

Research on College Oral English Teaching under the Background of Artificial Intelligence

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Abstract: With the rapid development of Artificial Intelligence (AI) technology, college English teaching is facing unprecedented opportunities and challenges. The paper takes the dilemma of traditional college oral English teaching as the entry point, then combines the development of AI technology, deeply analyzes the characteristics and innovative teaching modes of college oral English teaching under the background of AI, and finally discusses the positive impact and potential challenges of AI technology on college English oral teaching, aiming to provide new ideas and methods for the innovation of college English oral teaching.

Keywords: Artificial intelligence; college English oral teaching; innovative teaching modes.

1. Introduction

With the increasing frequency of global communication, the importance of English speaking ability has become more and more prominent. Traditional college oral English teaching often favors the teaching of word pronunciation, but neglects the cultivation of students' ability to apply it in actual communication. However, with the rise of artificial intelligence technology, college oral English teaching has ushered in an innovative change. Artificial intelligence can not only realize the personalized customization of teaching content, but also simulate the real language environment, so as to enhance students' learning interest and efficiency. Therefore, the integration of AI technology into college oral English teaching is not only an inevitable trend in line with the development of the times, but also an effective way to improve the quality of teaching. The purpose of this paper is to discuss the application of artificial intelligence in the field of college oral English teaching, with a view to providing new ideas and methods for college oral English teaching.

2. Problems in Traditional College Oral English Teaching

2.1. Lack of Expression Opportunities

In traditional college oral English teaching, teachers play a decisive role in the classroom. They are usually the transmitters of knowledge, while students passively receive knowledge. This one-way instilling teaching method leads to students' lack of initiative and participation in oral learning. In addition, the size of English teaching classes in college is usually large so that teachers cannot give enough attention to each student. This leads to the fact that many students may not have enough opportunities to practice oral English in the classroom, and it is also difficult for them to find a suitable place for oral training after class, which limits the improvement of their English speaking ability [1].

2.2. Single teaching content

In traditional college oral English teaching, the teaching content is often limited to the textbooks, which lacks topicality and practicality. The content of textbooks is updated slowly and often fails to reflect the latest language

phenomena and oral expressions in time. Some of the topics in the textbooks may also be out of touch with the students' daily life, making it difficult to stimulate their interest and enthusiasm in learning. And due to the single teaching content, students' horizons and abilities to use English are limited. They may be able to master the conversations and sentence patterns in the textbook, but they often feel overwhelmed when they encounter complex communication in real situations. For example, when talking about current hot topics or communicating in specialized fields, students may be troubled by the lack of relevant vocabulary and expressions. This not only affects their oral English ability, but also weakens their self-confidence and learning motivation.

2.3. Out of Real Situation

In the traditional college oral English teaching process, the oral exercises designed by teachers often lack real situations, which leads to low participation of students. Oral exercises are often limited to the dialogues in textbooks, and these situations are often disconnected from real life, which makes it difficult to stimulate students' interest and enthusiasm in learning. Due to the lack of opportunities to practice in real situations, students often feel at a loss when facing actual communication and are unable to flexibly utilize the oral knowledge and skills they have learned. This mode of teaching not only limits the improvement of students' speaking ability, but also may lead to their resistance to learning spoken English.

2.4. Lack of Effective Feedback

Traditional assessment methods in oral English classes tend to focus on students' grammatical accuracy and vocabulary use rather than their communication skills and ability to express ideas fluently. This kind of method further discourages students from actively participating in oral activities as they may feel stressed to perform perfectly instead of communicating effectively. In addition, due to the large class size, it is often difficult for teachers to provide detailed feedback to each student within a short period of time, resulting in students not being able to get their oral errors and problems corrected in a timely manner. This not only limits the improvement of students' oral English ability, but may also make them feel neglected, further reducing their learning

motivation and self-confidence. Therefore, the traditional oral assessment methods that lack effective feedback have become an important factor that restricts the development of students' oral English ability.

3. College Oral English Teaching Under the Background of Artificial Intelligence

3.1. Technical Support for Artificial Intelligence-Assisted College Oral English Teaching

At the present stage, there are several artificial intelligence technologies that can be applied to the cultivation of English speaking ability. They can guide learners to complete oral training efficiently and provide timely and accurate feedback. For example, automatic speech recognition (ARS) technology can recognize and evaluate learners' input speech, then provide learners with feedback on their speech accuracy and other relevant information, and remind learners to improve their pronunciation in the form of scores [2]. Semantic analysis technology can parse learners' oral expressions with quick assessment of grammatical and lexical accuracy, which reduces teachers' workload and improves the efficiency of the assessment [3]. Adaptive systems can continuously collect learners' speech practice data and automatically adjust the difficulty and content of conversations according to their learning progress and abilities [1]. Affective computing technology can sense learners' emotional states through voiceprint recognition and camera micro-expression analysis, and automatically adjusts the rhythm of conversations to achieve a more humanized intelligent accompaniment. The comprehensive application of these technologies helps to improve the effect of oral English teaching and promote the transformation of the oral teaching mode to precision and individualization.

3.2. Characteristics of Artificial Intelligence-Assisted College Oral English Teaching

3.2.1. Personalized Learning

Artificial intelligence can provide support for personalized English learning by analyzing the characteristics of students' oral English. Through automatic speech recognition technology, students' oral expressions are transformed into text data, and then the text data is analyzed by using semantic analysis technology. The text analysis not only covers the analysis of vocabulary, syntax, semantics and other knowledge aspects, but also includes the assessment of emotional attitudes, so as to comprehensively capture the characteristics of students' oral English expressions. Then, the intelligent speech system can customize a personalized corpus according to the students' oral expression characteristics, such as generating or pushing the oral practice materials of their interests, so as to promote students' personalized learning. At the same time, teachers can also keep abreast of students' oral learning and provide more personalized guidance based on the learning analysis provided by the system [4].

3.2.2. Real Situation

Using AI technology, learners can engage in immersive and authentic language experiences [5]. For example, after students master the expression of asking for the location of an object, AI and VR technology can be used to create a virtual

unfamiliar street environment, and then students can use what they have learned to have a conversation with a virtual character in the scene for asking directions. This kind of activity design not only provides students with a situational experience close to reality, but also allows students to sense the practical significance of language use in the process of completing the task, rather than just engaging in boring mechanical exercises. In addition, the system can intelligently adjust the difficulty and complexity of the scenarios according to the students' learning progress and level, ensuring that students can practice oral English in an environment that suits them. This intelligent contextualized learning approach provides a more efficient and interesting way for students to learn oral English.

3.2.3. High Efficiency

A real-time feedback system for Oral English Teaching with artificial intelligence technology can significantly improve the efficiency of learning and teaching. The system can capture information about students' pronunciation, intonation, and grammar usage in a very short period of time and give multi-dimensional evaluation reports. These reports not only detail the strengths and weaknesses of students' oral expressions, but also provide targeted suggestions for improvement. With instant feedback, students are able to quickly recognize and correct their mistakes, effectively avoiding the problem of delayed feedback in traditional teaching. At the same time, teachers can also use the data provided by the system to get a comprehensive understanding of the students' learning situation, make timely adjustments to the teaching strategy, and provide more appropriate teaching guidance. This real-time feedback system can not only help students to improve oral English learning efficiency, but also reduce the workload of teachers, thus improving their teaching efficiency [6].

3.3. Models of College Oral English Teaching Under the Background of Artificial Intelligence

3.3.1. Blended Teaching

Blended teaching combines the advantages of online and offline teaching, aiming to provide students with a more flexible and diverse learning environment. In the online part, students can access personalized learning resources with the help of artificial intelligence technology, such as adaptive exercises and intelligent assessment, which can be dynamically adjusted according to students' actual level and learning needs. At the same time, the online platform also has rich interactive functions, such as online discussions and group cooperation, which help to cultivate students' teamwork and cross-cultural communication skills. In offline teaching, teachers are mainly responsible for guiding students to carry out in-depth discussions and practical applications, helping them solve problems encountered in online learning through face-to-face exchanges and guidance, and further improving their oral expression skills. This combination of online and offline teaching mode not only ensures the flexibility and individualization of learning, but also strengthens the interaction and cooperation between teachers and students, which provides a strong support for the improvement of students' English speaking ability.

3.3.2. Virtual Situation Teaching

Virtual situation teaching provides students with a vivid and concrete oral practice environment by simulating real

communicative scenes. With the use of artificial intelligence, virtual reality and other technologies, students are able to participate in a variety of actual conversations in an immersive way, from which they can gain a more authentic experience of English language practice and application [6]. For example, the system can simulate the discussion scene of an international conference, allowing students to play different roles and engage in instant oral communication and discussion. This virtual situation not only enhances the fun and interactivity of learning, but also enables students to have a deeper understanding of English language use in practice, thus improving the accuracy and fluency of their oral expressions. Through continuous practice in virtual situations, students can gradually adapt to the needs of oral expression in different scenarios, laying a solid foundation for future practical applications.

3.3.3. Oral English Teaching Based on Intelligent Conversation Robots

Teaching with intelligent conversation robots is an innovative way of oral English teaching, which utilizes artificial intelligence technology to provide students with the opportunity to have real-time conversations with robots. These conversation robots are able to simulate various situations and roles in real conversations, so that students can naturally improve their oral expression skills in the process of interacting with the robots [7]. Compared with traditional ways of practicing oral English, intelligent conversation robots have higher interactivity and flexibility. They are able to provide personalized conversation content and feedback according to students' oral level and needs. Through continuous conversations with the robot, students can gradually improve their oral fluency and accuracy. At the end of the conversation, the robot can also play the role of a "teacher", evaluating the student's performance and giving constructive feedback and encouragement. This interactive teaching mode not only helps to reduce students' nervousness when having conversations with real people, but also flexibly adjusts the difficulty and content of the conversations according to students' learning progress and interests, making the learning process more efficient and enjoyable. This way of using robots as a teaching medium injects new vitality and infinite possibilities into college oral English teaching.

4. The Impact of Artificial Intelligence on College Oral English Teaching

4.1. Positive Impacts of Artificial Intelligence

First of all, college oral English teaching based on artificial intelligence can enhance students' learning interest and participation. Through interactions with the intelligent conversation robot, students can practice oral English in a relaxed and pleasant environment, avoiding the embarrassment and tension that may be brought by the traditional classroom, which is conducive to students' English learning [8]. At the same time, students can also personalize their learning according to their own learning rhythm and interests, and explore different ways of oral English expression, thus stimulating the development of their independent learning abilities. Secondly, the introduction of artificial intelligence enriches teaching means and resources. Traditional oral English teaching is often limited by teaching materials and teachers' personal experience, while AI can provide a huge amount of learning materials and diversified practice ways, which can meet the needs of students of

different levels. In addition, AI can ensure the objectivity of teaching assessment. Traditional oral English assessment often relies on teachers' personal subjective judgments, while AI, through advanced automatic speech recognition technology, can provide a more objective and comprehensive evaluation of students' oral English expression, ensuring the fairness and accuracy of the assessment results. Last but not least, AI can monitor students' learning progress and effects in real time, providing teachers with accurate data support to help assess students' learning outcomes and adjust teaching strategies more effectively.

4.2. Negative Impacts of Artificial Intelligence

Although AI brings many positive effects to college oral English teaching, we should not ignore its potential negative impacts. First of all, over-reliance on AI may lead to a decrease in authentic communication between students and teachers, affecting the establishment and maintenance of the relationship between teachers and students [8]. With the assistance of intelligent systems, students may be more inclined to practice conversations with machines and neglect the importance of face-to-face communication with teachers, which is not conducive to the development of students' social and emotional communication skills. Secondly, the introduction of AI may also have an impact on traditional teaching methods, and teachers need to adapt to new teaching techniques and concepts in a short period of time, which puts higher requirements on their professionalism and adaptability [4]. In addition, although AI can provide rich learning materials and diversified ways of practicing, over-reliance on intelligent systems may lead to a lack of independent thinking and problem-solving ability in the learning process. Students may be unable to think and solve problems independently because they are accustomed to relying on the hints and answers of intelligent systems when facing real-world problems, which is not conducive to the development of their innovative ability and critical thinking. Finally, the application of AI in oral English teaching may also raise some ethical and privacy issues, such as the protection of students' data, which are issues that need to be thought about and solved in depth.

5. Conclusion

With the deep integration of artificial intelligence technology and college oral English Teaching, we have witnessed an innovative change in the traditional teaching mode. This change is not only reflected in the renewal of teaching methods, but also in the fact that it opens up a new interactive space for students and teachers. Through the comprehensive use of automatic speech recognition, virtual reality and other advanced technologies, teaching activities can be transformed from a single standardized model into a more individualized model that pays more attention to the individual differences and needs of students. The emergence of innovative teaching models such as blended teaching, virtual situation teaching and intelligent conversation robots has effectively alleviated the problems of insufficient interactions and disjointed scenarios in traditional classrooms, and provided students with a richer and more realistic language practice environment.

However, while enjoying the convenience of these technologies, we must also be aware of the potential problems that may arise from over-reliance on AI. For example, it may undermine the relationship between teachers and students by

weakening real and meaningful communication between them. In virtual conversations, students may lose the subtle emotional and nonverbal messages that are often an integral part of language learning when communicating face-to-face with teachers. Therefore, future teaching models should seek a balance between technology and humanistic care, ensuring that the emotional guidance and human interaction of the teacher is retained while utilizing AI-assisted teaching. Teachers' encouragement, timely feedback, and personalized attention to students are all hard to replace with cold machines. Only in this way can we truly improve students' oral English expression ability and train them to become well-rounded individuals with both solid English language knowledge and good communication skills.

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