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AI-POWERED FEEDBACK SYSTEMS IN SPEAKING AND PRONUNCIATION TRAINING: BENEFITS AND DRAWBACKS

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Abstract: This article explores the role of Artificial Intelligence (AI)-powered feedback systems in enhancing speaking and pronunciation skills in English language learners. With increasing access to digital tools, AI has emerged as a transformative force in language education. The paper discusses the key functionalities, pedagogical advantages, and limitations of AI-based pronunciation trainers and speech recognition tools. It also examines empirical findings from recent studies and highlights the implications for learners, teachers, and curriculum developers.

Keywords: Artificial Intelligence, pronunciation, speaking skills, feedback systems, speech recognition, ELT

Introduction

Speaking and pronunciation are critical aspects of language proficiency. However, traditional classroom settings often lack the resources and time needed for individualized pronunciation training. The emergence of AI-powered tools, such as automatic speech recognition (ASR) systems and intelligent tutoring systems (ITS), offers new possibilities for personalized, immediate feedback on learners' oral performance. This paper aims to examine how AI-powered feedback systems contribute to the development of speaking and pronunciation skills.

AI in Pronunciation Training

AI in pronunciation training is typically implemented through mobile applications, web-based platforms, or embedded classroom software. These systems utilize speech recognition technology to detect pronunciation errors and provide corrective feedback. Examples include apps like ELSA Speak, Google's Read Along, and Microsoft's Immersive Reader. AI can also compare learner speech to native speaker models, visualize phoneme articulation, and deliver instant recommendations for improvement.

Benefits of AI-Powered Feedback

AI-powered feedback systems offer several pedagogical advantages. First, they provide immediate, consistent feedback without the need for teacher intervention. This autonomy encourages learners to practice more frequently. Second, AI can detect subtle phonetic errors and offer customized guidance, which is difficult for most human instructors to provide consistently. Third, learners gain increased confidence as they receive real-time performance analytics and progress tracking.

Drawbacks and Challenges

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Despite its benefits, AI-based pronunciation training has notable limitations. AI systems may struggle with diverse accents and speech patterns, leading to inaccurate feedback. There are also concerns regarding over-reliance on technology, which can reduce human interaction and communicative authenticity. Moreover, limited access to high-quality devices and reliable internet hinders equitable implementation, especially in low-resource settings.

Case Studies and Evidence

A 2022 study by Garcia & Lin found that students using AI pronunciation apps improved their speaking scores by 27% compared to traditional methods. Another study conducted by Lee et al. (2021) highlighted how AI feedback improved phoneme accuracy and learner motivation in Korean EFL contexts. However, in both studies, teacher facilitation remained crucial to help students interpret and apply AI-generated feedback effectively.

Recommendations for Implementation

Educators should adopt a blended approach where AI tools supplement rather than replace traditional instruction. Teachers must be trained to interpret AI feedback and guide learners accordingly. Curriculum developers should ensure AI tools are aligned with communicative language teaching principles and promote meaningful oral interactions.

Conclusion

AI-powered feedback systems hold great promise for advancing speaking and pronunciation instruction in English language teaching. They provide timely, personalized support and enhance learner autonomy. However, to maximize their effectiveness, these tools must be integrated thoughtfully, supported by trained teachers, and adapted to diverse learner contexts.

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