"JOURNAL OF SCIENCE-INNOVATIVE RESEARCH IN UZBEKISTAN" JURNALI
VOLUME 04, ISSUE 09, 2026. SEPTEMBER
ResearchBib Impact Factor: 10/54/ 2025 ISSN 2992-8869

ARTIFICIAL INTELLIGENCE-BASED CHATBOTS AND THE FLUENCY–ACCURACY TRADE-OFF IN UNIVERSITY EFL LEARNERS' SPOKEN ENGLISH PRODUCTION

Xodjayeva Vazira Alisher qizi,
Researcher
Bukhara State University, Bukhara city,Uzbekistan
Email: *Vxodjayeva@gmail.com*

Annotation: *This thesis examines the fluency–accuracy trade-off in university EFL learners' spoken production through Skehan's model. AI chatbots are considered as a tool for low-stakes task repetition. Existing research shows that repeated chatbot practice improves fluency and confidence but does not automatically improve accuracy; the outcome depends on whether the chatbot provides explicit corrective feedback. The thesis recommends combining fluency-oriented repetition with feedback-rich, accuracy-focused chatbot tasks and calls for measuring fluency and accuracy separately in future research.*

Keywords: *AI chatbots, EFL, spoken production*, fluency, accuracy, Skehan's model, task repetition, corrective feedback.

One of the most persistent challenges in teaching English as a foreign language at the university level concerns the well-documented trade-off between fluency and accuracy in learners' spoken production. According to Skehan's model of second language performance, learners possess limited attentional capacity during real-time speech, and this capacity must be distributed among complexity, accuracy, and fluency; consequently, an increased focus on one dimension typically comes at the expense of another [1]. In traditional classroom speaking activities, time pressure and the presence of an evaluating audience often push learners toward either halting, overly self-corrected speech or fluent but error-laden production, with few opportunities to reconcile the two.

The growing use of artificial-intelligence-based conversational agents (chatbots) in EFL instruction offers a potential avenue for addressing this trade-off, primarily through the mechanism of low-stakes task repetition. Because chatbot-mediated practice removes the social cost of repeating the same communicative task

multiple times, learners can rehearse a given topic or function repeatedly without the embarrassment associated with visible repetition in front of peers. Prior research on task repetition in second language acquisition has shown that repeated performance of the same task tends to improve fluency measures (such as speech rate and reduced hesitation) while not necessarily compromising, and sometimes even improving, accuracy, since learners are freed from having to simultaneously plan content and monitor form on each attempt [2].

Recent empirical work on AI chatbots in EFL contexts lends indirect support to this expectation. A systematic review of AI-powered chatbots for EFL speaking practice concluded that sustained, repeated chatbot interaction was consistently associated with gains in learners' fluency and self-reported confidence, findings that were echoed across the broader body of studies synthesized in a large-scale systematic review covering the period from 2018 to 2026 [3; 4]. However, the same reviews caution that fluency gains are not automatically accompanied by proportional accuracy gains, and that the balance between the two depends heavily on whether the chatbot provides explicit corrective feedback on grammatical or lexical errors, or whether it functions purely as a fluency-oriented conversational partner [3].

This observation suggests a concrete pedagogical implication for the design of AI chatbot-mediated speaking practice at the university level: chatbot tasks intended to develop fluency through repeated, low-stakes rehearsal should be deliberately alternated or combined with chatbot tasks that incorporate explicit, immediate feedback on accuracy, rather than assuming that fluency practice alone will proportionally improve grammatical and lexical precision. Framing AI chatbot practice explicitly around Skehan's trade-off model allows instructors to make principled decisions about when to prioritize fluency-building repetition and when to prioritize accuracy-focused, feedback-rich chatbot interaction, rather than treating all chatbot practice as pedagogically equivalent.

In conclusion, artificial intelligence-based chatbots offer a genuinely new means of operationalizing task repetition for fluency development in university-level EFL speaking instruction, but their effective use requires explicit attention to the fluency–accuracy trade-off identified in second language acquisition theory. Future empirical research should measure fluency and accuracy outcomes separately across

different types of chatbot task design in order to determine the most effective sequencing of fluency-oriented and accuracy-oriented AI-mediated practice.

References:

1. Skehan P. Modelling Second Language Performance: Integrating Complexity, Accuracy, Fluency, and Lexis // Applied Linguistics. — 2009. — Vol. 30, № 4. — P. 510–532.

2. Bygate M. Effects of Task Repetition on the Structure and Control of Oral Language // Researching Pedagogic Tasks: Second Language Learning, Teaching and Testing / Ed. by M. Bygate, P. Skehan, M. Swain. — Harlow: Longman, 2001. — P. 23–48.

3. Du J., Daniel B.K. Transforming Language Education: A Systematic Review of AI-Powered Chatbots for English as a Foreign Language Speaking Practice // Computers and Education: Artificial Intelligence. — 2024. — Vol. 6. — Article 100230.

4. Gonzalez-Torres [et al.]. Artificial Intelligence for EFL Speaking Development: A Systematic Review of Empirical Studies (2018–2026) // International Journal of Learning, Teaching and Educational Research. — 2026.

Research Science and Innovation House