

ChatGPT Integration of English Education: Implications for English Language Learners' Cross-cultural Communication

Hanyue Zheng

Department of Humanities, University of Southampton, Southampton, UK

qiyanyi@ldy.edu.rs

Abstract. ChatGPT as a product of technological innovation in language processing is bound to play a crucial role in language teaching and learning. This paper highlights the opportunities and challenges of six thematic clusters emerging from institutional research on ChatGPT in English language teaching and suggests measures to address them. The study shows that personalization brings developmental features that become one of the main advantages of student-centered participation in the language classroom and that speech recognition and translation algorithms provide authentic and valid corpus data that meets the needs of learners that cannot be achieved from traditional language learning. However, when considered at the cultural and educational level, language communication still needs to be modeled in depth for intercultural communication to achieve the purpose of socio-cultural communication. The incorporation and combination of ChatGPT for developing intercultural competence in this area of English language teaching in this study provides an important basis for educators and scholars.

Keywords: Cross-cultural communication, ChatGPT, English language teaching.

1. Introduction

The creation of ChatGPT in 2022 marks the epochal period of human-computer interaction in the information society. Its powerful text generation and smooth human-computer interaction capabilities have once again brought Artificial Intelligence (AI) to the forefront of language processing. English as a universal language is still an important communication tool for intercultural communication in teaching. However, in cross-cultural communication, the concepts of consciousness, communicative behaviors, etc. of people conversing in multicultural contexts are not the same [1]. Although the use of ChatGPT technology has been proven in the public eye, the embodiment of AI in cross-cultural communication integrated with English language teaching still needs to be practiced. So how does English education in the age of ChatGPT reflect on intercultural communicative competence? This paper discusses the cultivation of intercultural communicative competence in ChatGPT-assisted English language teaching through the following three aspects:

- A: The specific contextual environment of intercultural communication
- B: Foreign cultural communication's ability to master foreign cultures
- C: Behavioral competence in intercultural communication

AI can change the educational paradigm by altering traditional methods and personalizing the learning experience [2]. ELT has always moved with the times and embraced technological innovations [3]. However, as with all revolutionary innovations, being a language model brings food for thought to ELT. As Baskara suggests ChatGPT's contribution to addressing personalized experiences and language communication barriers in contributing to teaching and learning proves to be of great use in cross-cultural communication and mobility [4]. However, it should be mindful of the potential dependence to be curbed, and most of the data mediation found that more than half of the students in the class with relatively weak communicative skills improved their interaction after using AI technological aids, provided that they were used as aids. In another questionnaire survey showed that language models weaken their dialogue in cultural differences and specific contexts [5]. This shows the flood of the big time to use the advantages brought by the new technology while maintaining the human factor in language education to integrate into English language teaching [6]. Hu and Qi (2024) found that AI language modeling enables learners to assess the level of linguistic

communication and formulate areas for improvement. The large capacity of authentic resources represented by ChatGPT solves the problem of teaching quality. This unrestricted availability is key to enabling intercultural communication for language learners. Particularly in speaking, real-time spoken communication and intonation recognition provide a comfortable dialogue environment for teaching spoken language [7]. The traditional teacher-centered spoken language teaching is no longer able to meet the needs of oral expression, and ChatGPT is effectively incorporated in terms of pronunciation errors and grammatical reserves to assist the teacher with contextual exercises, etc. [8]. In recent years researchers have tried to study the integration of AI in English language teaching through the relevant experiences and pedagogies of language learners and teachers, but there are fewer applications in cross-cultural communication, this study argues based on this gap area and the existing research results and data and analyses the three domains of contextual environments, heterocultures and behavioral competencies of cross-cultural communication with English language teaching and learning in the context of AI integration.

Through argumentative analyses, this study mainly addresses the opportunities and challenges for English language teaching in the emerging phase of ChatGPT and makes pedagogical suggestions based on the corresponding challenges. Relying on machine learning, the large language model is expected to efficiently realize conversation practice and automatic summarisation, and enhance the learning input and efficiency of the speakers.

2. Methodology

This paper uses the argumentative critical method. The argumentative critical method uses its introspective and critical nature as an encouragement to delve deeper into the impact of AI on intercultural communication in language teaching and learning. Therefore, the critical nature of this approach also provokes people to think across representations, thus encouraging an in-depth exploration of the impact of AI on language learning [9]. ChatGPT, as an important tool for integrating language learning, promotes the development of competence in English language teaching and learning in a contextualized environment with a multilevel perspective of AI and behavioral competence. It enriches understanding by revealing nuanced complexities and enabling a broader dialogue about the intersection of AI, language learning, and pedagogy. The intuitive nature of the argumentative critical methodology allows for reflection on the process of exploring AI, language learning, and intercultural communication, also sheds light on the epochal language transformations produced by ChatGPT.

3. Result

3.1. Personalisation and Engagement

As a result of the argumentative analysis, one of the main advantages of language teaching and learning under ChatGPT integration lies in its individualized developmental features. The learner-centered language environment it creates allows learners to develop learning paths based on their own habits and proficiency goals, and to present feedback based on students' individual needs and learning. That is, it is assumed that learners in the classroom do not have the same cognitive abilities, language levels, and learning preferences. As a result, this personalized learning effect allows learners to listen and communicate phonetically more effectively and find learning materials in a more targeted way [10]. Also, personalized service is the voluntary participation of students in the classroom and teachers are better able to fulfill their language teaching needs through a student-centered classroom. ChatGPT, as a deep learning-based natural language processing technology, has been developed to be customized according to the professional knowledge and experience, characteristics, and needs possessed by the learner, and has been provided with a more efficient service. The personalization of its model training lies in the use of collected data to train the AI model so that it gradually becomes capable of understanding and generating the specific type of language requested by the user.

3.2. Cultural Education and Intercultural Understanding

On the one hand, ChatGPT can better help language users explain overly specialized terminology or slang by choosing words that learners can easily understand to explain the context. At the same time, ChatGPT has been validated in multiple platforms that assisted language learning outperforms individual learning experiences and promotes cross-cultural understanding by reducing language barriers [11]. Very little of the existing literature attempts to use ChatGPT's actual contextual environments for practical discussions of language learning. This suggests that language teachers need everyday conversational language and provide relevant context before teaching to guide learners to achieve authentic and effective communication with the help of the tool and the teacher's co-assistance for intercultural communication. However, ChatGPT should be used in a way that avoids learners asking broader questions, which usually do not give intuitively useful answers. Users are encouraged to complete dialogues or follow-up questions according to the guide, which leads to effective learning outcomes. More positively the model can explain words in context, even in the native language. Example sentences can also be provided to help language learners reason about the richness of the context [12]. Therefore, from a comprehensive balance, language communication is a deep social communication process, and ChatGPT still needs to build deep algorithms to realise the nuances of human intercultural communication. However, in the long run, the integration and balance between ChatGPT and traditional teaching make the means of language learning richer and achieve comprehensive intercultural humanistic education for globalized language education at an early date.

3.3. Speech Recognition and Machine Translation

On the other hand, AIs such as ChatGPT have fairly fast, user-friendly speech recognition capabilities and text generation. Similar to other AIs, it is used as a pedagogical intervention tool to achieve the assessment of students' English oral expression ability at both lexical and syntactic complexity levels [13]. Yan merged domain knowledge with deep learning techniques to investigate the problem of machine translation domain and language usage adaptation [13]. The results show that machine translation performance is significantly improved by domain annotation of the training corpus. Since the use of corpus provides language learners with real linguistic data with the help of which they can learn, students are convenient to use real language examples. The interaction also means that the real expression of the government and language learners' needs related to their performance can be provided. At the same time, this analysis points out certain limitations of ChatGPT such as lack of completeness and accuracy when the environment receives external interference or noise is present. The automatic speech recognition technology used in ChatGPT enables timely feedback at both lexical complexity and syntactic complexity levels. It enables learners to achieve improved speaking skills if they imitate pronunciation or when the machine reduces speed. In addition, there are opportunities and challenges in the application of translation functions in the process of language teaching. On the one hand, post-translation can optimize the students' language learning process and help analyze translations for comparative improvement. On the other hand, it is inevitable that the use of AI to complete assignments directly without any learning experience in terms of how to evaluate the development of students' language learning ability more objectively, which makes academic integrity and ethics challenged accordingly [14]. This view is in line with Ali's (2023) view that over-reliance on AI results in a loss of creativity. Notably, some have argued that it is the authentic linguistic expressions given by ChatGPT that allow users to understand Western cultural processes [15]. As its models and source data algorithms represent inherent cultural awareness, when used by non-Western cultures, they will be limited by different cultural contexts. This requires teachers to combine traditional pedagogical knowledge with AI to accomplish the advantages of both when teaching learners English as a second language.

4. Discussion

For learners, the integration of ChatGPT in language learning can narrow the gap in learning effectiveness. When AI stops being a tool, it becomes a communication partner for learners. It can provide learning resources that cannot be balanced by the current level of human beings. In this respect, this incorporation encourages the power of a linguistic knowledge base for cross-cultural communication. However, there are also many challenges when it comes to the incorporation of ChatGPT into teachers' classrooms. On the one hand, some risks are generic to AI, for example, compliance with the source and use of resources, and bias of the generated content. Existing language teaching practices are built on teaching with audio, video, etc. Integration with AI requires continuous resource teaching and training activities. Language learning requires a great deal of continuous feedback, but the realities of traditional large classroom teaching make this difficult to achieve. With the support of ChatGPT, cultural education tools are enriched. When generating dialogues, they make inferences based on their linguistic knowledge and the dialogue context. This is similar with the reasoning and logical thinking emphasized in traditional Chinese culture. The allusions contained in the traditional cultural stories provide ChatGPT with vivid and interesting backgrounds and contexts. Thus, the application options for language learning are wider.

It is worth noting that the application of ChatGPT is not a replacement but a fusion of traditional teaching methods, retaining their strengths based on finding a more adaptable and technologically integrated approach for students [5]. The second is that there exists a certain impact on the implementers and receivers of education. For teachers, the technical challenges of AI, how to optimize teaching, how to overcome the knowledge base of AI, etc. For learners, relying directly on AI to complete assignments instead of completing them subjectively can lead to the degradation of their de-credibility as well as their competence. In the face of these challenges, language teachers need to be proactive rather than misuse the tools. It is important to understand more about the algorithmic principles of how language intelligence works on top of mastering foreign language expertise, which means using technology to empower English language teaching. At the same time, as researchers continue to explore the role of AI in education, it is important to maintain a critical perspective as well as to acknowledge the possibilities of integrating the field of AI into language education, being mindful of the limitations while acknowledging the augmentative effects it brings to classroom teaching.

5. Conclusion

This study explores how intercultural communication can be used to teach English in ChatGPT integration through six thematic clusters in an argumentative analysis. Taking a unique perspective: contextual environment and personalization answered the need for teaching and learning in intercultural communication through ChatGPT in conjunction with traditional teaching modes, which means that teacher training and resources are needed to accomplish assisted teaching and learning. Speech recognition and machine translation answered that intercultural mastery in intercultural communication is limited, and although ChatGPT-assisted language learning is better suited to learners' understanding of culture than traditional methods, it still needs to be viewed with a dialectical and critical eye. Cultural differences and student engagement answer the question of how much the ability to behave in cross-cultural communication depends on the source language model and algorithmic stereotypes of ChatGPT. Learners are more motivated to complete culturally differentiated communication. The article also explores the current development of AI and English language teaching, revealing some opportunities and challenges, while summarising the future development path of language teaching and technology integration from the perspective of intercultural communication. Through this study, the integration of ChatGPT and language teaching is more necessary in the future by carrying out a series of survey research data and empirical studies to confirm the research results and improve the integration of technology in language teaching.

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