

Application Challenges and Strategies for Artificial Intelligence in College English Cultural Education

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ABSTRACT

The integration of artificial intelligence (AI) technology has transformed university English education, introducing innovative pedagogical possibilities while also posing significant challenges. This study examines the application of AI in university English cultural courses, exploring its implementation scope, effectiveness, and associated obstacles. Through a questionnaire survey conducted among students at Fuzhou University of International Studies and Trade, the study investigates learners' perceptions and evaluations of AI-enhanced instruction. The findings reveal a range of challenges at technological, pedagogical, and socio-cultural levels, highlighting both opportunities and constraints in AI-driven education. These insights offer valuable implications for optimizing instructional models in English cultural courses, ultimately fostering students' language proficiency and cross-cultural communicative competence.

Keywords: Artificial intelligence, University English culture courses, Implementation challenges, Strategic responses.

1. INTRODUCTION

Artificial intelligence (AI) has sparked extensive discussions across academic disciplines. As AI technology undergoes rapid advancements, it has permeated diverse fields and become an integral component of daily life and professional work. For instance, intelligent voice assistants, such as Apple's Siri, can execute fundamental tasks through voice commands, significantly enhancing user interaction convenience. In content distribution, streaming media and short video platforms, such as TikTok, leverage AI algorithms to curate content tailored to individual interests, thereby achieving personalized information dissemination. Furthermore, AI is widely recognized as a transformative force in the ongoing knowledge revolution (Wu, 2017), profoundly reshaping the education sector by introducing unprecedented opportunities and innovations in learning methodologies.

In the realm of college English cultural education, AI is progressively enriching instructional approaches and reshaping classroom dynamics. By leveraging AI-powered tools, educators can design interactive and personalized

learning experiences that effectively engage students. AI facilitates precise identification of learners' interests, fosters intrinsic motivation, and cultivates an engaging and meaningful classroom atmosphere (Cao & Wang, 2022). These advancements highlight AI's potential to enhance the efficacy of cultural education in university English courses.

Despite these advancements, university English cultural courses continue to encounter significant challenges. Traditional teaching approaches often rely on teacher-centered knowledge transmission, characterized by limited instructional strategies and outdated content. As Hong (cf. Shu, 2014) asserts, conventional teaching frameworks struggle to address the evolving demands of a diversified society and the personalized learning needs of students. The prevalent uniformity in instructional methods, where "a thousand schools are the same", calls for urgent reform. Therefore, exploring the seamless integration of AI into college English cultural education aligns with contemporary educational imperatives and holds substantial research significance. This integration not only modernizes pedagogical models but also empowers students to develop comprehensive language skills

and cross-cultural communication competencies, fostering a more dynamic and adaptive learning environment.

2. LITERATURE REVIEW

2.1 Relevant Research

The rapid advancement of artificial intelligence (AI) technology has significantly transformed the educational landscape, particularly in the realm of college English instruction. The integration of AI in this field has garnered substantial attention from scholars, who have explored its potential to enhance teaching and learning processes.

Zheng (2022) examines the broad application of AI in university English teaching, particularly in listening, speaking, and writing. He emphasizes that AI technology can enrich the language learning experience for students. Specifically, Zheng highlights the use of AI-driven knowledge spectrum technology to identify students' weaknesses through algorithmic analysis, thereby supporting the teaching of English cultural courses. However, his study primarily relies on case studies and lacks long-term empirical research, particularly in exploring the evolving role of teachers and the nuances of cultural teaching.

Building on Zheng's work, Cao and Wang (2020) investigate the role of modern information technologies, such as big data and intelligent recommender systems, in enhancing the effectiveness of cultural teaching. Their research addresses a gap in Zheng's study by focusing on the cultivation of cross-cultural communicative competence. They demonstrate that intelligent technologies, including contextual simulations, cross-cultural virtual communication, and corpus analysis, can significantly improve students' understanding of English culture. However, their study also lacks empirical research and fails to systematically explore the long-term effects on students' cultural comprehension.

C Lina (2022) delves deeper into the integration of AI in cross-cultural English language teaching, emphasizing the potential of emerging technologies such as intelligent teaching platforms, virtual reality (VR), and augmented reality (AR). She argues that AI not only provides rich content resources but also plays a crucial role in classroom interaction, cultural awareness, and teaching evaluation. While her research complements the findings of Zheng, Cao, and Wang, it primarily focuses on the

technical application level and overlooks critical issues such as teachers' adaptability, students' learning dependency, and ethical concerns.

Further expanding on these insights, Cao et al. (2020) explore the depth and breadth of modern information technology applications in university English cultural teaching. They highlight AI's ability to integrate English cultural resources, enabling intelligent, virtualized, and personalized learning experiences. Their study introduces innovative approaches, such as personalized learning services and virtual reality-based interactive learning, which open new avenues for teaching English language and culture. However, their research lacks a thorough examination of the challenges and strategies for addressing them, leaving a gap in the literature.

In summary, these studies collectively reveal the potential and challenges of AI technology in university English education. They analyze the advantages of AI in enhancing language skills, innovating cultural teaching, and transforming teaching modes. However, they also underscore the need to address technical, pedagogical, and cultural challenges to fully realize AI's potential in this field.

2.2 Importance of the Research

The rise of artificial intelligence has sparked a paradigm shift in university English cultural teaching (Cao & Wang, 2020). Leveraging AI to empower English cultural teaching has become a focal point of scholarly discussion. Through this literature review, it is evident that existing research lacks detailed exploration of AI's specific applications and empirical analysis of its long-term impact. Therefore, this study holds both theoretical and practical significance. Theoretically, it contributes to the growing body of research on college English teaching. Practically, it offers insights for improving teaching methods, exploring new instructional models, and enhancing students' overall literacy and competence.

2.3 Research Method

This study employs a questionnaire survey to collect and analyze data from English majors at Fuzhou College of Foreign Languages and Foreign Trade. The survey aims to understand the impact of AI technology on university English cultural teaching and to conduct further analysis based on the collected data. A total of 121 questionnaires were distributed to students, and all 121 were

returned as valid responses. By gathering students' feedback, this research seeks to explore the potentials and limitations of AI technology in university English cultural courses, with the goal of developing targeted strategies to address identified challenges.

3. APPLICATION OF ARTIFICIAL INTELLIGENCE IN UNIVERSITY ENGLISH CULTURE COURSES

3.1 Analysis of Specific Application Areas

3.1.1 Adaptive Learning System

According to Wikipedia, "Adaptive learning is an educational method that utilizes computers as interactive teaching devices to precisely allocate resources according to the unique needs of each student. The system can be informed of a student's learning needs through feedback from his or her problem solving habits and learning experiences, and push the appropriate teaching materials accordingly". Therefore, the adaptive learning system has the functions of real-time assessment, intelligent analysis and personalized pushing, which is conducive to examining the students' knowledge level, analyzing the error-prone and difficult points, and further helping students to consolidate through precise pushing, so that they can truly master what they have learned. In the university English culture course, the adaptive learning system can also intelligently adjust the learning content and difficulty according to the students' learning progress, ability level and knowledge mastery, so as to realize personalized learning path planning.

3.1.2 Intelligent Translation and Language Analysis Tools

AI intelligent translation technology also provides a path to efficient learning, as these tools help students understand foreign language materials and communicate better across cultures. In addition, some teachers use intelligent translation technology to help students engage their senses and memorize words. Sometimes students can take advantage of the big data characteristics of intelligent translation to filter the preferred and required corpus information, study and memorize, effectively enhance the interest and realize individualized learning (He, 2019). The language analysis tools, such as Grammarly, which cover syntactic parsing,

semantic annotation, discourse feature recognition and other functions, can play an auxiliary function for students' language learning, which helps to help students check the grammar, analyze the long and difficult sentences, so as to better understand the cultural context.

3.1.3 Virtual Reality and Immersion Teaching Technology

The combination of VR technology and immersion teaching theory is widely and commonly used in English culture teaching. Unlike traditional teaching methods, they can create a realistic language learning environment for students, for example, by wearing VR helmets, students are put in 3D virtual cultural space and have situational dialogues with virtual characters, which further enhances cultural interactivity and provides immersive cultural experiences. Especially the interactive virtual technology which contains the advantages of graphic and text combination, audio and video, virtual image, etc.(Jin et al., 2014), provides rich learning resources for the teacher's teaching and conveys the abstract knowledge accurately and vividly to the students, and at the same time, fully mobilizes their enthusiasm and autonomy. In addition, interactive virtual teaching transcends the constraints of temporal and spatial boundaries, and diversifies the teaching scenes, such as cloud classrooms, etc., which has an important impact on stimulating students' intrinsic motivation.

3.2 Specific Practices of Artificial Intelligence Technology in English Culture Courses

3.2.1 Enhancing Students' Participation and Interactivity

For example, in college English culture courses such as cultural overview of British and American countries, intelligent translation tools can be used to quickly understand the general meaning of complex English texts, and then through the teacher's in-depth explanations, to sort out the cultural connotations implied. On the basis of saving classroom time, more in-depth cross-cultural thinking collisions can be carried out. In addition, intelligent teaching assistants (beanbag, virtual teaching assistant, etc.) is also a tool that facilitates problem search, language exchange and scene simulation, with the help of intelligent teaching

assistants can help to integrate the required British and American cultural information, which is conducive to students' comprehensive understanding of the cultural background, and at the same time, the English conversation training can be carried out through the simulation of virtual scenarios, which can be based on the more realistic scenarios, so that the English speaking ability and language application ability can be fully exercised.

3.2.2 Providing Support and Feedback for Personalized Learning

AI in the Learning Channel and MOOC platform is also very extensive, which can accurately push relevant resources according to students' knowledge mastery and learning paths, provide personalized and independent learning, and greatly improve learning efficiency (Fang et al., 2022). At the same time, it can also rely on a series of correction and test evaluation systems to provide students with personalized feedback, and teachers can also gauge the knowledge mastery of students through data analysis, and provide corresponding strategies for students' knowledge weaknesses, so as to promote the teaching quality. In addition, it can also personalize the push of relevant English cultural knowledge according to students' English level, learning habits and interest preferences.

3.3 Practical Case Analysis

This questionnaire covered 121 students, 82.65% of whom were sophomores and juniors, while 88.43% of the students who participated in the questionnaire had used artificial intelligence tools in the study of English culture courses. The specific analysis is as follows:

3.3.1 Artificial Intelligence Learning Tools Usage in English Culture Courses

The data in "Figure 1" shows that the use of intelligent translation tools is as high as 90.91% indicating that students are highly dependent on such tools in understanding foreign languages. The demand for adaptive learning systems (54.55%) and intelligent teaching assistants (53.72%) followed closely, indicating that the frequency of students' use of adaptive learning systems and intelligent teaching assistants in English culture courses is high. While the students who chose language analysis tools for cultural learning were 38.02% and those who chose Virtual Reality (VR) or immersive teaching technology were 27.27%, the findings of the study showed that these two tools have begun to take shape, but there is still room for expansion. However, by understanding the students' use of AI tools in English culture courses, it is possible to make targeted adjustments to teaching strategies.

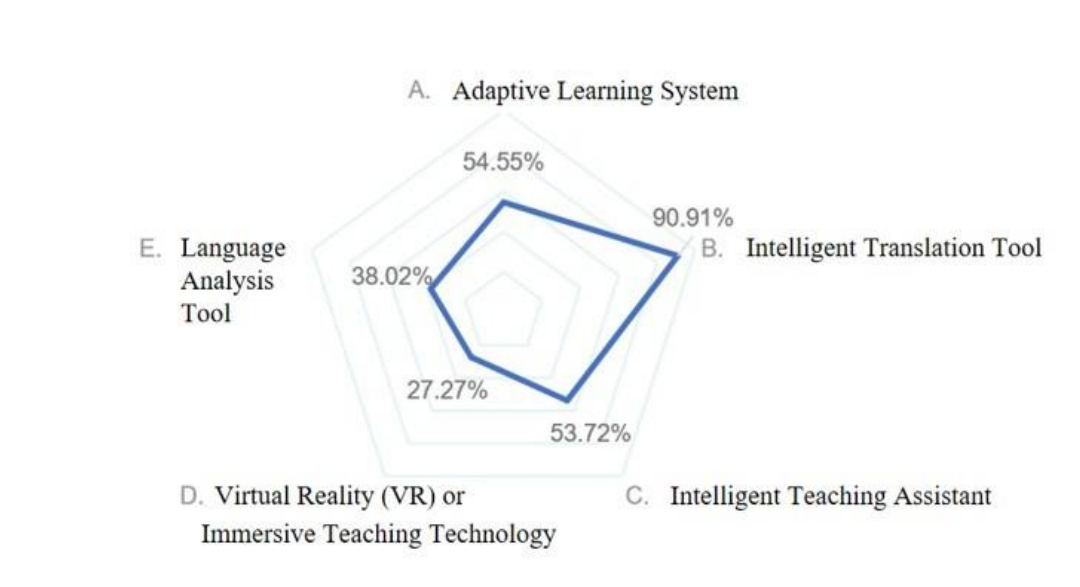


Figure 1 AI resources in English culture education.

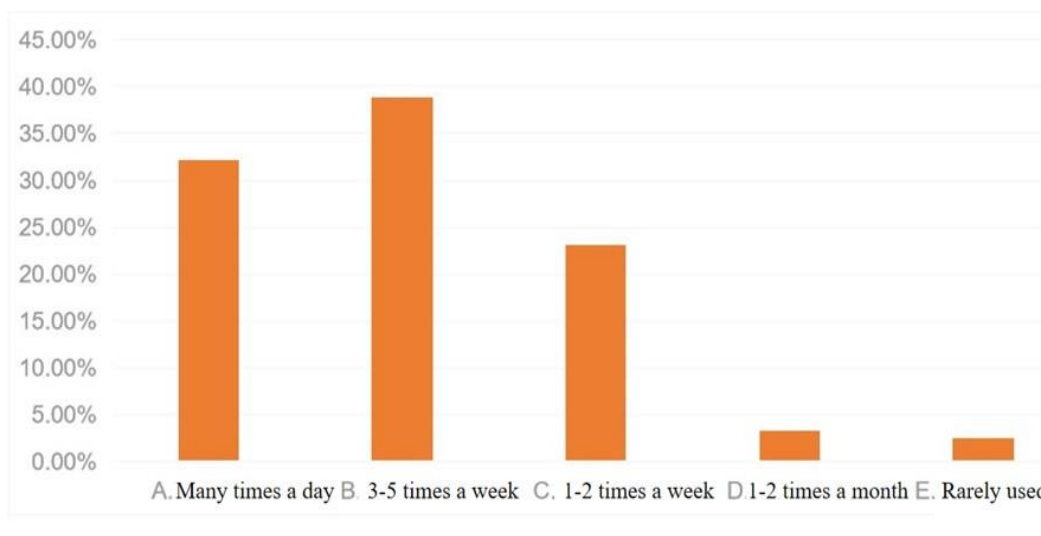


Figure 2 Frequency of using AI to assist learning.

Through the “Figure 2”, it can be found that students use AI tools 3-5 times a week and many times a day in English culture courses, accounting for a high percentage, close to 40% and 35% respectively, indicating that a considerable number of students use AI-assisted learning more frequently, and that this kind of tool has been widely accepted and integrated into learning habits. The frequency of using AI tools 1-2 times a month and hardly using AI tools at all is relatively low, with less than 10%, indicating that most of the

students use AI tools to a certain extent, and also reflecting that AI-assisted learning in English culture courses has greater application value and potential. However, students also need to be wary of becoming overly dependent on AI tools, thus losing their ability to think independently about cultural connotations and other aspects. Therefore, when introducing and promoting AI tools, students must be guided to use them rationally to realize efficient teaching aids.

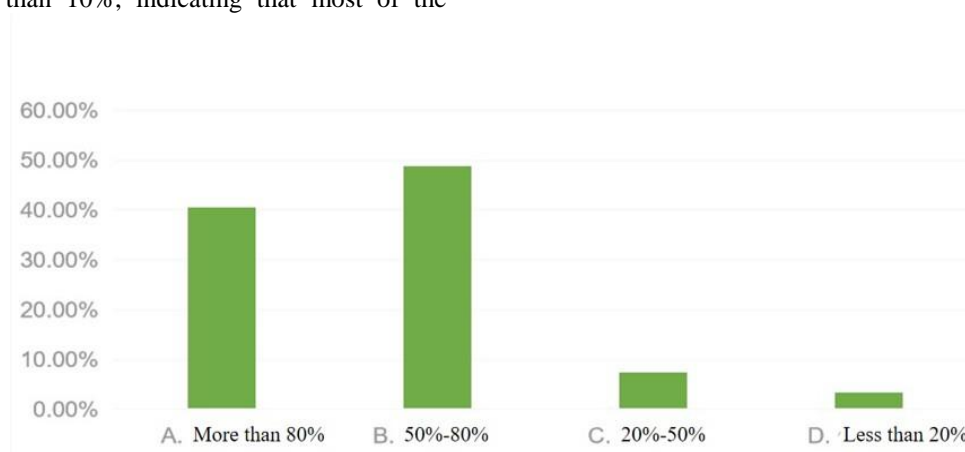


Figure 3 Percentage of Peers using AI in English culture learning.

From the data in “Figure 3”, a high percentage of students chose “B. 50%-80%” and “A. More than 80%”. This result strongly indicates that most of them realize that the majority of their classmates around them use AI tools in their English culture courses, highlighting the high popularity of this technology among the student body. On the other hand, the percentages of “C. 20%-50%” and “D.

Less than 20%” are significantly lower, which means that only a very small number of people think that fewer students around them use AI to assist in their studies. This chart reflects the high popularity and wide use of AI tools in English culture classrooms.

3.3.2 Impact of Artificial Intelligence on Learning Outcomes and Engagement in English Culture Courses

The data in “Figure 4” show that the survey indicates that nearly 91% of the people think that the effect is significant or good, 7% think that the

effect is general, and only less than 5% think that the effect is small or almost no effect, which effectively illustrates that the application effect of artificial intelligence in enhancing the learning of English culture courses is widely recognized, at the same time, to be optimized by the technology and the depth of excavation.

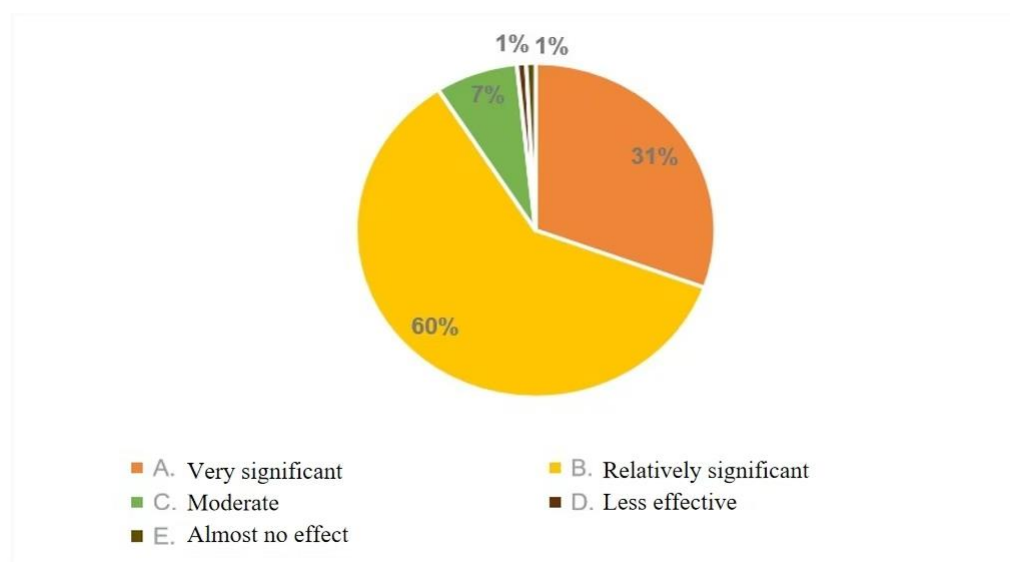


Figure 4 AI in enhancing the learning effect of English culture courses.

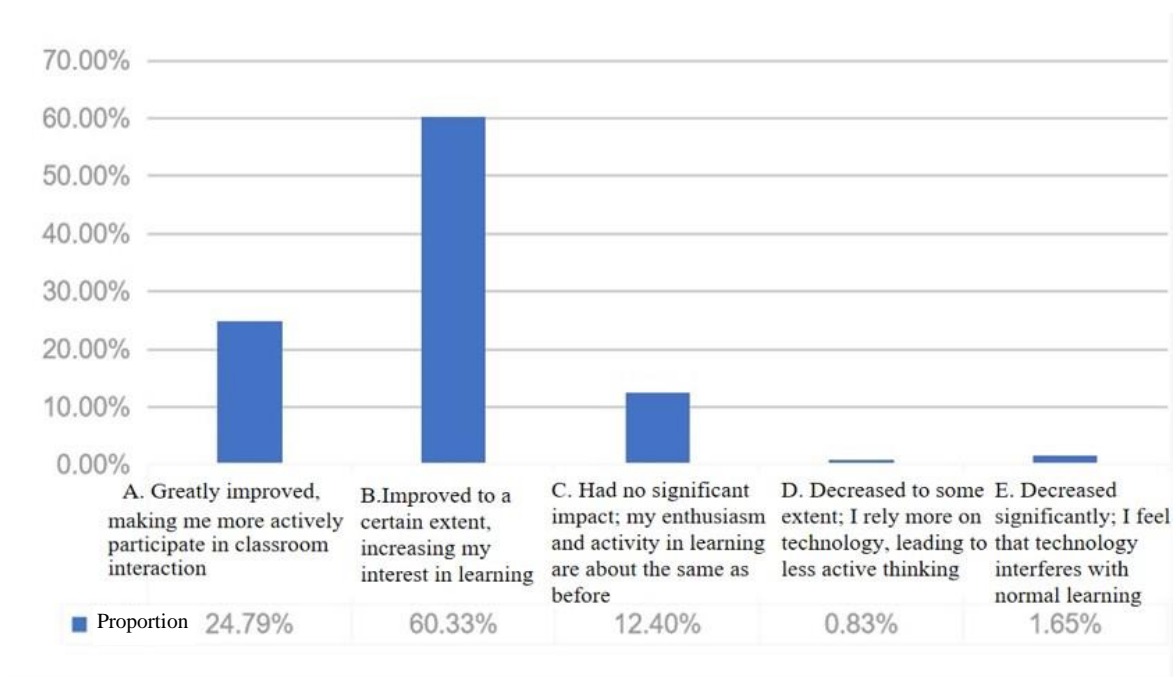


Figure 5 AI technology’s effects on student motivation and interactivity in English culture courses.

According to the data in “Figure 5”, the proportion of people who chose to have some help or great help is relatively large, more than 80%, which indicates that most people think that AI

technology can improve the motivation of learning and classroom interactivity, showing that the technology has the effect of stimulating students’ enthusiasm for learning. At the same time, the

proportion of those who think that the technical advantages brought by AI technology are not obvious is about 15%. And only a very small percentage of students believed that AI technology had a negative impact on their participation in the course. The results of this study show that students

have a more positive attitude towards artificial intelligence technology for your participation in English culture courses, and its application can be explored more deeply to give full play to its advantages.

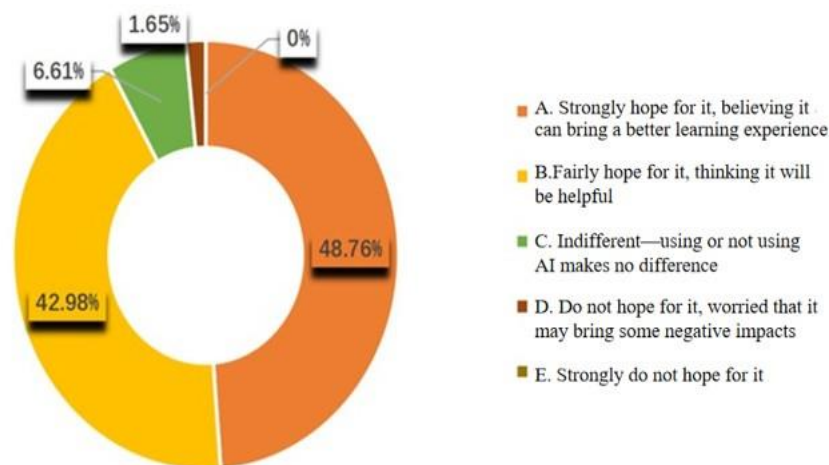


Figure 6 Desire for increased artificial intelligence use in English culture courses.

Meanwhile, in the questionnaire on “Desire for increased artificial intelligence use in English culture courses” (“Figure 6”), a total of 91.74% of the students have a very hopeful or quite hopeful attitude towards the use of AI technology, while only 8.26% of the students are neutral or don't want to use AI technology. The results show that the student body has a high degree of acceptance of AI technology, which provides data support for subsequent widespread application.

3.3.3 Challenges and Recommendations for Artificial Intelligence in English Culture Courses

However, at the present stage, 60.33% of the students in the English culture classroom at the university have the problem of over-reliance on AI technology. In addition, 53.72% of the students think that AI technology lacks the understanding of cultural background, which may result in the misinterpretation of the context. In addition, the survey data showed that 42.98% and 42.15% of the students were aware of the instability of the technology and the poor integration of the content. Only 29.75% of the students found that there are

privacy and security issues with AI technology, worrying about personal privacy being leaked. Overall, the concerns of the students in the questionnaire survey can provide open new research directions on how to apply AI technology in the English culture classroom in the future.(“Figure 7”)

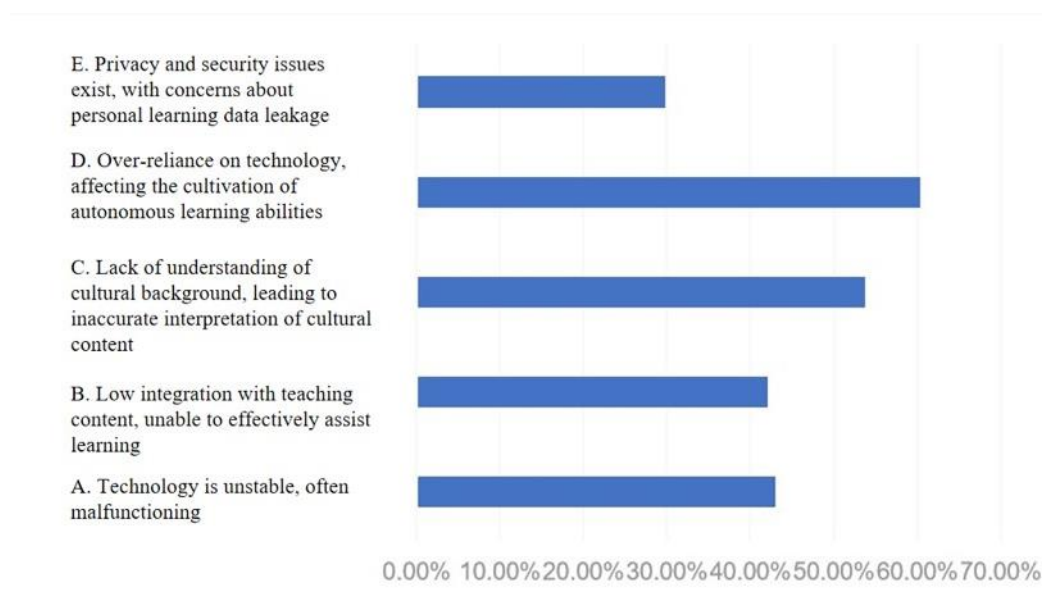


Figure 7 Current issues of AI application in English culture courses.

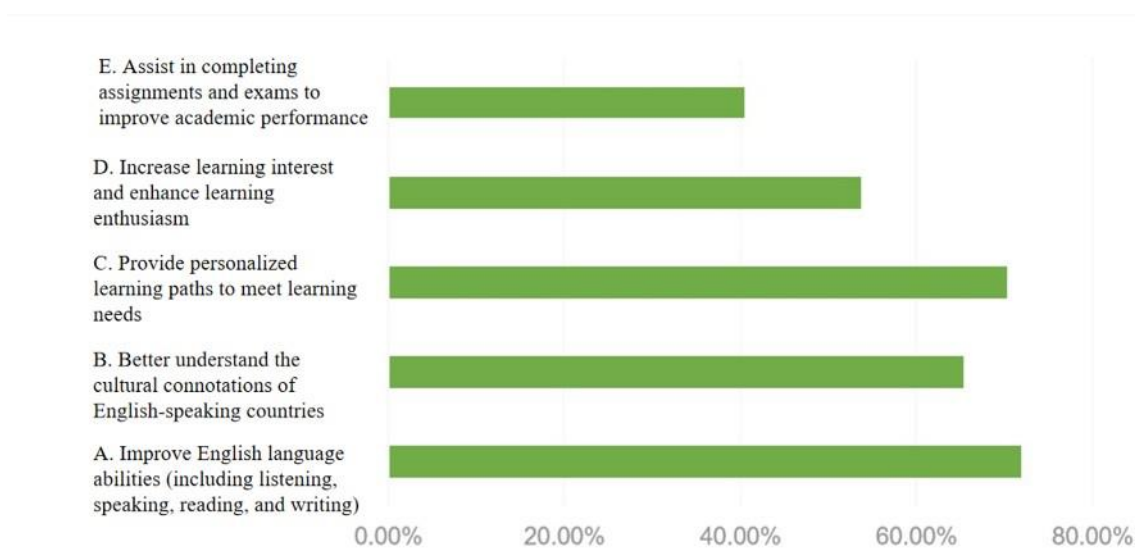


Figure 8 Prioritized AI Solutions in English culture courses.

In addition, in the survey data of the multiple choice questionnaire “Prioritized AI Solutions in English culture courses” (“Figure 8”), 71.9% and 70.25% of the students think that artificial intelligence can improve English language ability and provide personalized learning paths, and 65.29% and 53.72% of the students choose that it can help understand the cultural connotations of English-speaking countries and increase the number of students in English culture classes respectively. 65.29% and 53.72% of the students chose that AI can assist in delving into the cultural connotation of

English-speaking nations. However, only 40.5% of the students thought that AI technology can assist in the learning of English culture classroom and help to improve the grades.

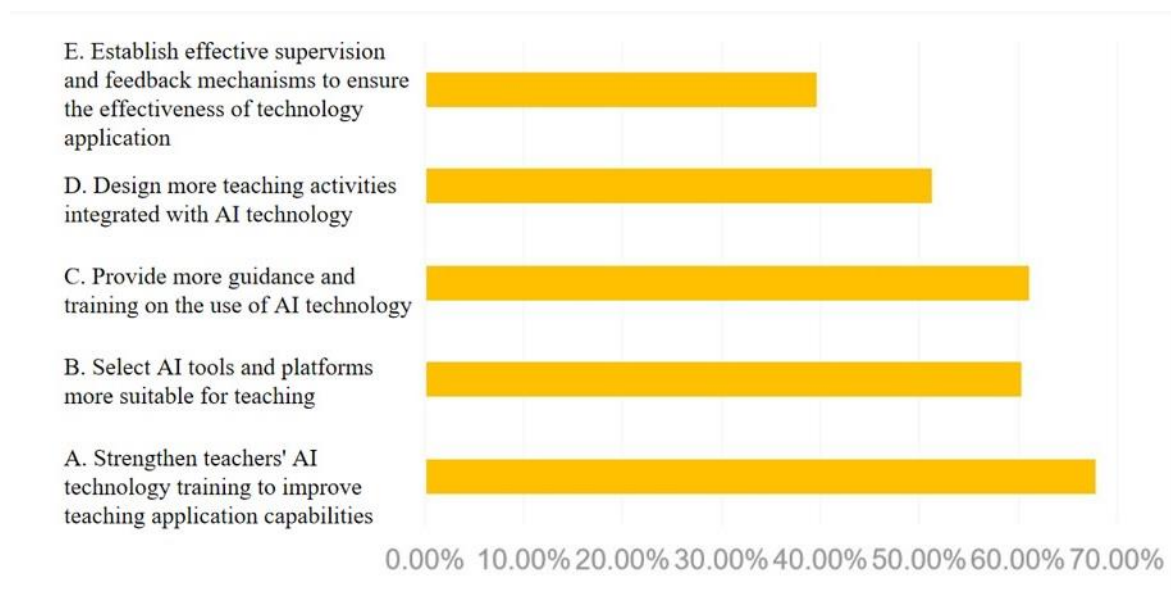


Figure 9 Recommended enhancements for AI use in English culture courses.

The questionnaire survey ("Figure 9") showed that 67.77% of the students believed that schools and teachers should strengthen technical training in AI to improve teaching resilience, while 61.16% and 60.33% of the students respectively hoped to provide guidance on its use or select AI tools and platforms that are more suitable for teaching. In addition, 51.24% of students believe that AI+teaching activities can be designed, while only 39.67% believe that effective monitoring and feedback mechanisms should be established. This reflects the fact that students are more concerned with the instructor's ability to use technology and the design of the course's instructional activities than with monitoring and feedback mechanisms.

4. APPLICATION CHALLENGES

4.1 Technological Challenges

The first challenge is the adaptability of the technology. Whether the AI technology can be compatible with the existing teaching facilities, platforms and software and hardware systems is the primary issue in the implementation of the technology. AI systems can also lead to increased technology development costs and implementation challenges if they are not compatible with existing instructional systems.

Besides, the stability and reliability of the technology can't be overlooked. During the teaching process, system failures, such as crashes, data loss and lagging, will interrupt teaching

activities and affect the teaching progress, which in turn negatively affects both the continuity and effectiveness of teaching. Especially in real-time interaction and personalized learning environments, system instability may greatly weaken the pedagogical advantages of AI technology, affecting the user's experience at the same time, and even triggering students' and teachers' resistance to AI technology.

4.2 Challenges at the Teaching Level

Currently, teachers' mastery and application of AI technology is still insufficient, and at the "teaching end" some teachers lack the knowledge and skills related to AI technology, making it difficult to effectively integrate it into classroom teaching and teaching activities, which seriously affects the quality of teaching. Therefore, how to make good use of the advantages of artificial intelligence technology, highlighting the irreplaceability of teachers in teaching, and integrate it with classroom knowledge content, such as teaching design, teaching activities, such as the organization is still a problem. Traditional teaching is centered on teacher teaching, but the introduction of AI technology is to a certain extent a blurring of teachers' positioning of their roles, which may lead to bias in the teaching process.

In addition, on the "learning side", many students have poor adaptability to artificial intelligence, over-reliance on AI, and lack of independent learning and thinking ability, which

makes it difficult to cultivate critical thinking ability. It is important for students to think deeply about the text and consider the connotations that follow the cultural context in a college English language and culture course, which can therefore make students' learning less effective.

Some relevant studies have shown that the pervasive effect of AI translation technology may pose certain risks to translators, such as the erasure of the translator's self-identity due to linguistic pipelining, the dependence on AI translation technology and the regression of one's own translation ability, physiological and psychological injuries (psychological anxiety and depression, lumbar spine injuries, etc.), and professional ethics (splicing of translations by multiple translators, etc.), among other series of problems (Wang, 2021). This situation also raises concerns about the emergence of the proliferation of the use of AI translation technology in English culture courses.

At the same time, learning analytics systems (e.g., eye tracking, voice sentiment analysis, and other technologies) may pose a risk of student privacy leakage, which in turn poses a potential threat to students' learning and physical and mental health.

4.3 Sociocultural Challenges

The role of AI such as translation tools like Youdao Translator and DeepL in cross-cultural communication cannot be underestimated, which not only saves the labor cost and time cost of translation, but also ensures the accuracy and timeliness of translation to a certain extent, but we still need to look at such tools dialectically (Wu, 2023). In the process of AI technology-enabled university English culture teaching, the accuracy of cultural context parsing has always been the key bottleneck that restricts the improvement of teaching effectiveness. Especially when dealing with metaphorical expressions, literary allusions and cultural symbols with complex historical origins, misunderstanding of the cultural context and misjudgment of cultural connotations may occur, and this cognitive bias may lead to inaccurate understanding by students. For example, AI often limits itself to surface semantics when decoding culture, or does not analyze its cultural connotation based on a specific cultural context.

But Yuan, H. et al. (2024) showed that AI machines such as Chat GPT can exhibit cultural biases, stereotypes, and it is a product of

domestication of the human mind based on limited contexts, data that may hinder cross-cultural interactions. Therefore, perhaps this challenge can inspire us to conduct research on localized AI tools.

5. STRATEGIES FOR RESPONDING

5.1 Enhancing Technical Stability and Compatibility

To address technical challenges, schools and educational technology departments should conduct comprehensive compatibility testing of existing teaching facilities (e.g., multimedia, projectors) and platforms (e.g., online learning systems) before integrating AI tools. In addition to this, a sound feedback mechanism should be established so that targeted adaptation and optimization can be carried out. For example, if abnormal operation is found, timely feedback should be given to the suppliers and technicians to promote the development of adaptation patches and upgrades, so as to ensure that the software can run stably on the existing teaching facilities and ensure the stability of teaching activities.

Secondly, when artificial intelligence teaching tools are used, a technical monitoring and emergency response mechanism should be established to build a specialized technical monitoring system and relevant technical departments to monitor the operational status of artificial intelligence technology in the teaching process in real time, including the response time of the system, the stability of data transmission and other indicators. Set a reasonable threshold, once the technical indicators exceed the normal range, immediately issue an early warning to allow technicians to deal with and continuously track the operation status in the later stage.

Simultaneously, a perfect contingency plan is formulated, so that when a technical failure occurs, such as a system crash, teachers can quickly switch to an alternate teaching plan, such as enabling traditional teaching materials or temporarily switching to other simple teaching tools, to ensure the continuity of teaching activities. Finally, technicians should be regularly organized to carry out overhaul and emergency drills to improve the ability to cope with technical failures and effectively prevent the emergence of AI teaching tool failure situations.

5.2 Empowering Teachers and Students Through Training and Critical Thinking

To overcome teaching-level challenges, teachers should receive stratified training based on their proficiency with AI technology. According to the teachers' mastery of AI technology, they are stratified and targeted training is carried out. For teachers with a weak foundation, introductory-level training is provided, covering the operation methods and applications of common AI teaching tools; for teachers with a certain foundation, advanced training is organized to discuss in depth how to deeply integrate AI technology with the teaching objectives and content of the English culture course, and how to use intelligent analysis tools to design personalized teaching tasks and teaching activities. During the training process, practical sessions are arranged and professional instructors are equipped to provide on-site guidance to help teachers apply to actual teaching and solve problems encountered in a timely manner.

In addition, teachers are encouraged to participate in relevant teaching practice research so that they can constantly innovate teaching methods. And for teachers who have lost their roles, they can clarify the multiple roles of “guide”, “organizer”, etc., and gradually transfer the teaching tools to the direction of “educating people”, so as to establish correct worldview, values and outlook on life for the students, and leaving the traditional knowledge explanation to AI tools.

Furthermore, exercising students' independent thinking ability and information security education. In the course teaching, teachers should consciously guide students to gradually reduce the over-reliance on AI and develop proper habits in the long term. Kenedy, R. A. (2024) points out that students should be cultivated in critical thinking skills, including the ability to actively explore, think independently and examine information about influential AI tools, and guided to make rational use of AI tools. For example, when assigning homework or carrying out classroom tasks, students can be explicitly asked to think independently and complete part of the task first, and then make reasonable use of AI tools to assist in checking and expanding. Meanwhile, students are educated on how to correctly set privacy permissions when using AI learning tools, and do not arbitrarily enter personal sensitive information on untrustworthy

platforms, so as to improve students' awareness of information security precautions.

5.3 Promoting Cultural Accuracy and Cross-Cultural Understanding

As Dai, R.(2019) proved, due to the complexity and fluidity of human culture, understanding of cultural context is often a difficult gap for AI technologies to bridge. Therefore, a mechanism of cultural expert review and annotation can be established. Experts and scholars in the field of culture from English-speaking countries should be invited to form a cultural audit team to scrutinize the teaching content provided by AI, especially the parts involving cultural connotations. And for the content that is prone to cultural misunderstanding, the experts carry out detailed labeling and explanation, supplementing the relevant historical background, cultural context and connotation and other information, so that when presenting the content, they can provide students with a more accurate understanding and avoid cultural misjudgment.

At the same time, intercultural communication practice and reflection activities can also be organized so that students can feel the differences of different cultures in the actual communication environment and improve their sensitivity to the cultural context. After the activities, students can be guided to reflect and summarize, analyze the problems encountered in the communication process, and explore solutions. Through these practice and reflection activities, students can cultivate the attitude and ability to understand and treat multiculturalism correctly.

In addition, promoting the localization and cultural appropriateness of AI tools and applying them to the English culture classroom is also an effective way to promote cross-cultural communication. For example, we can introduce or develop AI tools in the context of local culture, perhaps fostering tools that are relatively compatible in terms of cultural concepts and values, and enhancing the student experience.

6. CONCLUSION

The integration of artificial intelligence (AI) technology into university English teaching and cultural courses has become an undeniable trend, driven by the continuous emergence of new educational resources and innovative teaching models. Given the current landscape, it is of

significant practical importance to thoroughly analyze the existing challenges and explore effective strategies to address them.

Currently, the challenges faced by AI in education primarily manifest at three levels: technical, pedagogical, and socio-cultural. At the technical level, issues such as the compatibility, adaptability, and stability of AI tools remain critical. Establishing robust technical monitoring and emergency response mechanisms is essential to ensure seamless integration and operation. At the pedagogical level, there is a pressing need to innovate teaching methods and deepen the integration of AI technology with course content. Teachers must also focus on guiding students to use AI tools responsibly, providing safety education, and fostering habits that promote independent thinking. At the socio-cultural level, further efforts are required to establish mechanisms for cultural expert review and annotation, as well as to promote reflective cross-cultural communication activities that enhance students' cultural sensitivity and understanding.

In conclusion, while AI offers transformative potential for university English cultural education, addressing these multi-faceted challenges is crucial to fully realize its benefits. By implementing targeted strategies, educators can harness AI's capabilities to create more dynamic, inclusive, and effective learning environments.

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