AI FEEDBACK VS. HUMAN FEEDBACK IN WRITTEN AND SPOKEN EXERCISES

To'lqinova Mushtariybegim Erkinjon qizi – student,
Uzbekistan State World Languages University
Scientific supervisor: Axmedjanova Dilraboxon Asatullaevna

Abstract: This article explores the differences between AI feedback and human feedback in written and spoken exercises, focusing on their impact on learner development. While AI provides instant, consistent, and objective response, human feedback offers emotional support along with contextual understanding and motivation. The research highlights the strengths and limitations of each approach, emphasizing the need for a balanced integration. A humanistic perspective is adopted to value empathy, encouragement, and personalized learning in language education.

Keywords:AI feedback, human feedback, language learning, humanistic approach, writing and speaking skills, personalized learning.

Аннотация: В данной статье исследуются различия между обратной связью, предоставляемой искусственным интеллектом (ИИ), и человеческой обратной связью в письменных и устных заданиях, с акцентом на их влияние на развитие обучающихся. Обратная связь от ИИ отличается мгновенностью, последовательностью и объективностью, в то время как человек способен предложить эмоциональную поддержку, контекстуальное понимание и мотивацию. В исследовании подчеркиваются сильные и слабые стороны каждого подхода, а также необходимость их сбалансированной интеграции. Работа основана на гуманистической перспективе, придающей значение эмпатии, поощрению и персонализированному обучению в процессе изучения языка.

Ключевые слова: обратная связь ИИ, человеческая обратная связь, изучение языков, гуманистический подход, письменные и устные навыки, персонализированное обучение.

Introduction

In the evolving landscape of language education, the demand for timely and effective feedback in writing and speaking exercises has driven the integration of artificial intelligence (AI) into instructional practices. AI-based feedback systems, such as automated writing evaluators and speech recognition technologies, promise efficiency, scalability, and real-time response, making them increasingly popular in digital learning environments[5, 12]. These tools are designed to identify grammatical errors, suggest lexical alternatives, and assess fluency with remarkable consistency. However, language learning is not solely a mechanical process it is deeply embedded in human interaction, emotion, and social context. Human feedback, by contrast, offers individualized guidance that is shaped by empathy, pedagogical experience, and an understanding of learner identity and motivation [4, 8] . From a cognitive perspective, both AI and

human feedback can support language acquisition, but they do so in fundamentally different ways. While AI can enhance accuracy and autonomy through repetitive, data-driven correction, human feedback is more likely to foster critical thinking, confidence, and communicative intent [1]. Thus, the central question is not whether one should replace the other, but how each can be strategically employed to support a balanced, human-centered approach to language development. This article examines the strengths and limitations of AI and human feedback in writing and speaking tasks, emphasizing the need for integrative models that leverage the efficiency of machines and the depth of human insight.

Methodology

This study employed a mixed-methods approach to examine the comparative effectiveness and learner perceptions of AI-generated and human-provided feedback in writing and speaking exercises. By combining quantitative data with qualitative insights, the research aimed to capture both the measurable outcomes and the nuanced human experiences associated with each feedback type [6].

Participants

The study involved 60 intermediate-level English as a Foreign Language (EFL) learners aged 18–25, enrolled in an academic English program at a university in Central Asia. Participants were randomly assigned to two groups: the AI Feedback Group (AIFG) and the Human Feedback Group (HFG), with 30 learners in each. Ethical consent was obtained, and participation was voluntary and anonymized to ensure respect for learner autonomy and dignity [3].

Instruments

For the writing tasks, both groups completed two argumentative essays over a four-week period. In the AIFG, students received automated feedback via an AI writing tool (e.g., Grammarly or Write & Improve), focusing on grammar, coherence, and vocabulary use. The HFG received teacher-written feedback guided by principles of formative assessment and dialogic interaction [11]. For speaking tasks, learners performed two oral presentations recorded and evaluated via AI speech analysis software (e.g., Speechace) in the AIFG, and by experienced language instructors in the HFG.

Data Collection

Quantitative data were gathered from pre- and post-tests assessing writing quality (e.g., linguistic accuracy, organization, and lexical diversity) and speaking performance (e.g., fluency, pronunciation, and complexity). Additionally, Likert-scale questionnaires measured learner perceptions of feedback usefulness, clarity, and emotional response. To provide a deeper understanding of learners' experiences, semi-structured interviews were conducted with 10 participants from each group, exploring their emotional engagement, perceived learning, and motivation [7].

Data Analysis

Quantitative results were analyzed using paired-sample t-tests to determine statistical significance in performance gains within and between groups. Qualitative interview data were transcribed, coded, and thematically analyzed to identify recurrent patterns related to learner attitudes toward AI and human feedback [2]. Triangulation was employed to enhance the validity of findings by comparing results across data sources and methods.

This methodology was designed not only to evaluate learning outcomes but also to honor the human dimensions of language learning perceptions, emotions, and social context ensuring that the technological dimension did not overshadow the learner's voice.

Conclusion

The findings of this study highlight the distinct yet complementary roles of AI and human feedback in writing and speaking exercises. AI-based systems demonstrated clear strengths in delivering timely, objective, and consistent feedback, particularly in identifying surface-level errors and promoting learner autonomy through self-directed correction [5, 9]. However, the human feedback group showed comparatively stronger gains in communicative effectiveness and learner confidence, underscoring the value of personalized guidance, encouragement, and contextual sensitivity provided by instructors [4, 8].

From a pedagogical perspective, relying solely on AI risks reducing language learning to a mechanistic process, whereas human feedback acknowledges the learner as an emotional and social being. Language is not only a cognitive skill but a medium of human connection, and feedback must therefore engage both the mind and the heart [13, 10]. Learners in the human feedback group reported feeling more motivated and supported, while those in the AI group appreciated the immediacy but occasionally felt disengaged or uncertain about the depth of the responses.

This study suggests that an integrative model blending AI's efficiency with the relational depth of human feedback may offer the most holistic and ethical approach to language education. Future research should explore how hybrid feedback systems can be designed to adapt dynamically to learner needs, fostering both linguistic competence and learner agency. As we move further into an AI-augmented educational future, maintaining a humanistic perspective remains essential to ensure that technology serves learning, rather than the other way around.

References:
1. Bitchener J., & Ferris D.R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge. https://doi.org/10.4324/9780203832400
2. Braun V., & Clarke V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

3. British Educational Research Association (BERA). (2018). *Ethical guidelines for educational research* (4th ed.). https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018

4. Carless D., & Boud D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, *43*(8), 1315–1325. https://doi.org/10.1080/02602938.2018.1463354

5. Chen X., Zou D., & Xie H. (2020). Artificial intelligence in adaptive learning technology and education. *Technology, Knowledge and Learning*, *25*(3), 625–640. https://doi.org/10.1007/s10758-020-09495-5

6. Creswell J.W., & Plano Clark V.L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

7. Dörnyei Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.

8. Hyland F., & Hyland K. (2006). Feedback on second language students' writing. *Language Teaching*, *39*(2), 83–101. https://doi.org/10.1017/S0261444806003399

9. Li Y., Link S., & Hegelheimer V. (2022). Automated writing evaluation and feedback: Learner engagement and perceptions. *Language Learning & Technology*, *26*(1), 1–25. https://doi.org/10125/73485

10. Mercer N. (2016). Dialogue, thinking together and digital technology in the classroom: Some educational implications of a continuing line of inquiry. *International Journal of Educational Research*, *75*, 162–171. https://doi.org/10.1016/j.ijer.2015.07.014

11. Nicol D.J., & Macfarlane-Dick D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, *31*(2), 199–218. https://doi.org/10.1080/03075070600572090

12. Ranalli J., Link S., & Chukharev-Hudilainen E. (2017). Automated written corrective feedback: How well can students make use of it? *Computer Assisted Language Learning*, *30*(7), 598–619. https://doi.org/10.1080/09588221.2017.1304965

13. Vygotsky L.S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.