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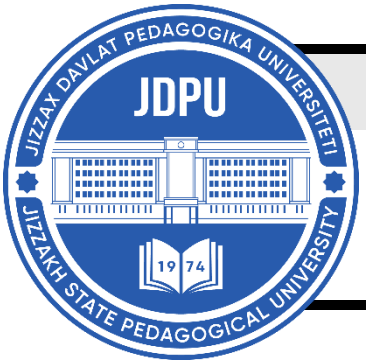

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POSTMETHOD PRINCIPLES IN ACTION: DIGITAL TECHNIQUES FOR DEVELOPING LEARNERS' SPEAKING COMPETENCE

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ABOUT ARTICLE

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Abstract: This study investigates the incorporation of AI-driven speaking tutors within a postmethod framework to improve the speaking proficiency of high school EFL students. The eight-week intervention included AI conversation partners, real-time feedback on pronunciation, and role-plays based on real-life situations. The experimental group showed significant improvements in fluency, pronunciation, and overall speaking ability compared to the control group. Additionally, students indicated diminished speaking anxiety and heightened engagement. The results show how important it is to make sure that AI tools follow postmethod principles—specificity, practicality, and possibility—in order to teach language effectively. This study shows how AI can help students improve their speaking skills while also encouraging independence and lowering their anxiety.

Introduction. Speaking competence is an essential yet demanding skill for high school EFL (English as a Foreign Language) students to cultivate. Students often don't get to practise speaking in real-life situations because of the limits of traditional classrooms. This can cause problems like anxiety about speaking a foreign language and low confidence (Horwitz et al., 1986; Dörnyei & Ushioda, 2011). Recent developments in AI-driven speaking tutors, including

conversational chatbots and automated feedback systems, present innovative methods to enhance speaking practice. These AI tools can act as conversation partners for students and give them personalised, instant feedback on their grammar, vocabulary, and pronunciation. This makes it easier for students to practise speaking in a meaningful way outside of teacher-led activities (Chapelle, 2001; Thomas et al., 2013). Research has started to demonstrate the efficacy of digital methodologies; for instance, EFL classes that incorporated AI chatbot exercises yielded markedly superior improvements in students' speaking performance relative to conventional practice methods. In a recent quasi-experimental study, an experimental class utilising ChatGPT-based conversational practice surpassed a control class in post-test speaking proficiency and indicated diminished speaking anxiety (Derwing & Munro, 2005; Neri, 2008; Liakin, 2015). This evidence indicates that AI-driven speaking interventions can enhance not only linguistic outcomes but also learners' motivation and comfort in utilising the spoken language.

But just adding technology doesn't mean success. A solid teaching framework is needed for AI tools to be used well in language instruction. Kumaravadivelu's (2001, 2003, 2006) postmethod pedagogy offers a guiding framework, underscoring the absence of a universal method in language instruction and the necessity for approaches to be customised to the particular context and learners. Postmethod pedagogy is based on three teaching principles: particularity, practicality, and possibility. These principles call for teaching that is aware of local needs, based on what teachers have learnt from their own experiences, and open to changes in society and culture. Particularity means that teachers are aware of their local context and adjust their lessons to fit the needs of their students, culture, and institutions. Practicality means that teachers should learn about teaching by doing it. They should come up with and use theories based on their own classroom experiences, which will help them connect what they say they believe with what they actually do. Possibility involves acknowledging the social identities of learners and teachers (such as class, gender, and ethnicity) and the wider socio-political implications of education, fostering practices that empower students and enhance critical awareness. Postmethod pedagogy essentially gives teachers the freedom to change and improve their teaching methods beyond what is prescribed, allowing them to tailor their techniques to their specific needs. This article discusses a classroom intervention that put postmethod principles into action by using AI-powered speaking tutors to help high school students improve their speaking skills. We elucidate the intervention's design, emphasising contextual needs and learner empowerment, delineate the outcomes on students' speaking performance and affect, and analyse the findings through the framework of postmethod

pedagogy. By using cutting-edge AI tools in a solid pedagogical framework, we want to show postmethod principles in action and give language teachers who want to use digital techniques in their speaking lessons useful tips.

Methods. Setting and Participants

This study took place in a public high school EFL program, involving two intact Grade 10 classes, comprising approximately 50 students aged 15 to 16. An initial needs analysis indicated that students experienced anxiety regarding speaking English and lacked confidence in oral communication. We recognised the necessity for enhanced interactive speaking practice beyond the standard curriculum—a context-specific challenge that corresponds with the particularity principle (catering to local learner needs). The two classes were similar in skill level (mid-intermediate level, based on a standardised English test) and were used as an experimental group (Class A, n = 25) and a comparison group (Class B, n = 25). Every student had their own smartphone or could use a school laptop, which made it possible to use digital tools. Before the intervention, both classes took a baseline speaking test and filled out a questionnaire about how anxious they were about speaking. The teacher got the right permissions and showed the students how to use the AI app to learn a language.

Designing Interventions and Using Digital Tools

Class A got AI-integrated speaking lessons on top of their regular lessons for 8 weeks, while Class B did the regular speaking activities without AI help. The teacher-researcher carefully planned the intervention in Class A so that AI-powered speaking tutors would work well with communicative teaching methods. In keeping with postmethod practicality, the teacher used what she had learnt from her students and her own classroom experience to make activities that were both educationally sound and useful for real-world communication. The AI tools that were chosen were a conversational chatbot that used a large language model and could take and give voice input and output, as well as an automated speech feedback engine. These were used to help with different speaking tasks. The main digital methods used were:

- AI Conversation Partners: Every week, students had guided conversations with an AI chatbot that acted as a virtual conversation partner. The teacher gave the students a situation or topic that was related to the curriculum, like talking about their hobbies, debating a school issue, or pretending to have a conversation while travelling. The students then talked to the AI for 10–15 minutes. The chatbot was made to ask questions, follow up, and use a friendly, encouraging tone. This gave students a lot of chances to practise speaking English in a way that was interactive, with the AI acting like a patient, always-available person to talk to. It was important that the topics were chosen to fit the students' lives and interests (for example,

talking about local youth culture or personal goals), which made sure that the content was relevant to the students' lives.

- Real-time Feedback and Pronunciation Help: The AI system gave students instant feedback on what they said. The tool could find mistakes in the student's speech, like mispronunciations, grammatical errors, or awkward phrasing, by using speech recognition and natural language processing. It gave gentle feedback and suggestions after each turn in the conversation or at the end of the session. For instance, if a student said a word wrong, the AI's speech feedback engine would highlight the word and play back the right way to say it. It also gave a simple score to things like fluency (words per minute) and clarity of pronunciation. This quick, personalised feedback helped students see their mistakes and fix them, which is in line with the postmethod idea of using technology to help people become more aware of language. The AI told the students to say the same things over and over and try different ways of saying them, which made the practice sessions iterative and focused on getting better.
- Interactive Role-Play Scenarios: The teacher used role-plays based on scenarios in which students did a task by talking to AI. Ordering food at a restaurant was one of the tasks. The AI pretended to be a waiter, and the student practiced the conversation. In another, the AI played the role of a job interviewer and asked the student questions. The AI and I did these role-plays out loud, which helped me use functional language in context. These kinds of simulated real-life interactions with AI made speaking practice more realistic and diverse, which fit with the macrostrategies of contextualising linguistic input and integrating skills (speaking while listening to the AI). The AI's ability to adopt different personalities and topics allowed the activities to be customised to meet the students' real-world needs (supporting practicality and particularity).
- Autonomous Speaking Practice: To encourage students in Class A to be independent learners, they were also told to use the AI tutor to practice on their own outside of class. They could pick a topic from a list or talk to the AI for at least 30 minutes a week on their own time. Many students took advantage of the AI's "24/7 tutor" feature, which let them practise whenever and however they wanted. The system kept track of practice and sent the teacher weekly reports. The intervention also used the possibility parameter by letting students take charge of extra practice. This gave learners the power to extend their learning to new times and places as needed.

Picture1. AI-assissted digital methods ranges from guided to independent learning.

During the intervention, the teacher kept a close eye on how Class A was interacting with the AI activities. The teacher was both a facilitator and a reflective practitioner. They watched how the students used the technology and made small changes as needed, such as giving extra help to students who had trouble with the app at first or changing the conversation topics to make them more interesting. This process of making small changes over and over shows that the teacher is a "strategic researcher" in the classroom, as postmethod pedagogy suggests. They look at results, find problems, and come up with solutions. Class B (the comparison group) did the same speaking exercises as the other group (pair dialogues, presentations, etc.) as the textbook and syllabus said, with the same teacher, but they didn't use the AI tools. This setup made it possible to compare the effects of the AI-enhanced approach, and the teacher made sure that both classes learnt what they needed to know.

Results. The class that got AI-enhanced instruction (Class A) saw a big improvement in their speaking skills. Class A's average score on the speaking test was 31.4 out of 50 (SD 5.2), which was close to Class B's average score of 30.8 out of 50 (SD 5.0). After 8 weeks, Class A's average score went up to 38.7/50 (SD 4.8), and Class B's average score went up to 33.9/50 (SD 5.1). This means that the experimental class gained about 7.3 points, while the comparison class only gained about 3.1 points. A paired t-test showed that Class A's improvement was statistically significant ($t(24) \approx 9.5$, $p < 0.001$). Additionally, an independent t-test on gain

scores indicated that Class A's gains were significantly superior to those of Class B ($p < 0.01$), implying a distinct advantage of the AI-integrated approach. Many students in Class A went from a "low-intermediate" speaking level to a solid "intermediate" or "high-intermediate" level by the end of the study (based on rubric descriptors). Progress in Class B was less impressive. Class A made big strides in fluency and pronunciation when it came to certain speaking sub-skills. Raters said that the recordings from Class A after the test had longer stretcheS of speech with fewer pauses and hesitations, and the intonation sounded more natural. Class A's average fluency sub-score went up by 1.5 points (on a scale of 10), while Class B's only went up by 0.5 points. On average, pronunciation scores in Class A went up by 1.2 points. In the post-test, students were able to say several words that were hard to say in the pre-test. Class A had slightly better gains in vocabulary range and grammatical accuracy than Class B, but they were still higher. These findings corroborate previous research indicating that AI-driven speaking practice results in substantial improvements in oral proficiency, encompassing specific aspects such as pronunciation, fluency, and lexical resource. For instance, Maknun et al. (2020) found that students who practiced speaking with an AI speech app (Orai) did better on the post-test than students who didn't use the app. In our study, the significant enhancement of Class A highlights the efficacy of AI conversation practice and feedback in advancing learners' speaking abilities. In contrast, Class B's slight improvement is what you would expect from just one term of regular instruction. This shows that AI's extra practice opportunities and feedback loops were a major difference.

Discussion. This study aimed to investigate the potential of AI-driven speaking techniques, informed by postmethod pedagogy principles, to improve the speaking proficiency of high school EFL learners. The results show that when digital tools are carefully used in language teaching, they can make a big difference in how well students speak and how confident they are. Class A, which used the postmethod-informed, AI-supported method, did better in fluency, pronunciation, and overall speaking ability than the class that used traditional methods. The students in Class A also had less anxiety about speaking and a better attitude towards speaking English. These results are consistent with the expanding research indicating the effectiveness of AI in language acquisition—ranging from enhanced oral performance in experimental settings to heightened learner motivation and reduced anxiety in AI-enhanced contexts. The current study's contribution is to show how these technological tools can be used in line with good teaching practices, rather than just as new things.

When you put all of these points together, they show that the digital techniques weren't used in a vacuum; they were closely linked to pedagogical reasoning that was in line with

postmethod values. The teacher successfully implemented postmethod principles through technology integration by guaranteeing specificity, practicality, and feasibility. This supports the notion that technology and postmethod pedagogy can synergise: recent literature indicates that educators can integrate traditional methods with technology in adaptable manners to establish a postmethod learning environment tailored to their specific context. The AI tools' ability to adapt was important because they helped teachers reach their goals instead of telling them how to teach. This is something that teachers should think about: they should only use AI or any other new digital tool if they have clear teaching goals and know how their classroom is different from others.

Implications for Practice

The results of this study have practical ramifications for language educators and curriculum developers. First, using AI-powered speaking tutors can greatly increase the amount of time students spend practicing speaking and give them personalised feedback on a large scale. Teachers who have trouble giving each student enough chances to speak or correcting mistakes right away may find these tools helpful. But the teacher's role is still very important. They oversee how and when these tools are used, they are the ones who deal with any problems, and they are the ones who put the AI's feedback in context. For instance, if students don't understand what the AI says, the teacher may need to clarify or correct it. They may also need to add a human touch to the AI, such as talking about common mistakes in class. Another implication is that using AI for low-stakes practice could help people who are afraid of speaking. Language programs that want students to talk to each other more could use AI conversation practice as a way to get them ready for real communication tasks. You could say that our method is a type of blended learning because it didn't replace human interaction or instruction; it added to it. So, one thing to remember is that balance is important. Good integration means using AI to improve, not replace, teaching language through conversation. Teachers should also think about access and training issues. Not all students may know how to use AI interfaces at first, so they need help and training in digital literacy to make sure everyone can participate equally. Also, AI tools should be checked for accuracy and content appropriateness, even though they have many benefits. The AI sometimes made an awkward phrase or misheard a student's word, so the teacher had to step in and explain. This means that teachers who use AI need to keep an eye on what it does and be ready to fix or explain things as needed, keeping an eye on the teaching process.

Conclusion. In conclusion, this study showed that using AI-powered speaking techniques in line with the principles of postmethod pedagogy can greatly improve the

speaking skills of high school EFL students. The intervention resulted in significant enhancements in students' fluency, accuracy, and confidence in speaking English by meticulously aligning technology use with the local context (particularity), utilising teacher autonomy and experience (practicality), and striving to empower learners (possibility). The AI conversation partner and feedback tools offered ample practice and immediate assistance, demonstrating how digital innovation can fulfil educational objectives in a learner-centered and context-responsive way. The findings indicate that language teaching professionals can adopt new digital tools without contradicting established pedagogical principles. In fact, the integration of technology is most effective when informed by principles such as postmethod, which emphasise adaptability, teacher agency, and learner empowerment. As AI changes the way languages are taught, teachers are encouraged to try out these tools in their own classrooms and think critically about what works for their students. In this way, teachers help create new ways of doing things that go beyond the old ways. In the end, postmethod principles in action—like the combination of AI techniques and responsive pedagogy shown here—lead to more dynamic and personalised learning experiences that help students become confident and competent speakers of a new language.

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