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UTILIZING ARTIFICIAL INTELLIGENCE (AI) TO IMPROVE SPEAKING SKILLS IN LANGUAGE LEARNING

Qarshiyeva Mushtariy Tolibovna

Termez State University

Abstract: Artificial Intelligence (AI) is revolutionizing various aspects of education, including language learning. This article explores the use of AI to enhance speaking skills in language learners. By leveraging AI-powered tools such as speech recognition, pronunciation feedback, and conversational agents, learners can receive personalized and immediate feedback, practice in a risk-free environment, and engage in interactive speaking exercises. This article examines the theoretical foundations, benefits, and practical strategies for integrating AI into speaking instruction. Through analysis and case studies, we demonstrate how AI can significantly improve learners' speaking abilities and overall language proficiency.

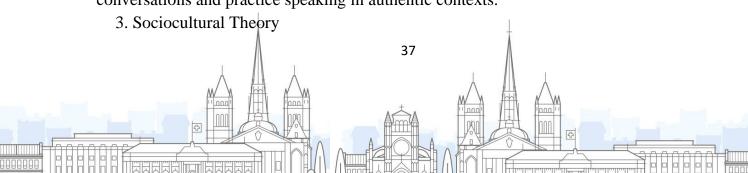
Key words: Artificial Intelligence, AI, speaking skills, language learning, educational technology, speech recognition, pronunciation feedback, conversational agents, language proficiency.

Introduction.

Speaking is a critical skill in language learning, essential for effective communication and interaction. Traditional speaking exercises often lack personalized feedback and sufficient practice opportunities, which can hinder learners' progress. Artificial Intelligence (AI) offers a solution by providing advanced tools that enhance speaking instruction. This article explores the role of AI in improving speaking skills for language learners. It examines the theoretical foundations, benefits, and practical strategies for integrating AI into speaking instruction. Additionally, it discusses potential challenges and considerations in using AI to develop speaking skills, providing a comprehensive view of its application and efficacy.

Theoretical Foundations of Using AI

- 1. Behaviorist Learning Theory
- AI supports behaviorist principles by providing immediate feedback and reinforcement through speech recognition and pronunciation correction.
 - 2. Constructivist Learning Theory
- AI facilitates constructivist learning by enabling learners to actively engage in conversations and practice speaking in authentic contexts.



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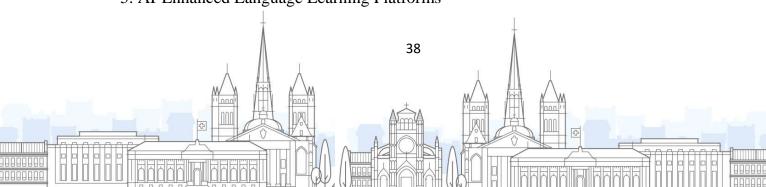
- AI aligns with sociocultural theory by offering interactive conversational agents that simulate social interactions, enhancing communicative competence.
 - 4. Cognitive Load Theory
- AI tools help manage cognitive load by providing targeted feedback and scaffolding to support learners' speaking practice.

Benefits of Using AI in Enhancing Speaking Skills

- 1. Personalized Feedback
- AI provides personalized feedback on pronunciation, fluency, and grammar, helping learners to identify and correct errors.
 - 2. Increased Practice Opportunities
- AI-powered tools offer unlimited practice opportunities, allowing learners to practice speaking at their own pace and convenience.
 - 3. Interactive and Engaging Learning
- AI creates interactive and engaging learning experiences through conversational agents and speech-based activities.
 - 4. Risk-Free Environment
- AI provides a risk-free environment for learners to practice speaking without the fear of judgment or embarrassment.
 - 5. Enhanced Fluency and Pronunciation
- AI tools help learners improve fluency and pronunciation by providing real-time feedback and modeling correct speech patterns.

Practical Strategies for Implementing AI in Speaking Instruction

- 1. AI-Powered Speech Recognition Tools
- Utilize AI-powered speech recognition tools such as Google Speech-to-Text, Microsoft Azure Speech, and IBM Watson to provide real-time feedback on pronunciation and fluency.
 - 2. Conversational Agents and Chatbots
- Implement conversational agents and chatbots like Duolingo's AI Chatbots, Replika, and Mondly to simulate real-life conversations and enhance speaking practice.
 - 3. Pronunciation Training Apps
- Use pronunciation training apps such as ELSA Speak, Speechling, and Forvo to provide targeted feedback and practice exercises.
 - 4. Virtual Language Partners
- Integrate virtual language partners that use AI to engage learners in interactive speaking activities and role-playing scenarios.
 - 5. AI-Enhanced Language Learning Platforms



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- Utilize AI-enhanced language learning platforms such as Rosetta Stone, Babbel, and Busuu to offer comprehensive speaking practice and feedback.

Challenges and Considerations

- 1. Access to Technology
- Ensure that learners have access to the necessary AI tools and devices to participate in AI-enhanced speaking activities.
 - 2. Data Privacy and Security
- Address data privacy and security concerns by using reputable AI tools that comply with data protection regulations.
 - 3. Balancing AI with Human Interaction
- Balance the use of AI tools with human interaction to provide a well-rounded speaking practice and avoid over-reliance on technology.
 - 4. Technical Skills and Support
- Provide technical support and training for learners to effectively use AI tools and platforms.
 - 5. Evaluating Effectiveness
- Regularly evaluate the effectiveness of AI tools in improving speaking skills and make necessary adjustments to the instructional approach.

Conclusion

Artificial Intelligence (AI) offers a transformative approach to enhancing speaking skills in language learning by providing personalized feedback, increased practice opportunities, and interactive learning experiences. The theoretical foundations of using AI support its potential to improve speaking abilities by offering targeted and immediate feedback, managing cognitive load, and simulating social interactions. By integrating AI into speaking instruction, educators can create dynamic and supportive learning environments that enhance learners' speaking abilities and support their development of overall language proficiency. However, successful implementation requires careful consideration of technology access, data privacy, and balancing AI with human interaction. By leveraging AI effectively, educators can significantly enhance learners' speaking skills and support their development of overall language proficiency.

REFERENCES:

- 1. Burston, J. (2015). Review of Mobile Applications for Language Learning. In ReCALL, 27(1), 4-20.
- 2. Chen, X., Xie, H., & Hwang, G. J. (2020). A Multi-Perspective Study on Artificial Intelligence in Educational Technology & Society, 23(4), 1-15.



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- 3. Chien, S. P., Tai, S. J. D., & Yeh, S. W. (2020). The Influence of Extrinsic and Intrinsic Motivation on Continuance Intention for Language Learning Using AI Chatbots. In Interactive Learning Environments, 1-16.
- 4. Derwing, T. M., & Munro, M. J. (2015). Pronunciation Fundamentals: Evidence-Based Perspectives for L2 Teaching and Research. John Benjamins Publishing Company.
- 5. Godwin-Jones, R. (2017). Emerging Technologies: Autonomy and Language Learning. In Language Learning & Technology, 21(3), 4-17.
- 6. Lin, M. H., & Lin, H. (2019). Evaluation of AI-Based Language Learning Platforms. Journal of Educational Technology Development and Exchange, 12(1), 15-30.
- 7. Lu, X., & Doshi, P. (2017). Interactive Conversational Agents for Learning. In IEEE Transactions on Learning Technologies, 10(1), 1-14.
- 8. McCrocklin, S. M. (2016). Pronunciation Learner Autonomy: The Potential of Automatic Speech Recognition. In System, 57, 25-42.
- 9. Pino, C., & Oliver, R. (2018). AI and Language Learning: A Critical Review. In International Journal of Artificial Intelligence in Education, 28(2), 156-174.
- 10. Warschauer, M., & Grimes, D. (2007). Audience, Authorship, and Artifact: The Emergent Semiotics of Web 2.0. Annual Review of Applied Linguistics, 27, 1-23.

