modern adaptations, educational programs, and digital platforms to reach a wider audience.

Beyond leading students to explore issues that were not effectively resolved before class, the teachers also guide students on how to use prompts and interact more efficiently with DeepSeek, and critically analyze the intelligent support provided by LLMs. For example, through analysis, students recognize that although LLMs provide logically clear answers, their reasoning tends to be conventional, and their arguments are often homogeneous, lacking unique insights. Furthermore, the teacher consciously guides students to evaluate the quality of LLM-generated content, including its authenticity, relevance, credibility, and professionalism, as well as identify potential biases and underlying intentions. Through this process, students fully understand that LLM-provided solutions are more suitable as starting points for further thinking. Learners must combine their experiences and knowledge to construct more creative and personalized solutions. Additionally, the teacher emphasizes the limitations of LLM-generated text, ensuring that students maintain a critical attitude when using LLMs for supplementary learning in pre- and post-class activities, avoiding blind reliance on their feedback (Rudolph et al., 2025).

Post-class extension stage

In traditional educational settings, delivering immediate, tailored, and comprehensive feedback for each individual student presents significant challenges. However, the incorporation of LLMs facilitates the realization of this objective.

LLMs help students improve their English expression skills through language polishing and translation training while deepening their understanding of Chinese culture. Additionally, LLMs assist the teacher in generating quizzes to assess learning outcomes and identify knowledge gaps through learning log analysis. As a valuable assistant to the teacher, DeepSeek provides students with language learning feedback at any time and offers personalized learning support based on individual progress and interests, becoming a tireless professional guide. For example, after completing the teaching of this section, the teacher asks students to write an English essay on "The Code in Beijing Opera Facial Makeup" and use Deepseek for grammar correction and cultural accuracy assessment. Simultaneously, the teacher uses the chapter summary generated by DeepSeek as translation practice material, requiring students to translate it themselves before seeking revision suggestions from the platform. To address the lack of oral practice, the teacher uses the voice call feature to allow students to engage in oral communication with the LLM on the topic after class. The LLM can evaluate students' expressions from language, logic, and content dimensions, providing real-time feedback, effectively enhancing student participation and personalized oral practice outcomes. In addition, the course also leverages DeepSeek to create diverse quiz questions derived from uploaded documents. The generated multiple-choice questions are designed with plausible distractors, while the true/false questions are accompanied by detailed explanations, which could be used directly to assess the outcomes of classroom instruction (See Table 2).

Table 2. Some of the quiz questions generated by DeepSeek.

<p>Multiple Choice Questions:</p> <p>1. Question 1:</p> <p>What are the four basic skills of Beijing Opera?</p> <p>A) Singing, dancing, acting, and painting</p> <p>B) Singing, recitation, acting, and acrobatic fighting</p> <p>C) Singing, martial arts, acrobatics, and painting</p> <p>D) Recitation, dancing, acting, and martial arts</p> <p>Correct Answer: B) Singing, recitation, acting, and acrobatic fighting</p> <p>2. Question 2:</p> <p>Which color in Beijing Opera facial makeup typically represents loyalty and bravery?</p> <p>A) White B) Red C) Yellow D) Green</p> <p>Correct Answer: B) Red</p> <p>3. Question 3:</p> <p>Which of the following operas is known as the "mother of Chinese operas"?</p> <p>A) Beijing Opera B) Sichuan Opera C) Kunqu Opera D) Henan Opera</p> <p>Correct Answer: C) Kunqu Opera</p>

4. **Question 4:**

What is the main characteristic of the *xiaosheng* role in Beijing Opera?

- A) They wear colorful facial makeup.
- B) They use a combination of real and falsetto voices.
- C) They are known for their acrobatic fighting skills.
- D) They play elderly women.

Correct Answer: B) They use a combination of real and falsetto voices.

5. **Question 5:**

Which of the following is a famous stunt in Sichuan Opera?

- A) Singing in falsetto B) Face-changing C) Acrobatic fighting D) Playing traditional instruments

Correct Answer: B) Face-changing

Furthermore, during the post-instructional phase, educators can leverage LLMs to curate personalized supplementary reading materials tailored to students' proficiency levels, thereby fostering sustained intellectual engagement beyond classroom hours. The analytical capabilities of LLMs further enable systematic examination of granular student feedback data, facilitating evidence-based refinement of pedagogical approaches.

Reflections on integrating LLMs into classroom teaching

This section reflects on the advantages and considerations of applying LLMs, represented by DeepSeek, in educational applications. Undeniably, LLMs have demonstrated powerful capabilities in natural language processing, and their integration into foreign language teaching has brought unprecedented changes to both teachers and students, profoundly impacting course design and implementation. In AI-empowered foreign language teaching, intelligent systems can be teachers, supervisors, or communication partners. Learners are not only recipients of foreign language knowledge but also active users of language and proactive thinkers. LLMs have significantly enhanced the convenience of teaching and learning processes, thereby improving instructional efficiency. However, we must also recognize that the emergence and application of this technology warrant deep reflection.

Point #1: Transformation and restructuring of course design

The emergence and application of LLMs have brought profound transformation and restructuring to traditional foreign language course design. This technological innovation not only challenges traditional teaching concepts but also redefines the roles of teachers and students in the teaching process. In traditional foreign language teaching settings, the training and transmission of language and cultural knowledge are predominant. However, the impressive capabilities of LLMs in tasks such as translation, writing, and syntax-semantic parsing position them as powerful assistants for teachers, as they can handle many basic tasks efficiently. Therefore, when designing teaching, teachers should fully consider the application of LLMs, delegating some simple, repetitive training content to LLMs.

For example, in foreign language courses such as "Chinese Culture", certain foundational knowledge tasks and language skill training can be effectively managed by LLMs. This not only improves teaching efficiency but also allows teachers to take on the roles of supervisors, designers, and guides, focusing on cultivating students' self-directed learning and exploratory learning abilities.

The core goal of language courses is not only language learning but also cultural acquisition and thinking training (Han, 2002; Liddicoat & Scarino, 2013). Classrooms should focus on solving complex problems, training higher-order thinking, and cultivating students' critical thinking and values. This shift in teaching concepts requires foreign language educators to adjust teaching methods and designs in a timely manner, transitioning from traditional knowledge transmission to a competency-oriented training model, promoting the integration of virtual and real-world classroom teaching.

In an environment where teachers and students can equally share the knowledge, advice, and judgments provided by intelligent systems, foreign language teaching methods, content, and evaluation systems must be reorganized. Foreign language education urgently needs to construct a new teaching paradigm. This transformation is merely one aspect or beginning of the many changes in the field, but its profound impact cannot be ignored. In the future, the transformation of foreign language classrooms, the renewal of teaching concepts, and how to guide students to actively and proactively learn will become key issues that need to be deeply considered in teaching design.

Point #2: Current technical issues

While current AI technology has made significant progress, it still faces numerous technical challenges. Generative artificial intelligence has long been shrouded in hyperbolic discourse within academic and technological circles (Rudolph et al., 2025). As Chomsky et al. (2023) point out, ChatGPT and similar systems have inherent flaws in balancing creativity and constraints. Specifically, there are two main issues: over-generation, where the model may simultaneously produce both true and false information, supporting both moral and immoral decisions, and under-generation, where the model lacks commitment when making decisions and is indifferent to consequences (Chomsky et al., 2023).

One manifestation of this is the credibility of data and feedback provided by LLMs. As data-driven models, LLMs lack an understanding of the real-world state and rules behind the data, so their generated results may not always align with real-world facts and logic. In some cases, the model may fabricate information or cater to the questioner's tendencies when questioned. For instance, when recommending books on Chinese opera, DeepSeek accurately recommended seven books, while ChatGPT recommended ten books, some of which did not exist, demonstrating a situation of 'speaking nonsense with a straight face.'

Therefore, we should maintain a cautious attitude toward the factual information provided by LLMs. Machine-generated knowledge cannot guarantee complete accuracy, especially in collaborative learning scenarios where learners cannot fully rely on this information. The machine itself cannot determine the rationality and correctness of its output, posing a risk of acquiring incorrect knowledge for learners lacking experience with LLMs. When interacting with LLMs, learners need to maintain a questioning attitude, and for important content, they should verify and cross-check through multiple means. In this process, teachers' guidance and assistance remain the most direct and effective way to avoid various risks (Qin, 2023).

Point #3: Changes in teacher competencies

Will teachers become obsolete under the strong impact of LLMs? During the drafting of this article, reports emerged of an Arizona-based charter school receiving approval to implement fully AI-driven academic guidance for students in grades 4-8 (Prada, 2024). This case has sparked widespread discussion about the future of teacher roles. Although LLMs have shown great potential in foreign language education, it is premature to claim that they will completely replace foreign language teachers (Chan & Tsi, 2024; Ghazali et al., 2024; Rudolph et al., 2023a). Currently, while LLMs reduce the burden on teachers in knowledge transmission, they also impose higher demands on this group. Although LLMs take on some simple, repetitive knowledge-based tasks, teachers face new challenges in course design, shifts in educational concepts, and the enhancement of technical competencies.

First, to fully leverage the potential of LLMs in foreign language teaching, teachers need to redesign the course system under new technological conditions. For example, based on the automatic generation capabilities of LLMs, teachers need to design new teaching modules such as AI-assisted writing, intelligent translation, and comparative analysis (Kohnke et al., 2023). Only then can LLMs be fully integrated into language teaching, leveraging big data to create smart classrooms and build cross-cultural communication environments, providing students with a new environment for intelligent foreign language learning.

Second, teachers need to update their educational concepts and redefine their roles in a timely manner. Traditionally, foreign language teachers have primarily been responsible for transmitting foreign language and cultural knowledge, acting as "knowledge porters" (Hu & Gao, 2024). Some foreign language teachers have outdated ideas and insufficient hands-on skills (Li, 2024). However, in the context of LLMs, students can access and obtain vast amounts of information just like teachers, partially diminishing the teacher's role as the main body of knowledge transmission. In this context, the role of foreign language teachers as knowledge authorities is challenged, and they need to expand into knowledge producers, innovators, and "AI collaborators".

Teachers also need to continuously enhance their technological literacy. The widespread application of LLMs heralds the advent of a new era in education. In this new epoch of knowledge production, educators are not only tasked

with imparting knowledge but also with mastering the skills to interact with mainstream LLMs, effectively integrating them into teaching practices, and formulating targeted pedagogical strategies. The rapid pace of technological advancements imposes constant pressure on continuous learning. Teachers need to develop a 'technological sensitivity,' continually improve their technological literacy, and acquire the ability to guide learners in critically utilizing the outputs of LLMs. In the age of AI, while teachers who are unfamiliar with the technology may not be replaced outright, they could be overshadowed by those who are proficient in using it effectively (Zhang & Dong, 2020). This also echoes Neil Selwyn's (2019) critical observation: while it would be misguided to position AI technology as ready replacements for human-centered educational processes, it proves equally "foolish" to assume teaching methodologies will remain static amidst rapid AI advancement.

Point #4: Technological dependence and the masking of true proficiency

The impact of LLMs on learners' creativity is twofold: it can both inspire and stimulate creativity, and it can also constrain intellectual development, leading to over-reliance on intelligent technology. In foreign language learning, the intervention of LLMs may obscure students' true language proficiency (Kong, 2024). Students may become overly dependent on model-generated texts, reducing opportunities for independent thinking and expression. This over-reliance on LLMs can inhibit students' learning motivation and agency, impeding the enhancement of their knowledge and skills (Kim et al., 2025). If students rely on models for assignments or writing, they may develop a superficial understanding of language structures and vocabulary. Teachers may find it challenging to assess whether students have genuinely mastered the relevant knowledge and skills. The convenience of models may lead to a decline in students' interest and initiative in learning, affecting long-term language development. Moreover, excessive reliance on LLMs can impair original innovation and critical thinking, as the use of model-generated content may suppress students' creative thinking and independent writing abilities. Machine-generated personalized learning scenarios may create "information cocoons" (Sunstein, 2006), hindering students from expressing diverse needs. Therefore, teachers should guide students to use language models rationally, treating them as auxiliary tools rather than substitutes. Encouraging students to engage in critical thinking when using models and analyzing the outputs is essential. While leveraging the advantages of LLMs, it is crucial to maintain students' independent thinking and learning capabilities.

Additionally, the intervention of LLMs raises issues of technological misuse and academic integrity (Rudolph et al., 2025). Machine-generated content used in academic exams, assignments, or thesis writing can lead to academic misconduct and integrity concerns (Chaka, 2024; Mohammadkarimi, 2023; Susnjak & McIntosh, 2024). Whether students using LLMs to complete assignments constitutes plagiarism is a complex issue, and determining when it is appropriate to use such tools is equally challenging.

Point #5: Instrumentality of technology and the humanistic nature of language teaching

For a long time, academia has overemphasized the instrumental nature of foreign language disciplines while neglecting their humanistic aspects. Particularly in higher education, the core of foreign language teaching often focuses on the cultivation of language skills, making skill training dominate the curriculum. Although some foreign language courses include humanistic education content, these elements are usually peripheral and fail to form a systematic humanistic education framework.

Take the English course “Chinese Culture” as an example. We should not merely treat it as a tool for language skill development or simply position it as a means to enhance students’ English listening, speaking, reading, and writing abilities within a Chinese cultural context. Such an instrumental teaching perspective fails to fully explore the course’s deeper value in personal holistic development and educational humanism. One of the course’s key objectives is guiding students to understand and identify with their own traditional culture. Although LLMs demonstrate significant advantages in natural language processing, their neutrality in ethical judgment and value guidance necessitates human intervention and guidance in their application within the course. As an English course for non-English majors, “Chinese Culture” transcends the traditional paradigm of language instrumentalism, aiming not only to provide language skill training materials in specific fields but also to cultivate students’ cross-cultural understanding, critical thinking, and humanistic literacy.

While LLMs can provide abundant information and knowledge, they cannot convey the emotional and ethical values closely tied to personal experience. Although AI technology demonstrates significant advantages in training listening, speaking, reading, writing, and translation skills in foreign language teaching, the essence of education lies in nurturing individuals, a core task that can only be accomplished by humans themselves (Zhang & Dong, 2020). Therefore, teachers should focus on cultivating students’ emotions and values, enhancing their moral judgment and social responsibility (Kong, 2024). However, the limitations of LLMs as platforms offering ‘neutral’ values are particularly evident in guiding students’ values. Emotional cultivation and value shaping, as core components of moral education, are areas where AI technology falls short (Li, 2024). Foreign language teaching should be a process that subtly enhances students’ humanistic literacy and moral qualities. Teachers should integrate moral and humanistic education into language teaching, helping students understand the cultural backgrounds and values of different countries and regions, thereby strengthening their cross-cultural communication skills and social responsibility. Therefore, in the context of LLMs, we should not overemphasize the instrumental nature of foreign language disciplines at the expense of their humanistic aspects (Rudolph et al., 2024). When technology deeply intervenes in humanistic education, the true value of education lies in maintaining an “appropriate distance” from technology, achieving genuine holistic development in the tension between technological empowerment and humanistic commitment.

Conclusion

This paper explores the practical application of LLMs, exemplified by Deepseek, in the university English course “Chinese Culture”. It offers a deep reflection on existing practices through specific case studies. The findings reveal that LLMs provide diversified support for teaching and learning, significantly enhancing students’ language abilities and cultural understanding. In various teaching activities, LLMs serve not only as comprehensive assistants for teachers but also as continuous cultural mentors for students.

As intelligent entities participating in foreign language teaching alongside teachers and students, LLMs are subtly transforming educational paradigms. Foreign language education must keep pace with the times, constructing new educational frameworks supported by various intelligent technologies (Kong, 2024). This trend places higher demands on foreign language teachers, who need to continuously improve their technological literacy and learn how to leverage large models to enhance the effectiveness and efficiency of language instruction.

At the same time, we should be clear-headed about the current limitations of LLMs. For example, the accuracy of information provided by these models requires further verification; the potential technological dependence arising from widespread use may obscure students’ true proficiency levels; and the ‘technological neutrality’ of large language models requires human intervention to better cultivate students’ critical thinking and humanistic literacy in the language teaching process.

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