

THE IMPACT OF REAL-TIME AI-GENERATED FEEDBACK ON SPOKEN FLUENCY AMONG ESL LEARNERS

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Abstract: This study looks at how real-time AI feedback helps ESL students speak more fluently. During six weeks, one group used AI speaking apps, and another group used traditional practice. The students who used AI improved their fluency and pronunciation more than the other group. The results show that AI feedback can help learners speak more confidently and correctly. It also helps them learn faster and stay motivated.

Keywords: ESL learners, speaking fluency, AI feedback, pronunciation, language learning.

Аннотация: Это исследование изучает, как обратная связь от ИИ в реальном времени помогает студентам ESL говорить более свободно. В течение шести недель одна группа использовала ИИ-приложения, а другая — обычную практику. Группа с ИИ показала большее улучшение в беглости и произношении. Результаты показывают, что ИИ помогает учиться быстрее, говорить увереннее и делать меньше ошибок.

Ключевые слова: ESL студенты, беглость речи, ИИ обратная связь, произношение, изучение языка.

Annotatsiya: Bu tadqiqot real vaqtli AI feedback ESL o'quvchilariga qanday yordam berishini o'rganadi. Olti hafta davomida bir guruh AI ilovalaridan foydalandi, ikkinchi guruh esa oddiy mashq qildi. AI ishlatgan guruh ravon gapirish va talaffuzda ko'proq o'sish ko'rsatdi. Natijalar shuni ko'rsatadiki, AI talabalarga tezroq o'rganish, aniqroq gapirish va ko'proq ishonch bilan muloqot qilishga yordam beradi.

Kalit so'zlar: ESL o'quvchilari, ravon gapirish, AI feedback, talaffuz, til o'rganish.

INTRODUCTION

Speaking is one of the most important skills for ESL learners, but it is also one of the most difficult. Many students feel shy or afraid to speak because they think they will

make mistakes. Others cannot hear their pronunciation problems, so they continue speaking incorrectly. In traditional classrooms, teachers try to help every student, but it is not always possible to give feedback to each learner quickly. Because of this, many students do not improve their fluency as fast as they want.

Today, real-time AI tools are becoming very popular in language learning. Apps like ELSA Speak or Duolingo Speaking AI can listen to the student's voice and give instant feedback. These apps show the mistakes in pronunciation, grammar, or stress, and they also tell the learner how to say the word or sentence correctly. This kind of support helps students learn faster because they do not have to wait for the teacher to correct them. AI feedback also makes students more confident, because they can practice anytime and repeat the exercise as many times as they want.

Many teachers and researchers believe that AI can be a strong tool for improving speaking fluency. However, there is still a need to study how much AI helps students in real learning situations. For this reason, this research focuses on understanding the effect of real-time AI feedback on ESL learners' spoken fluency. The goal is to see whether students who use AI improve more than students who use traditional speaking practice [1].

Methods

This study was done with 30 intermediate ESL learners. The research lasted for six weeks. The students were divided into two groups. The first group used real-time AI speaking apps every day for 15 minutes. They used apps like ELSA Speak, which gave instant feedback on pronunciation, stress, and grammar. The second group practiced speaking in the traditional way. They did pair work, reading aloud, and simple speaking tasks, but they did not use any AI tools.

Before the study began, both groups took a pre-test based on the IELTS Speaking Band Descriptors. This helped the researcher understand the students' starting level. After six weeks, both groups took a post-test with the same format. The scores were compared to see which group improved more. The researcher also asked students simple questions about how they felt during the learning process.

Results

The results of the study showed a strong and clear difference between the two groups. The group that used real-time AI feedback made much bigger progress in speaking fluency and pronunciation. After six weeks, the AI group improved their fluency score by about 1.0 band. Their pronunciation score increased by 0.8 band. Many students in this group said they felt more confident speaking English because the AI apps corrected their mistakes immediately. They explained that they could practice

many times, listen again, and learn at their own speed, which made them more comfortable.

The traditional group improved only a little. Their fluency score increased by 0.2 band, and their pronunciation improved by 0.3 band. Several students in this group said speaking was still difficult for them. They often did not know their mistakes during practice, so they repeated the same errors many times. They also said that waiting for the teacher’s feedback took more time, and this slowed their progress. The test results and student opinions together show that real-time AI feedback helped learners learn faster, correct mistakes more effectively, and speak more clearly. The AI tools also supported student confidence and gave them more chances to practice without feeling nervous.

Table 1. Pre-test and Post-test Scores

Group	Fluency (Pre-test)	Fluency (Post-test)	Pronunciation (Pre-test)	Pronunciation (Post-test)
AI Feedback Group	4.5	5.5	4.4	5.2
Traditional Group	4.6	4.8	4.5	4.8

The table shows the scores before and after the six-week study. The AI group had strong improvement in both fluency and pronunciation. Their scores increased by more than one full band in fluency and almost one band in pronunciation. The traditional group showed only small improvement in both skills. These results show that students who receive instant corrections learn faster and improve more, while students without real-time feedback progress more slowly

Discussion

The results of the study show that real-time AI feedback can help ESL learners improve their speaking skills more effectively than traditional practice. Students in the AI group made bigger progress because they received corrections immediately after making a mistake. This helped them understand what they were doing wrong and fix it at the same moment. When students can hear their mistakes and repeat the correct version, they learn faster and remember the correct pronunciation longer. This is one of the main reasons why the AI group improved more in fluency and pronunciation [2].

Another important point is confidence. Many students in the AI group said they felt less afraid to speak because they could practice alone with the app. They did not feel embarrassed or shy, which often happens in classroom speaking activities. The AI app did not judge them, and they could repeat the exercise many times until they felt

satisfied. This made speaking practice easier and more comfortable for them. More confidence often leads to more practice, and more practice leads to better results. The traditional group did not improve as much because they did not receive quick feedback. When learners do not know their mistakes right away, they sometimes continue using incorrect pronunciation or grammar for a long time. This slows down learning. Some students in the traditional group also said they needed more teacher support and more time to understand their mistakes. This shows that traditional practice alone may not be enough for fast improvement in speaking fluency. Even though AI feedback is very helpful, there are still some small challenges. Some students said that the AI app sometimes had difficulty understanding their accent or voice. A few students felt stressed when the app showed many mistakes at once. This means that AI tools are useful, but they cannot fully replace a human teacher. Teachers can give emotional support, explain difficult points more clearly, and help students stay motivated [3].

Overall, the discussion shows that real-time AI feedback is a strong tool for improving spoken fluency in ESL learners. It helps students learn faster, correct mistakes sooner, and feel more confident while speaking. At the same time, AI should be used together with traditional teaching, not instead of it. A combination of both methods can give students the best learning results.

Conclusion

This study shows that real-time AI feedback has a strong and positive effect on improving spoken fluency in ESL learners. The students who used AI speaking apps made much bigger progress than the students who practiced in the traditional way. They improved more in both fluency and pronunciation, and they also felt more confident when speaking English. These results mean that AI tools can support learners in a very effective way because they give fast and clear corrections at the exact moment the mistake happens.

Real-time AI feedback also helps students learn at their own speed. They can repeat words and sentences as many times as they want, and they do not have to wait for a teacher's answer. This makes practice easier and more comfortable, especially for shy students who do not like speaking in front of others. The AI tools also make learning more engaging because students can listen to their own voice, see their progress, and understand their improvement.

However, the study also shows that AI tools cannot completely replace teachers. Some students had problems when the AI did not understand their accent, and a few learners felt stressed when the app pointed out many mistakes at the same time. Teachers are still important because they can give emotional support, explain

grammar or pronunciation in a simple way, and help students stay motivated.

Technology works best when it is used together with a teacher's guidance.

In general, the conclusion of the study is clear: real-time AI feedback is a helpful and powerful tool for improving ESL speaking skills. It supports faster learning, clearer pronunciation, and stronger confidence. Future research can continue exploring how AI can help with other language skills such as listening, vocabulary, and grammar. Using AI and traditional teaching together can create the best learning environment for ESL students.

References

1. Brown, H. D. (2014). *Principles of Language Learning and Teaching*. New York: Pearson Education.
2. Derwing, T. & Munro, M. (2015). *Pronunciation Fundamentals: Evidence-Based Perspectives for L2 Teaching and Research*. Amsterdam: John Benjamins.
3. Li, Z. (2022). The role of artificial intelligence in improving ESL speaking skills. *Journal of Language Learning Technology*, 9(2), 45–57.