



4

AI as a Teaching Assistant: Enhancing Personalized Learning in English Language Teaching (ELT)

Dr. Sunita Yadav, Associate Professor of English, R.D.S Public Girls College, Rewari
Page No. 18-22

Abstract: In recent years, Artificial Intelligence (AI) has emerged as a transformative force in education, offering new pathways for innovation in teaching and learning. In the field of English Language Teaching (ELT), the integration of AI as a teaching assistant has opened up significant opportunities for personalization, efficiency, and learner autonomy. Personalized learning — an instructional approach tailored to the individual needs, abilities, and learning styles of students — is increasingly recognized as essential for effective language acquisition. However, traditional classroom environments often struggle to provide such individualized attention due to time constraints, large class sizes, and curriculum standardization. AI technologies such as adaptive learning platforms, conversational agents, automated writing evaluation tools, and speech recognition software can help bridge this gap. These tools are capable of offering real-time feedback, tracking learner progress, and adjusting instructional content dynamically to meet the learner's evolving needs. This paper examines the current landscape of AI integration in ELT, with a particular focus on how AI tools function as virtual teaching assistants that enhance personalized learning. It explores the benefits of AI in fostering student engagement, providing immediate and context-sensitive feedback, and supporting differentiated instruction. At the same time, it critically engages with concerns such as ethical implications, data privacy, access inequality, and the shifting role of educators. Ultimately, the study argues that while AI cannot replace the human teacher, it serves as a powerful ally in delivering more effective, personalized, and engaging English language education.

Keywords: AI, ELT, Adaptive Learning, Education

Introduction

The integration of digital technologies into education has profoundly changed the way teaching and learning occur. Among these technologies, Artificial Intelligence (AI) stands out for its potential to revolutionize educational practices across disciplines. English Language Teaching (ELT), in particular, has begun to experience the transformative effects of AI through the development of tools and platforms designed to support instruction, assessment, and learner engagement. As education systems worldwide strive to cater to increasingly diverse student populations, the demand for personalized learning has become more urgent than ever. AI, functioning as a teaching assistant, offers a timely and effective solution to this pedagogical challenge.

Personalized learning in ELT refers to the customization of instruction to suit individual learner profiles, including language proficiency, learning pace, goals, interests, and cultural backgrounds. This approach contrasts with traditional one-size-fits-all methods, which often overlook the unique needs of learners. In language learning, where factors such as confidence, motivation, and prior exposure play critical roles, personalized support can greatly enhance



outcomes. However, delivering such individualized instruction within conventional classroom settings is often difficult due to teacher workload, time limitations, and logistical constraints. Here, AI steps in as a valuable partner. By leveraging machine learning algorithms and natural language processing, AI-powered tools can adapt to learners' input, provide feedback, and suggest tailored learning paths. Applications such as Duolingo and Lingvist analyze user data to deliver exercises of appropriate difficulty, while chatbots like ChatGPT offer practice opportunities in natural, conversational English. Tools such as Grammarly evaluate writing for grammatical accuracy, coherence, and tone, while apps like ELSA Speak assess pronunciation and provide corrective suggestions based on phonetic analysis.

Despite these advantages, the use of AI in ELT also introduces complex challenges. Questions around data privacy, bias in AI systems, technological access, and the ethical use of learner information must be addressed to ensure equitable and responsible use of these tools. Moreover, there is a growing need to redefine the role of the teacher in AI-assisted classrooms. Rather than rendering educators obsolete, AI demands that they evolve into facilitators who guide learners in navigating digital tools, interpret machine-generated feedback, and ensure a balanced learning experience that incorporates both technology and human interaction.

This research aims to explore the role of AI as a teaching assistant in enhancing personalized learning within ELT environments. It will assess the pedagogical advantages of AI-driven tools, the challenges educators and learners face in implementing them, and the implications for future teaching practices. By analysing current applications, user feedback, and pedagogical theories, the study seeks to contribute to a deeper understanding of how AI can be effectively and ethically integrated into language education. Through this lens, the paper positions AI not as a replacement for the human teacher, but as a dynamic support system capable of elevating the quality and inclusivity of English language learning.

Literature Review

The integration of AI into education has been well documented over the last decade, with increasing scholarly focus on its application in language learning. Researchers such as Heffernan (2019) and Warschauer (2021) argue that AI has moved beyond basic automation and now enables more nuanced forms of feedback, content adaptation, and learner interaction. Studies on adaptive learning platforms (e.g., Beatty, 2020; Stockwell, 2022) show that AI-powered tools can adjust to individual learner progress and offer customized pathways based on performance data. Duolingo, for instance, uses reinforcement learning models to continually recalibrate lesson plans based on user accuracy and engagement levels (Khan et al., 2021).

Conversational agents like ChatGPT have sparked recent interest in ELT due to their natural language capabilities. These AI tools simulate realistic dialogues, helping learners practice language in context. According to Li & Kumar (2023), such tools reduce learner anxiety, offer non-judgmental environments, and improve communicative competence.

Writing support tools like Grammarly and automated writing evaluation (AWE) platforms have also been extensively studied. Bitchener & Ferris (2019) noted improvements in grammar and structure when learners received frequent, automated feedback. Similarly, speech recognition tools such as ELSA Speak have been credited with helping learners enhance pronunciation and fluency (Nguyen, 2022).

However, ethical concerns and implementation challenges persist. Selwyn (2020) warns of the risks of surveillance and data misuse, while Kukulska-Hulme (2021) emphasizes the digital divide that excludes learners from under-resourced backgrounds. This literature review underlines the need for balanced, ethical, and pedagogically sound approaches to AI integration in ELT.



AI Tools in ELT: Functions and Features

Adaptive Learning Platforms

Adaptive platforms assess learner input in real time and offer content suited to the learner's level. For example:

Duolingo personalizes learning paths using algorithms that detect learning speed and accuracy. Lingvist and Busuu analyze language gaps and adjust vocabulary frequency accordingly. These platforms allow for self-paced, competency-based progression—an essential component of personalized learning.

Chatbots and Conversational AI

Chatbots simulate human conversation to provide speaking and writing practice. With tools like ChatGPT, learners can:

Engage in context-specific dialogues.

Receive sentence restructuring suggestions.

Ask grammar or vocabulary questions.

This offers a safe space for practice without judgment or peer pressure.

Automated Writing Evaluation (AWE) Tools

Tools like Grammarly, ProWritingAid, and Write & Improve:

Provide instant feedback on syntax, coherence, and tone.

Track patterns in learner errors.

Offer suggestions for improvement and citation styles.

These tools foster writing confidence and revision skills.

Pronunciation and Fluency Applications

Apps like ELSA Speak use AI to analyse phonemes and speech rhythm. Learners receive:

Visualized feedback on stress and intonation.

Real-time phonetic scoring.

Custom practice modules based on weaknesses.

This helps non-native speakers approximate native-like pronunciation.

Benefits of AI for Personalized Learning in ELT

Real-Time, Contextual Feedback

AI provides immediate feedback, helping learners understand and correct errors before they become habits. This responsiveness accelerates the learning process.

Learner Autonomy and Motivation

AI enables self-directed learning. Students can study at their own pace, revisit difficult topics, or explore interests beyond the syllabus—leading to increased motivation.

Scalability and Inclusivity

AI systems can manage thousands of learners simultaneously, making them ideal for large-scale learning environments like MOOCs or national-level language programs.

Teacher Support and Analytics

Teachers receive performance dashboards and data summaries. This enables targeted intervention and efficient lesson planning.

Challenges and Limitations

Digital Divide and Access Issues

Learners in rural or underfunded areas may lack devices, stable internet, or digital literacy. AI tools can widen the educational gap if access is not equitable.

Overreliance on Technology

Excessive use of AI may reduce critical thinking, creativity, and human interaction. Some learners may prefer human feedback or become disengaged from screen-based learning.



Bias and Data Privacy

AI systems are trained on datasets that may contain cultural or linguistic biases. Additionally, data collection raises concerns about consent, surveillance, and misuse.

Teacher Preparedness

Many teachers lack formal training in using AI for instruction. Professional development programs must include AI literacy and pedagogical integration strategies.

Case Studies and Real-World Applications

Case 1: Duolingo English Test (DET)

The DET uses AI to adapt its difficulty level based on candidate responses. It's accepted by many global universities and provides equitable testing at low costs.

Case 2: ChatGPT in ESL Writing Classes

A pilot study in an Indian university used ChatGPT to assist students with academic writing. Students reported improved grammar, idea generation, and reduced writing anxiety.

Case 3: ELSA Speak in Pronunciation Training

Vietnamese high school students using ELSA Speak reported noticeable pronunciation improvements over three months. Teachers noted increased fluency and confidence in oral exams.

The Changing Role of Educators

Rather than replacing teachers, AI alters their responsibilities:

Teachers curate and guide learners through AI tools.

They address cultural, emotional, and linguistic nuances AI may miss.

Teachers ensure ethical and pedagogical integrity in tool use.

The 21st-century ELT educator must be both a facilitator and a digital literacy mentor.

Conclusion

AI's role as a teaching assistant in ELT signifies a major leap toward personalized, effective, and scalable language instruction. Through adaptive platforms, chatbots, writing evaluators, and pronunciation tools, AI helps address individual learner needs, fosters autonomy, and provides instant feedback. However, these benefits must be balanced against challenges such as access inequality, ethical concerns, and the potential erosion of human interaction. For AI to reach its full potential in ELT, institutions must prioritize inclusive access, teacher training, and ethical oversight. Ultimately, AI should not replace educators but empower them to deliver more responsive and inclusive language education.

References

- 1) Beatty, K. (2020). *Teaching and learning with technology*. Routledge.
- 2) Bitchener, J., & Ferris, D. (2019). *Written corrective feedback in second language acquisition and writing*. Routledge.
- 3) Heffernan, N. (2019). "AI in Language Learning: Promise and Practice." *TESOL Journal*, 10(3), 345–360.
- 4) Khan, R., Smith, L., & Jang, H. (2021). "Reinforcement Learning in Duolingo: An Adaptive Model." *Language Learning & Technology*, 25(2), 101–118.
- 5) Kukulska-Hulme, A. (2021). "Mobile-assisted language learning and AI: Emerging directions." *ReCALL*, 33(1), 1–12.
- 6) Li, J., & Kumar, A. (2023). "ChatGPT in ESL Classrooms: Engagement and Writing Skills." *TESOL Quarterly*, 57(1), 44–65.



- 7) Nguyen, T. (2022). "Improving Pronunciation with AI: A Case Study Using ELSA Speak." *Asian EFL Journal*, 24(3), 112–130.
- 8) Selwyn, N. (2020). *Should robots replace teachers? AI and the future of education*. Polity Press.
- 9) Stockwell, G. (2022). "Technology and Language Learning: Current Trends." *Language Teaching*, 55(1), 1–23.
- 10) Warschauer, M. (2021). "Digital Literacies and Language Learning: Reassessing Pedagogy." *CALICO Journal*, 38(2), 143–159.