

Research on Oral Teaching of International Chinese Language Education Assisted by ChatGPT

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Abstract: With the advancement of globalization, the significance of international Chinese language education has become increasingly prominent, with oral language teaching being particularly crucial. However, traditional Chinese oral language teaching faces numerous challenges, such as limited teacher resources, constraints on teaching time, and variations in student proficiency. In recent years, the emergence of artificial intelligence technology, particularly large language models like ChatGPT, has presented new possibilities for oral language teaching in international Chinese language education. This study aims to explore the auxiliary role of ChatGPT in oral language teaching in international Chinese language education. By harnessing its powerful language generation and comprehension capabilities, this study seeks to innovate teaching methods and enhance students' oral expression skills. The article begins by outlining the technical characteristics of ChatGPT and its potential applications in international Chinese language education. Subsequently, it analyzes the current status and challenges of oral language teaching in this field. The article then elaborates on the specific applications of ChatGPT in personalized oral practice, intelligent speech assessment, real-time interactive teaching, and teaching aids. Finally, the article summarizes the effectiveness and feasibility of ChatGPT in oral language teaching in international Chinese language education and anticipates its broad application prospects in the future. This study provides valuable insights and references for the innovation and development of oral language teaching in international Chinese language education.

Keywords: ChatGPT; International

Chinese Language Education; Oral Chinese Teaching; Intelligent Assisted Instruction; Personalized Teaching

1. Introduction

Amidst the ongoing globalization and increasing international exchanges and cooperation, Chinese, as one of the most widely spoken languages in the world, has gradually emerged as a significant player on the global stage. As a crucial avenue for promoting the Chinese language and disseminating Chinese culture, international Chinese education has garnered widespread attention and high regard. Within this domain, oral Chinese instruction holds a pivotal position in cultivating learners' communicative proficiency. Fluent oral Chinese skills not only facilitate learners' integration into Chinese society but also open up broader career opportunities for them.

Nevertheless, traditional oral Chinese teaching in international education often faces constraints from various factors such as limited teacher resources, restricted teaching time, and diverse student proficiency levels. These factors have contributed to less than satisfactory outcomes in oral Chinese instruction, with students struggling to effectively improve their speaking abilities. Consequently, the pressing challenge in the current landscape of international Chinese education is to innovate oral teaching methodologies, overcome the limitations of traditional approaches, and enhance students' oral expression skills.

In recent years, the rapid development of artificial intelligence (AI) technology has injected new vitality into the field of education. Large language models like ChatGPT, with their powerful language generation and comprehension capabilities, have particularly piqued the interest of educators. ^[1] These technologies offer intelligent features such as

simulating real-life conversations and providing personalized feedback, presenting new possibilities for reforming and innovating oral Chinese teaching in international education. ^[2] Existing research has begun to explore the application of AI in language teaching, focusing on the potential of intelligent teaching systems to offer personalized learning paths, enhance students' autonomous learning abilities, and utilize natural language processing techniques to improve oral assessment and feedback mechanisms. ^[3] These studies provide theoretical support and practical insights for integrating large language models like ChatGPT into oral Chinese teaching in international education. By introducing ChatGPT into this context, we can not only alleviate the pressure on teacher resources but also offer students personalized learning support, helping them overcome various difficulties in oral Chinese learning. Therefore, this study aims to investigate the auxiliary role of ChatGPT in oral Chinese teaching within the realm of international education, hoping to provide valuable references and insights for innovating and developing this critical aspect of language learning.

2. Overview of ChatGPT Technology

ChatGPT is a large language model based on deep learning technology in the field of artificial intelligence. Its emergence has completely transformed the traditional approaches and outcomes of natural language processing, offering users a more intelligent and efficient language interaction experience. The core strength of ChatGPT lies in its powerful language generation and comprehension capabilities, which are gradually developed through training and learning from massive corpora.

During the training process, ChatGPT analyzes billions of text data, extracts key information such as language structure, grammar rules, and vocabulary usage, and subsequently constructs a vast and intricate language model. This model can quickly and accurately analyze and comprehend user queries or demands and then generate natural and fluent responses and solutions. The responses generated by ChatGPT are not only highly accurate but also linguistically smooth and comprehensible, making it an exceptional tool in various

language interaction scenarios.

In the field of international Chinese education, the potential of ChatGPT is particularly significant. It can serve as an intelligent teaching assistant, providing students with personalized oral practice and guidance. Through real-time interactive dialogue with students, ChatGPT can simulate authentic oral communication scenarios, enabling students to improve their oral expression and language communication skills in a relaxed and enjoyable atmosphere. Additionally, ChatGPT can continuously adjust and optimize teaching content and methods based on students' learning progress and feedback, catering to their individualized learning needs.

This intelligent teaching approach not only enhances students' learning efficiency but also provides teachers with a more convenient and effective teaching tool, contributing to the innovation and development of oral teaching in international Chinese education. Therefore, as an advanced large language model, ChatGPT plays a pivotal role in the oral teaching of international Chinese education. Its exceptional language generation and comprehension capabilities offer new ideas and methods for the innovation and development of oral teaching, potentially pushing international Chinese education to a higher level.

3. Current Situation of Oral Teaching in International Chinese Education

In the field of international Chinese education, oral teaching has always been regarded as a crucial aspect in enhancing students' practical language proficiency. However, upon deeper examination of current teaching practices, it becomes evident that traditional oral teaching models are confronted with multifaceted challenges that significantly hinder the improvement of teaching quality and effectiveness. ^[4]

Firstly, in terms of teacher resources, the traditional model demands a considerable number of professional teachers. Studies have shown that in countries or regions where Chinese is not the native language, there is a scarcity of Chinese teachers with rich teaching experience and good language proficiency. This leads to an imbalance in the teacher-student ratio, making it difficult for teachers to provide adequate and personalized

guidance to each student. Simultaneously, variations in teaching philosophies, methods, and techniques among different teachers result in inconsistencies in oral teaching, affecting students' learning experiences and outcomes.^[5]

Secondly, the limitation of teaching time poses another prominent issue. In traditional oral classrooms, teachers need to balance the time allocation between explaining knowledge points and conducting oral practices. Nevertheless, constrained by class schedules and teaching plans, it is often challenging to ensure sufficient practical opportunities for students to engage in oral training. This temporal compression not only impacts students' absorption and internalization of language knowledge but also restricts their ability to enhance their communication skills in real-life contexts using Chinese.

Furthermore, student diversity in oral proficiency represents another challenge that traditional teaching models struggle to address. Significant differences often exist among students in the same class regarding their Chinese language foundation, learning motivation, and learning strategies. This makes it difficult for uniform teaching content and pace to cater to the needs of all students. Students with lower oral proficiency may feel frustrated due to their inability to keep up, while those with higher proficiency may find the teaching content too simple and lacking in challenge.

In addition, traditional oral teaching models tend to lag behind in updating teaching content and methods. With the rapid development of society and the continuous progress of international Chinese education, oral teaching needs to evolve and integrate new elements and concepts to meet the demands of the times. However, some teachers may find it challenging to apply the latest teaching methods and tools in the classroom due to a lack of opportunities for continuous professional development and knowledge updating.^[6]

In conclusion, traditional oral teaching models in international Chinese education exhibit notable deficiencies and challenges in terms of teacher resources, teaching time, student diversity, and the updating of teaching content and methods. To enhance the quality and effectiveness of oral teaching, there is a need

to actively explore new teaching models and methods, such as utilizing intelligent teaching tools like ChatGPT for supplementary instruction. This can help meet the individualized needs of students and promote their comprehensive development. These viewpoints and research findings not only provide strong support for this paper but also offer clear directions for the reform and innovation of oral teaching in international Chinese education.

4. Application of ChatGPT in Oral Teaching of International Chinese Education

In the realm of oral teaching for international Chinese education, the application of ChatGPT manifests primarily in the following aspects: personalized oral practice, intelligent speech assessment, real-time interactive teaching, and as a teaching aid.

4.1 Realization of Personalized Oral Practice

Personalized oral practice serves as a significant highlight of ChatGPT's application in international Chinese education. Traditional oral practice materials often lack specificity, making it challenging to cater to students' individualized learning needs. Conversely, ChatGPT can generate personalized oral practice materials that align with students' oral proficiency levels and demands.^[7] This customized approach not only enhances students' interest and motivation in learning but also aids them in conducting more targeted oral practice, thereby rapidly improving their oral expression abilities.

4.2 Application of Intelligent Speech Assessment

Furthermore, intelligent speech assessment constitutes another crucial aspect of ChatGPT's application in oral teaching. Traditional methods of oral assessment often rely on teachers' subjective judgments, compromising the accuracy and impartiality of the evaluation. However, ChatGPT, leveraging its robust speech processing capabilities, can intelligently assess students' oral expressions and provide precise feedback on pronunciation and intonation.^[8] This not only assists students in promptly correcting pronunciation errors but also offers them a clearer understanding of their deficiencies in oral expression, enabling

targeted improvement and enhancement.

4.3 Innovation in Real-time Interactive Teaching Mode

Additionally, real-time interactive teaching represents an innovative application of ChatGPT in oral teaching for international Chinese education. Through real-time interactive conversations with ChatGPT, students can simulate oral communication in authentic scenarios, enhancing their language communication skills and adaptability. [9] This interactive teaching approach not only augments the enjoyment and practicality of learning but also allows students to naturally master Chinese oral skills in a relaxed and pleasant atmosphere.

4.4 ChatGPT as a Teaching Aid

Lastly, ChatGPT serves as a valuable teaching aid for educators, providing them with a plethora of educational resources and suggestions. Teachers can utilize ChatGPT to generate diversified teaching materials and design creative teaching activities, thereby stimulating students' interest and enthusiasm for learning. Simultaneously, ChatGPT can offer personalized teaching recommendations and guidance based on students' learning situations and needs, assisting teachers in conducting oral teaching more effectively.

In summary, the application of ChatGPT in oral teaching for international Chinese education is both extensive and innovative. Through various means such as personalized oral practice, intelligent speech assessment, real-time interactive teaching, and as a teaching aid, ChatGPT presents new ideas and methodologies for reforming and innovating oral teaching in international Chinese education. With the continuous advancement of technology and the updating of educational philosophies, it is believed that ChatGPT will play an even more significant role in oral teaching for international Chinese education in the future.

5. Case Study of Spoken Language Teaching Assisted by ChatGPT

To delve into the potential role of ChatGPT in spoken language teaching for international Chinese education and empirically demonstrate its effectiveness, we conducted a detailed teaching case study. This study took

the intermediate-level spoken language course for international students at Shaanxi Normal University as an example, cleverly integrating ChatGPT technology into the daily teaching process. Through systematic collection and analysis of students' spoken language output data, learning satisfaction surveys, and teacher assessments, we comprehensively evaluated the auxiliary effect of ChatGPT in spoken language teaching.

5.1 Case Description

Adhering strictly to the principles of educational experiment design, this study selected 30 students with intermediate Chinese proficiency as experimental subjects, divided into two groups of 15 students each. The control group received traditional spoken language teaching methods, while the experimental group adopted ChatGPT-assisted spoken language teaching methods. The experiment lasted for one semester, totaling 16 weeks, to ensure data integrity and accuracy.

5.2 Teaching Process

Introduction Stage: At the beginning of each class, the teacher introduced real dialogue samples related to the course theme through ChatGPT, allowing students to experience spoken Chinese expressions in authentic contexts.

Simulated Dialogue Practice: Students were required to engage in role-playing dialogue practice with ChatGPT. ChatGPT adjusted the difficulty of the dialogue based on the student's language level and provided appropriate language support. After each dialogue practice, ChatGPT provided immediate feedback, pointing out deficiencies in the student's pronunciation, grammar, and vocabulary usage. Additionally, the system automatically recorded the student's spoken language output data, including key indicators such as pronunciation accuracy, grammar error rate, and vocabulary usage.

Data Collection and Analysis: After each class, the students' dialogue practice was recorded and saved. We utilized natural language processing techniques to analyze these dialogue data and assess the students' progress in spoken language expression. Simultaneously, we collected student learning satisfaction and feedback through questionnaires and interviews.

5.3 Data Analysis and Results

Progress in Spoken Language Expression: By comparing the spoken language data of the experimental group and the control group, we found that the students in the experimental group significantly improved in terms of spoken language fluency, accuracy, and vocabulary size. Especially after multiple simulated dialogues with ChatGPT, the students' expressions became more natural and fluent. This result demonstrates that ChatGPT's assistance can effectively promote students' spoken language output ability.

Learning Satisfaction: The questionnaire survey results showed that the experimental group students were highly satisfied with the ChatGPT-assisted spoken language teaching method. They generally believed that this teaching method could provide a more authentic context and immediate feedback, making them more motivated and confident in spoken language learning. Simultaneously, they also believed that ChatGPT's personalized learning reports helped them better understand their spoken language level and progress. This result demonstrates the positive role of ChatGPT in enhancing students' learning experience.

Teacher Assessment: Teachers also highly evaluated the performance of the experimental group students. They believed that ChatGPT's assistance made students more active and engaged in spoken language practice, while also reducing the teachers' workload in spoken language correction and evaluation. Additionally, they expressed that through ChatGPT's personalized learning reports, they could more accurately understand students' learning needs and problems, enabling more targeted guidance. This result further confirms the effectiveness of ChatGPT in assisting teachers in teaching and assessment.

6. Conclusion and Prospects

Through systematic analysis, this study has verified the effectiveness and feasibility of ChatGPT in oral teaching for international Chinese education, providing a new technological approach and methodological support for Chinese oral instruction.

The research findings reveal that, leveraging its advanced artificial intelligence capabilities, ChatGPT effectively promotes students' oral

expression and language communication skills. Specifically, through the design and implementation of personalized oral practice, ChatGPT can tailor learning support to individual student differences and needs, significantly enhancing learning motivation and outcomes. Simultaneously, its intelligent speech assessment functionality enables precise diagnosis and timely feedback on students' oral expressions, aiding them in identifying and correcting pronunciation and intonation deficiencies, ultimately improving their oral accuracy and fluency. Furthermore, the introduction of real-time interactive teaching modes creates a more authentic and natural language environment for students, effectively boosting their language communication and cross-cultural communication abilities.

Looking ahead, this study posits that ChatGPT holds vast potential for application in oral teaching for international Chinese education. Future research could explore how to integrate ChatGPT with other teaching technologies to develop more diversified and comprehensive oral teaching models. For instance, ChatGPT could be combined with virtual reality or online collaboration tools to craft more immersive and interactive oral learning environments for students. Additionally, leveraging big data analytics and AI technology, the learning process could be further mined and analyzed to offer teachers more scientific and personalized teaching decision support.

However, it is important to note that the promotion and application of AI technologies like ChatGPT should carefully consider potential ethical and privacy issues. Relevant educational institutions and technology developers should jointly establish strict data protection and usage norms to ensure the adequate protection of students' personal information and learning data. Concurrently, the regulation and evaluation of AI technologies in education should be strengthened to guarantee their reasonable and safe application.^[10]

In summary, this study affirms the significant value and potential of ChatGPT in oral teaching for international Chinese education. With the continuous advancement of technology and innovation in educational philosophy, it is believed that ChatGPT will

contribute even more wisdom and strength to the development of oral teaching in international Chinese education.

References

- [1] Wang Ye. Benchmark Testing of Artificial Intelligence in Education: A Comprehensive Evaluation of Interdisciplinary Large Chinese Language Models. *Journal of Guangxi Vocational and Technical College*, 2024, 17(01): 61-68.
- [2] Ma Ruili, Liang Yu. The Triple Logic of Digital Transformation in International Chinese Education: Starting from ChatGPT. *Journal of Henan University (Social Science Edition)*, 2023, 63(05): 112-118+155.
- [3] Zheng Chunping, Yu Miao, Guo Zhiyan. Research on the Application of Artificial Intelligence in Language Teaching: Review and Prospects. *Foreign Language Education*, 2024, 45(01): 59-68.
- [4] Qian Jiyubing. A Study on Tasks in Task-Based Intermediate Chinese Oral Class. East China Normal University, 2006.
- [5] Li Qiang. A Comparative Study on the Teaching Behaviors of Novice and Experienced Teachers in International Chinese Education. Northeast Normal University, 2023. DOI:10.27011/d.cnki.gdbsu.2023.000042.
- [6] Wang Gang. Research on the Reform of Vocational College English Oral Teaching Based on English Oral Skill Competition under the CBI Mode. *The Science Education Article Collects*, 2021, (07): 186-187.
- [7] Ji Jiatong. ChatGPT - Advantages and Challenges of a New Tool for International Chinese Education. *PR World*, 2023(18): 12-15.
- [8] Song Fei, Guo Jiahui, Qu Chang. The Application System and Practice of ChatGPT in Teaching Chinese as a Foreign Language. *Journal of Beijing International Studies University*, 2023, 45(06): 110-128.
- [9] Lin Ying, He Gaoda. ChatGPT: Changing Your Language Learning with AI-ChatGPT. *Language and Culture Studies*, 2023, 30(05): 50-53.
- [10] Su Junhua, Du Nian. A Review of Privacy Risk Control in the Opening and Sharing of Public Data Resources Abroad. *Journal of Modern Information*, 2024, 44(03): 164-177.