Enhancing English Language Learning through AI-Supported Gamified Personalized Instruction in Higher Education

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Abstract

The integration of artificial intelligence (AI) into English language teaching (ELT) has created new opportunities for personalized and engaging learning experiences. A five-week classroom-based study was conducted with 28 university EFL students using AI-supported tools and gamified activities. The findings indicate increased learner participation, improved vocabulary retention, and higher motivation levels while highlighting ethical and pedagogical considerations.

Keywords

artificial intelligence, English language teaching, gamification, personalized learning, learner engagement, EFL, digital education

1. Introduction

The rapid development of digital technologies has transformed teaching practices in higher education. Artificial intelligence (AI) enables adaptive learning environments and personalized instruction in English language teaching.

2. Literature Review

Recent studies emphasize the growing role of artificial intelligence and gamification in supporting personalized learning, continuous assessment, and learner engagement in English language education.

3. Methodology

The study involved 28 undergraduate EFL students over five weeks. AI-supported tools were used for vocabulary practice, pronunciation training, and automated writing feedback combined with gamified classroom activities.

4. Results

The findings demonstrated increased learner engagement, improved vocabulary retention, and greater confidence in speaking activities. Students responded positively to interactive tasks.

5. Discussion

The integration of AI-supported gamified learning promotes learner autonomy and active participation while maintaining the importance of teacher guidance and pedagogical planning.

6. Conclusion

AI-supported gamified personalized instruction can enhance English language learning outcomes when balanced with effective teaching strategies and ethical considerations.

References

1. Godwin-Jones, R. (2018). Emerging technologies: Chasing the butterflies of artificial intelligence. Language Learning & Technology, 22(2), 8–18.

2. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. International Journal of Educational Technology in Higher Education, 16(39), 1–27.

3. Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Journal of Educational Technology, 15(3), 1–15.

4. Li, J., & Wang, Y. (2021). Artificial intelligence in language education: Opportunities and challenges. Computer Assisted Language Learning, 34(5–6), 1–25.

5. Sulaymonova, N. X. (2026). Artificial intelligence in English language teaching: Opportunities and challenges. Международный научно-образовательный электронный журнал «Образование и наука в XXI веке», №70-4 (том 2), 381–383.