



A Practical Study on AI-Assisted Oral English Teaching at College in the Intelligent Era

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Abstract: With the advent of the intelligent era, the deep integration of artificial intelligence (AI) and higher education teaching has become an inevitable path for educational reform. Oral English teaching is an important component of college English teaching and a key approach to cultivating and enhancing students' competence of language expression, comprehensive application, and intercultural communication. At present, oral English teaching at college generally encounters difficulties such as insufficient practice scenarios, lack of personalized guidance, and delayed feedback. Relying on AI technologies like speech recognition, natural language processing, and adaptive learning to assist oral English teaching can significantly improve learning effectiveness. This paper systematically introduces the core technological application scenarios, main tools, and practical models of AI-assisted oral English teaching, summarizes existing shortcomings, and conducts teaching reflections, with the aim of offering preliminary insights and providing references for advancing intelligent oral English teaching at college.

Keywords: artificial intelligence; oral English teaching at college; teaching practice; intelligent era

1. Introduction

With the acceleration of globalization and the increasing frequency of international exchanges, English speaking ability has become an important indicator for measuring college students' overall competence. However, in practical teaching, oral English teaching, due to its particularity, faces many difficulties. From the teaching perspective, class sizes are generally large, weekly class hours are limited, and students have few opportunities to speak; from the students' perspective, most students tend to be anxious, reluctant or even afraid to speak up in public, and thus cannot acquire effective practice. Breakthrough developments in artificial intelligence technologies have provided a brand-new pathway to address the above obstacles. Policies such as the Outline of the Plan for Building a Strong Education System (2024–2035) and the Opinions on Accelerating the Advancement of Education Digitalization have been successively issued, encouraging and supporting the integrated development of artificial intelligence and higher education. In China, quite a few colleges and universities have actively carried out AI-assisted oral English teaching practices by introducing AI digital human dialogue systems, intelligent speaking apps, and other tools, achieving encouraging teaching outcomes. Based on real teaching cases in higher education institutions, this paper summarizes the scenarios, tools, models, and practical effects of AI-assisted oral English teaching, aiming to provide theoretical references and practical paradigms for the innovative development of oral English teaching at college in the intelligent era, and to promote the transformation and upgrading of oral English teaching toward greater efficiency, precision, and personalization.

2. Typical Application Scenarios and Mainstream Tools of AI-Assisted Oral English Teaching at College

2.1 Typical Application Scenarios of AI-Assisted Oral English Teaching

With the continuous development of AI technologies and the in-depth advancement of teaching reform, AI technologies have begun to integrate deeply with oral English teaching at college. The typical application scenarios are as follows:

(1) Personalized AI-assisted learning and practice: AI digital humans simulate low-pressure, multi-scenario immersive dialogues, enabling one-to-one practice anytime and anywhere with unlimited repetitions, alleviating speaking anxiety and supporting students' autonomous learning. Intelligent speech recognition and feedback systems provide real-time pronunciation correction and scoring, as well as standard model audio. Apart from that, AI platforms can collect and analyze students' learning data to push personalized learning content, making practice more efficient.

(2) Immersive virtual simulation training: By relying on VR/AR equipment and integrating AI technologies, various simulated training scenarios can be constructed, such as international conferences, business negotiations, and technical exchanges. Students engage in role-playing and practical training in virtual environments, which may effectively enhance their practical spoken English application ability in professional fields. For example, in the course “Intercultural Communication,” VR technology can be used to allow students to “enter” overseas geological and mining project sites and conduct communication drills with virtual foreign colleagues.

(3) Intelligent speaking assessment and testing: With the support of AI technologies, the entire process of speaking tests—from test paper generation and administration to scoring and analysis—can be digitally managed, providing refined and data-based ability analysis reports. This will free teachers from heavy and inefficient test organization and scoring tasks, allowing them to devote more time and energy to more valuable teaching activities. Many institutions have already begun exploring speaking test platforms and applying them to projects such as the College English Test Band 4 and Band 6 speaking examinations.

(4) Teacher empowerment and teaching model innovation: By applying AI-assisted instructional design, scenario dialogues, debate scripts, and visualized teaching content can be automatically generated by inputting keywords, providing teachers with abundant basic materials and helping them prepare lessons efficiently and innovate instructional design. Via data analysis, AI assist teachers in accurately understanding both class-level and individual learning conditions, enabling data-driven precise teaching interventions and personalized guidance. At present, college teachers in China have begun to widely apply AI-assisted oral English teaching and have achieved positive results.

2.2 Mainstream AI English Speaking Learning Tools

With the advancement of the times, an increasing number of mainstream AI speaking tools have emerged. Typical representatives include Keli Speak, Hi Echo Speaking Coach, and TalkAI Speaking Practice. Among them, Keli Speak features a dynamic library of over 3,200 real-life scenarios, supports adaptation to 23 accents, and offers phoneme-level pronunciation correction along with an IELTS-aligned scoring system. Its main strengths lie in multi-modal interaction and precise feedback, making it highly suitable for students seeking accurate improvement and exam-oriented preparation. Hi Echo Speaking Coach builds a virtual coach based on the Ziri Education large language model and includes a built-in database of over 100 IELTS speaking topics, making it a great fit for basic speaking practice and IELTS topic accumulation. TalkAI Speaking Practice focuses on multilingual support, offering over 60 system languages, and is ideally suited for foreign-related business professionals and emergency speaking training for travel. AI Foreign Teacher, developed as a lightweight application based on a WeChat mini-program, provides simple and intuitive pronunciation assessment functions and supports the export of chat records for review, facilitating students’ daily use.

3. Practical Models of AI-Assisted Oral English Teaching at College

3.1 AI-Empowered Precise Correction of Basic Pronunciation

AI-assisted pronunciation instruction is a fundamental component of spoken English teaching at college. By relying on intelligent speech recognition and phoneme analysis technologies, it can effectively address problems such as inaccurate pronunciation, phoneme confusion, rigid intonation, and incorrect stress among college students, cultivating standard pronunciation and intonation. This enables students to dare to speak and speak accurately, laying a solid foundation for subsequent oral expression. In practice, before class, teachers may guide students to complete graded assessments of phonetic symbols, word pronunciation, and simple sentence patterns through AI platforms. The system automatically conducts problem analysis, such as generating personalized pronunciation problem reports and pushing targeted corrective learning resources. During class, teachers may rely on AI tools to collect and summarize students’ mispronunciations, provide focused explanations on common problems, and use AI tools for one-to-one correction. After class, based on students’ problem reports, the platform pushes daily personalized pronunciation check-in tasks and conducts secondary assessments to continuously consolidate and improve learning outcomes.

3.2 AI-Driven Immersive, Scenario-Based Interactive Practice

By relying on various AI large language models, virtual digital humans, and metaverse-based oral interaction spaces, we can effectively break through the limitations of traditional oral English teaching, such as a single scenario and interaction target, and students’ reluctance to speak up for communication. Through technology-enabled construction of simulated, interactive, and multidimensional speaking communication scenarios, students’ willingness to communicate can be stimulated, while their competence of English application and intercultural communication are cultivated. In class, teachers use AI tools to

create contexts and provide practice scenarios and personalized guidance. Teachers may present standard pronunciation and simulated dialogue scenarios through AI systems, offering intuitive demonstrations for students. Subsequently, students are organized to conduct targeted practice on AI platforms, with AI providing real-time feedback on their performance. Finally, teachers explain common problems based on AI-generated data and offer personalized guidance. After class, teachers may guide students to use AI virtual foreign teacher platforms, selecting dialogue modes of different scenarios and difficulty levels according to individual needs, such as daily communication, vocational English, and intercultural communication. By fully leveraging functions such as real-time responses, follow-up questioning, and error correction, one-to-one in-depth practice can thus be achieved.

3.3 AI-Assisted Cultivation of Students' Professional Competence

With the assistance of AI technologies, oral English teaching at college can be effectively aligned with students' employment needs, cultivating workplace-oriented spoken English abilities while providing targeted support for IELTS, TOEFL, and Business English requirements. In practice, teachers may guide students to apply modules such as the workplace speaking module of 51Talk and the Zhaopin AI speaking module to construct scenarios including foreign trade, cross-border e-commerce, international education, and general positions in foreign-funded enterprises. These modules can simulate interviewers asking questions such as "Please introduce your internship experience" and "How do you handle cross-team communication in English," after which students' responses are automatically evaluated. For specialized needs such as IELTS, TOEFL, and Business English, teachers may instruct students to use tools such as Keli Speak and Hi Echo and apply customized software modules to strengthen professional vocabulary accumulation and enhance expressive ability, thereby helping students master workplace speaking skills.

3.4 AI-Empowered Diversified Evaluation and Learning Analytics Management in Oral English Teaching

By relying on AI platforms, it is possible not only to realize automated and standardized assessment of speaking ability, addressing the problems of subjectivity and low efficiency in traditional speaking evaluation, but also to comprehensively record all students' speaking learning behaviors. These include data from pre-class assessments, in-class practice, and after-class self-study, collecting quantitative indicators such as pronunciation accuracy, fluency of expression, scenario participation, and problem improvement. Personalized learning profiles and radar charts can thus be formed, laying the foundation for subsequent targeted instruction. Teachers may adopt a diversified evaluation model combining human and machine assessment. Quantitative evaluation is completed by the AI system, covering objective indicators such as pronunciation, fluency, and task completion; qualitative evaluation is conducted by teachers, including subjective indicators such as students' intercultural thinking, logical expression, and impromptu response ability, followed by a comprehensive evaluation. At the same time, teachers can make effective use of AI platform systems to provide customized speaking improvement plans for students. Teachers can also adjust teaching content in a timely manner based on overall learning conditions, realizing "teaching determined by learning," and providing decision-making support for institutional reforms in oral English teaching.

4. Drawbacks and Limitations of AI-Assisted Oral English Teaching at College

4.1 Insufficient Technological Development and Limited Teaching Practicality

In practice, AI-assisted oral English teaching systems have exposed problems such as insufficient technological development. On the one hand, the level of system intelligence remains relatively low, enabling only the identification of basic pronunciation errors, while judgments regarding details such as intonation and stress lack sufficient precision and thus cannot fully meet students' self-learning needs. Virtual dialogue scenarios also suffer from templated and procedural limitations; the dialogues are relatively mechanical and superficial, making it difficult to simulate the complex and variable contexts and dynamic emotional thinking involved in individual communication. As a result, interaction tends to remain at a surface level. On the other hand, some institutions directly adopt third-party tools without integrating and optimizing them within campus platforms, leading to cumbersome operation and insufficient compatibility. Although teaching efficiency is improved, this approach to some extent increases students' learning burden and teachers' instructional costs. Aside from that, the collection of students' personal data, such as voice recordings and written drafts, entails certain risks of data leakage and misuse.

4.2 Lack of Humanistic Attributes and the Weakening of Teachers' Core Value

The essence of oral English teaching lies in language communication, the exchange of ideas, and the transmission of

values. As a tool, AI is unable to simulate human thinking, value systems, and emotions. In practice, although the application of AI tools can correct students' errors in linguistic form, it by no means provides evaluation or effective guidance in aspects such as logical thinking ability, intercultural adaptability, or emotional attitudes. Classroom interaction under AI assistance tends to be relatively monotonous and mechanical, making it difficult to replace the classroom atmosphere created by human teachers and the emotional support they offer. If teachers overuse AI in teaching, their core value and influence may be weakened to a certain extent, which is unfavorable to the cultivation and enhancement of students' overall competence, especially their humanistic literacy.

4.3 Heightened Dependency and Insufficient Real Communication Ability

In oral English teaching and learning, AI tools should primarily play an auxiliary role rather than a dominant one. Some teachers exhibit a tendency to rely excessively on AI, largely becoming operators of AI tools and, as a result, reducing face-to-face interactions with students, which is definitely a reversal of priorities. Some students also overdepend on AI training, failing to effectively enhance their capacity for independent summarization and reflection. Their spoken expression thus becomes procedural and modularized, making it difficult to adapt to real communication scenarios. Due to excessive interaction with AI and immersion in human-machine dialogue, these students still exhibit problems like speaking anxiety, rigid responses, and low communication efficiency in real interactions or group settings, which is far from the objective of cultivating "real communication ability" in oral English teaching.

5. Summary and Reflection

5.1 Teaching Summary

Practice has demonstrated that the application of AI-assisted oral English teaching has created a positive learning atmosphere, effectively improved teaching efficiency, and significantly enhanced students' speaking proficiency. First, the low-pressure environment and adaptive difficulty modes of AI systems effectively alleviate students' anxiety toward oral expression. Students can practice in relatively private and flexible scenarios without concern for external evaluation, which markedly increases their willingness to speak. AI systems are also equipped with incentive mechanisms such as level challenges and badges, stimulating students' enthusiasm and initiative in speaking learning through a sense of achievement and mission, thereby fostering a positive speaking learning atmosphere. Second, AI systems assume many repetitive instructional tasks that would otherwise fall to teachers, enabling teachers to devote more energy to core aspects such as course design, intercultural teaching, and personalized guidance. Among these functions, rapid scoring allows students to promptly identify their weak points and provides an efficient and convenient practice channel; reminder functions encourage timely review and independent thinking, enrich instructional methods, and enhance students' autonomous learning ability. Finally, AI-assisted oral English teaching not only significantly improves in-class efficiency but also creates an intelligent interactive after-class learning platform for college students, effectively extending the instructional carrier of classroom teaching and leading to substantial improvement in students' English speaking competence.

5.2 Teaching Reflection

Through phased practice, it has become evident that AI-assisted oral English teaching at college has demonstrated clear advantages in improving practice efficiency and providing personalized learning pathways. However, there exist certain limitations in emotional communication, cognitive depth, and the cultivation of humanistic literacy, and is accompanied by risks like data privacy leakage. Therefore, for higher education institutions and teachers, the first priority is to further clarify the auxiliary role of AI. AI itself is a tool rather than a substitute for teachers; it is suitable for undertaking highly repetitive tasks such as routine speaking practice and assessment, while areas such as communication, expressive improvement, and intercultural understanding still require teacher leadership. Second, it is necessary to further promote "human-machine collaboration." By fully leveraging the efficiency of artificial intelligence and the humanistic care provided by teachers, a more personalized and supportive learning environment can be created for students. Classroom time should be devoted more to deep interactions that AI cannot easily replace, such as group discussions, role-playing, or impromptu debates, thereby enhancing students' comprehensive language application ability as well as their cognitive and thinking skills. Accordingly, an important task for teachers is to guide students toward authentic, effective, and in-depth communicative interaction, cultivating critical thinking as well as independent thinking and problem-solving abilities, while pre-class preparation and post-class assessment are more appropriately handled by AI tools. Finally, it is essential to strengthen teacher training and data regulation. Teachers are supposed to actively learn how to use AI tools, and institutions provide relevant training; at the same time, it's imperative to make efforts in exploring the establishment of data security protection mechanisms, clarify the

boundaries of data usage, and safeguard students' privacy.

6. Conclusion

As the digital education strategy advances in depth, AI technologies are accelerating the transformation and upgrading of the education sector. AI technologies such as speech recognition, natural language processing, and deep learning are empowering college English speaking instruction, demonstrating clear advantages in improving classroom teaching efficiency, enriching after-class learning platforms, shaping a favorable speaking environment, and enhancing the overall English learning atmosphere. Colleges and universities are supposed to proactively adapt to the new normal of development and, in light of their actual conditions, develop or introduce AI systems to support high-quality teaching development. Frontline teachers are advised to actively embrace AI, take the initiative to learn relevant knowledge and skills, and enhance their teaching competence. It is essential to adhere to teacher leadership and student-centeredness, uphold the essence of education, clearly define the auxiliary role of AI, and anchor clear boundaries of use so that AI does not overshadow pedagogical goals. Through effective human-machine collaboration, teaching effectiveness can be maximized, thereby promoting the vigorous development of oral English teaching at college.

References

- [1] Zuo Ning. Analysis of Measures for Improving College English Teaching Models in the Digital Era [J]. *Modern English*, 2022, (04): 1–4.
- [2] Zou Bin, Wang Chenghao. A Study on the Paths of Generative Artificial Intelligence in Promoting Personalized English Speaking Learning among College Students [J]. *Foreign Language Journal*, 2026, (01): 61–69.
- [3] Xu Ying, Zhang Bingxue, Li Xiaodong. Practice and Reflection on Artificial Intelligence in Large-Scale English Speaking Tests [J]. *Foreign Language Journal*, 2026, (01): 70–76.
- [4] Liao Hongjing, Li Liwen. Framework Construction and Empirical Examination of College English Intercultural Speaking MOOCs from the Perspective of Cognitive Agency Development [J]. *Computer-Assisted Foreign Language Education*, 2025, (06): 34–39+105.
- [5] Wang Liyan, Zhang Qian, Guo Yuanyuan, et al. Multimodal Continuous Emotion Recognition for Affective Evaluation of English Speaking [J/OL]. *Computer Science*, 1–14 [2026-01-28]. <https://link.cnki.net/urlid/50.1075.tp.20251119.1519.002>.
- [6] Hao Jia. Research on the Application of the Production-Oriented Approach in College English Speaking Instruction [C]//Lifelong Learning Professional Committee of the China University School-Run Industry Association. Proceedings of the 7th Academic Symposium on Innovation and Development of Educational Information Technology (Part I). Jilin Institute of Chemical Technology, 2025: 158–160.