

The Impact of Artificial Intelligence (AI) In Teaching English In Higher Education: Challenges And Opportunities

Zainuddin ¹, Beny Hamdani ²

¹ Department of English, Faculty of Scientific Studies and Teaching, Zainul Hasan Genggong Islamic University, Probolinggo, East Java, Indonesia :)

zainuddintutik@gmail.com

² Department of English, Faculty of Scientific Studies and Teaching, Zainul Hasan Genggong Islamic University, Probolinggo, East Java, Indonesia)

benyhamdani.ielts9.consultation@gmail.com

ABSTRACT

This research investigates the influence of artificial intelligence (AI) on English language instruction in higher education, exploring both its potential benefits and challenges. A mixed-method approach was utilized, integrating survey data with in-depth interviews. The questionnaire was distributed via Google Forms through WhatsApp groups and personal networks to English lecturers. The study involved 16 English lecturers from both public and private universities in East Java. Analyzing the survey responses and interview transcripts revealed that AI technology presents both opportunities and obstacles in English language education. AI has brought significant changes to English instruction at the university level, with lecturers employing various AI tools for tasks such as generating and responding to questions, assessing grammatical accuracy, detecting plagiarism, paraphrasing, and conducting literature reviews. This research also underscores AI's benefits in language education, particularly in grammar correction and plagiarism detection. However, alongside its advantages, AI also introduces new challenges for the future of English teaching. The effective integration of AI necessitates strong digital literacy skills. As AI technology continues to develop, there is a possibility that certain aspects of English teaching may become automated. Consequently, English lecturers need to continuously refine their digital skills to maintain their relevance in the evolving educational landscape.

Keywords: Artificial intelligence; English language teaching; Higher education

Submitted	Reviewed	Revised	Published
12 March 2025	24 April 2025	20 June 2025	25 June 2025

Introduction

The emergence of artificial intelligence (AI) chatbot technology has significantly transformed various aspects of human life, including learning and teaching in higher education (Chaka 2023), particularly in English language teaching and learning. AI technology is now widely used in English language instruction to assist both students and lecturers, especially in the post-COVID-19 era (Toboula and Martinien 2023), where online learning through digital platforms has become a common practice worldwide. This shift aligns with Communicative Language Teaching (CLT), which emphasizes interaction and real-world communication (Solihabonu 2024). AI tools such as chatbots and virtual assistants enable students to engage in meaningful conversations, improving their communicative competence.

The introduction of AI chatbots such as ChatGPT in early 2023 has triggered a significant shift in English language teaching and learning (Rudolph, Tan, and Tan 2023). English language educators now have the opportunity to integrate AI into their teaching, as it offers numerous advantages. For example, AI-powered applications can support students in language learning and daily speaking practice (Qassrawi et al. 2024) while also motivating them to engage more actively in language acquisition. This aligns with Krashen's Input Hypothesis, which suggests that language learners acquire new knowledge when they are exposed to comprehensible input slightly above their current proficiency level. (Spitzer 2023) AI-powered applications can provide customized input and scaffolded learning experiences, promoting more effective language acquisition.

Preliminary studies indicate that English lecturers in Indonesia have widely adopted AI tools in English language teaching, particularly after the emergence of ChatGPT in early 2023. (Werdiningsih et al. 2024) Most lecturers utilize various AI applications for different purposes, such as generating and solving complex questions (ChatGPT), checking grammar errors (Grammarly), detecting plagiarism (Turnitin), paraphrasing (QuillBot), and reviewing literature (Mendeley). This aligns with Task-Based Language Teaching (TBLT), which focuses on learning through meaningful tasks. AI tools assist in creating and assessing communicative tasks that encourage students to develop their linguistic skills in authentic contexts. (Huang et al. 2024)

Given this rapid adoption, there is an urgent need to examine the impact of AI technology on English language teaching and learning in Indonesian higher education. AI has introduced significant pedagogical shifts, aligning with the Lexical Approach, which emphasizes vocabulary acquisition as the foundation of language learning. (Zeng et al. 2025) AI applications provide learners with extensive exposure to collocations, phrases, and authentic language use, reinforcing lexical competence.

Despite the numerous advantages AI presents, it also poses challenges for educators. Many English lecturers express concerns about AI-generated content lacking depth and critical analysis. Bloom's Taxonomy highlights the importance of higher-order thinking skills, such as analysis, evaluation, and creation, which AI may struggle to facilitate effectively. (Alafnan and Al 2024) While AI tools can support lower-order cognitive tasks like remembering and understanding, educators must design activities that encourage students to engage in critical thinking beyond what AI can generate.

Another critical concern is the potential for AI to replace human educators in language teaching. According to the Sociocultural Theory of Language Learning interaction with more knowledgeable individuals plays a crucial role in language development. (Alkhudiry 2022) AI, though efficient, lacks the human interaction necessary for meaningful negotiation of meaning, feedback, and scaffolding, which are essential for second language acquisition. (Zhai and Wibowo 2023) Therefore, AI should be integrated as a supplementary tool rather than a substitute for human instruction.

This study aims to explore AI's influence on English language instruction, focusing on two key aspects: opportunities and challenges in English language teaching. Specifically, the study addresses the following research questions: (1) What is the impact of AI technology on English language teaching and learning in higher education in Indonesia? (2) What are the opportunities and challenges of teaching English in the AI era? By examining these questions, the study seeks to contribute to a deeper understanding of AI's role in shaping the future of English language education and how educators can leverage its potential while mitigating its challenges.

Method

This study employs a mixed-method research design (Creswell & Clark, 2017), in which quantitative data (on the impact of AI on English language teaching in higher education) is collected and analyzed.

Additionally, in-depth interviews were conducted with 16 English lecturers. The survey results highlight several effects of the increasing use of AI in English language teaching in higher education. These in-depth interviews served as a follow-up to provide a more comprehensive understanding of how English language teaching has evolved since the adoption of AI in language instruction.

In Indonesia, English lecturers are required to hold at least a master's degree (S2) in education. Furthermore, they must fulfill the Tri Dharma of higher education to obtain a certified lecturer qualification. For this study, research respondents consisted of 30 English lecturers teaching at both public and private universities in Indonesia. The survey was conducted over two weeks in May 2023 through personal contacts and WhatsApp groups of English lecturers..

Findings and Discussion

The Most Frequently Used AI Tools for Facilitating English Language Teaching and Learning

In the survey, lecturers were asked to list at least five artificial intelligence (AI) applications they frequently use in English language teaching and learning. The five most commonly used AI tools for facilitating language instruction are presented in Table 1. Overall, Grammarly was the most frequently used tool for checking students' work for grammatical errors, with approximately 13 English lecturers selecting this application.

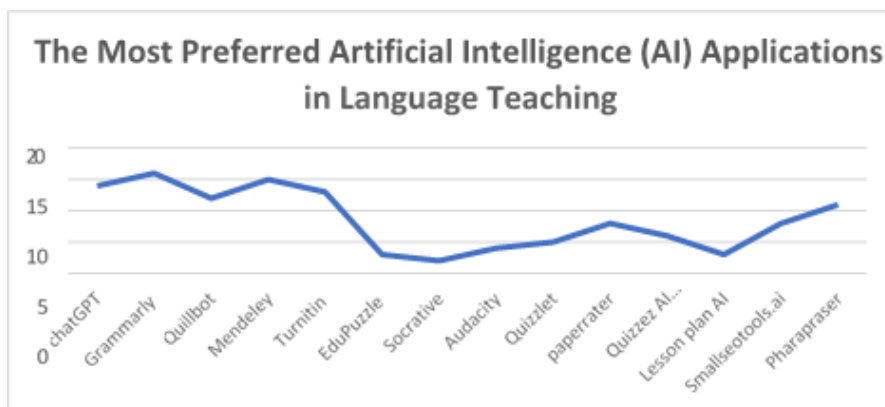


Table 1. Most Frequently Used AI Applications in Language Teaching

As shown in Table 1, 14 English lecturers reported using ChatGPT to quickly find answers related to English language teaching and learning. However, ChatGPT sometimes provides inaccurate or superficial information. For example, ChatGPT tends to generate content that lacks depth, making it unsuitable for writing detailed background studies in doctoral research. As a result, ChatGPT is primarily used for brainstorming and generating initial ideas rather than as a definitive reference.

Below is an excerpt from an interview with an English lecturer regarding the use of ChatGPT:

Interviewer (X): Do you frequently use ChatGPT for teaching and learning English?

Lecturer (Y): I often use ChatGPT to find information. However, ChatGPT sometimes provides unclear or imprecise answers, especially when generating paragraphs for writing a background study in doctoral-level research. We mainly use ChatGPT for brainstorming main ideas.

Impact of Artificial Intelligence (AI) on English Language Teaching

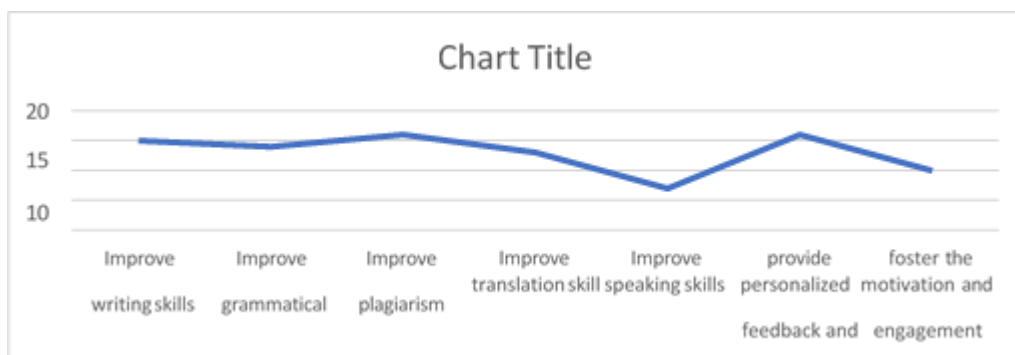


Table 2. The Impact of AI on English Language Teaching and Learning

One of the key benefits of AI in English language learning is its ability to provide personalized learning materials tailored to individual needs. For instance, if instructors want to check students' work for plagiarism, they can use tools such as Turnitin, Quetext, Small SEO Tools, Plagiarism Detector, and Plagiarism Checker.

Additionally, AI has the potential to offer students a personalized learning experience based on their interests and abilities. According to Table 2, AI plays a crucial role in providing personalized feedback and facilitating independent learning, particularly in English writing instruction.

Opportunities and Challenges of Integrating AI into English Language Teaching and Learning

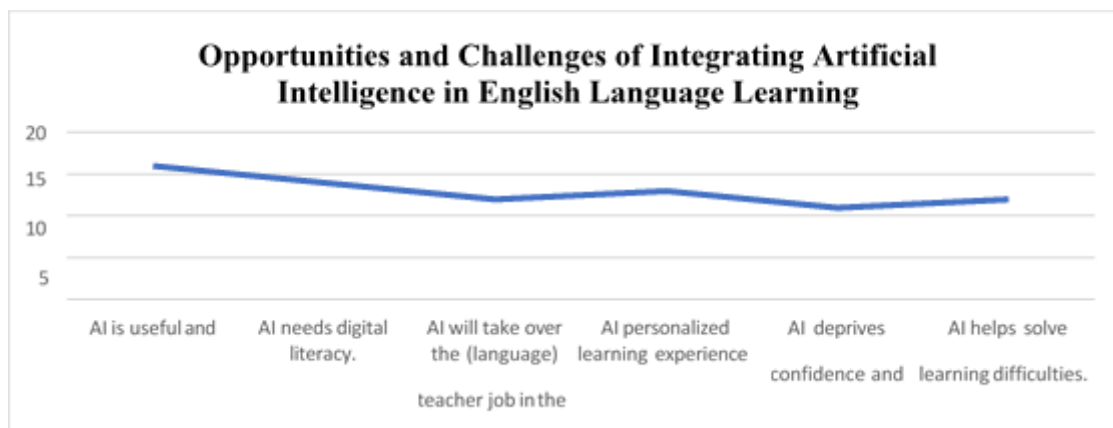


Table 3. Opportunities and Challenges of Integrating Artificial Intelligence (AI) into English Language Teaching and Learning

As shown in Table 3, the integration of artificial intelligence (AI) into English language teaching in higher education in Indonesia presents both opportunities and challenges. AI has proven to be highly beneficial for English language teaching and learning. The continuous emergence of AI applications creates opportunities for teachers, lecturers, and students to access unlimited knowledge. Additionally, AI can provide instant solutions to language learning difficulties.

However, alongside the numerous opportunities AI offers in English language learning, there are also challenges that English teachers and lecturers must face in the future. According to Table 3, 12 lecturers believe that AI could potentially replace the role of English teachers and lecturers in the future, as millennial learners are already tech-savvy and highly proficient in using AI tools. The following excerpt from an interview provides insights into how AI might replace the role of English teachers and lecturers in the future.

Conclusion

This section deals with the conclusion. It is subheading level one. The conclusion section consists of the summary, restatement of the main findings. It should state concisely the most important propositions of the paper as well as the author's views of the practical implications of the result. Tell how your work advances the field from the present state of knowledge. Without clear conclusion, reviewers and readers will find it difficult to judge the work, and whether or not it merits publication in the journal. Do not repeat the Abstract, or just list experimental results. Provide a clear scientific justification for your work, and indicate possible applications and extensions. You can also suggest future research and point out those that are underway.

References

- AlAfnan, Mohammad Awad, and Mohammad Al. 2024. "Taxonomy of Educational Objectives: Teaching, Learning, and Assessing in the Information and Artificial Intelligence Era." *Journal of Curriculum and Teaching* 13(4):173–91.
- Alkhudiry, Reham. 2022. "The Contribution of Vygotsky's Sociocultural Theory in Mediating L2 Knowledge Co-Construction." *Theory & Practice in Language Studies (TPLS)* 12(10).
- Chaka, Chaka. 2023. "Fourth Industrial Revolution—a Review of Applications, Prospects, and Challenges for Artificial Intelligence, Robotics and Blockchain in Higher Education." *Research and Practice in Technology Enhanced Learning* 18:2.
- Huang, Xiaojing, Yanyan Wu, Anqi Dou, and others. 2024. "AI-Enhanced Task-Based Language Teaching: Fostering Personalized College English Learning." *Frontiers in Educational Research* 7(10).
- Qassrawi, Rania Muhammad, Aya ElMashharawi, Mahmoud Itmeizeh, and Mohammed H. M. Tamimi. 2024. "AI-Powered Applications for Improving EFL Students' Speaking Proficiency in Higher Education." *Assessment* 8:9.

- Rudolph, Jürgen, Shannon Tan, and Samson Tan. 2023. "War of the Chatbots: Bard, Bing Chat, ChatGPT, Ernie and beyond. The New AI Gold Rush and Its Impact on Higher Education." *Journal of Applied Learning and Teaching* 6(1):364–89.
- Solihabonu, Normatova. 2024. "PRACTICAL APPLICATIONS OF COMMUNICATIVE LANGUAGE TEACHING." *UNIVERSAL JOURNAL OF SOCIAL SCIENCES PHILOSOPHY AND CULTURE* 2(16):21–28.
- Spitzer, David A. 2023. "Comprehensible Input for Second Language Vocabulary Acquisition." Northcentral University.
- Toboula, Zounhin, and Coffi Martinien. 2023. "Exploring the Impact of AI-Powered Collaborative and Interactive NLP Apps on EFL Teaching in the Post-COVID-19 Era." in *IJCI Conference Proceedings-International Conference on Education in Post Pandemic (EDUPAN 2023)-Volume*. Vol. 12.
- Werdiningsih, Indah, Marzuki, Inda Indrawati, Diyenti Rusdin, Francisca Maria Ivone, Yazid Basthomi, and Zulfahreza. 2024. "Revolutionizing EFL Writing: Unveiling the Strategic Use of ChatGPT by Indonesian Master's Students." *Cogent Education* 11(1):2399431.
- Zeng, Yanfang, Li-Jen Kuo, Lu Chen, Jr-An Lin, and Haoran Shen. 2025. "Vocabulary Instruction for English Learners: A Systematic Review Connecting Theories, Research, and Practices." *Education Sciences* 15(3):262.
- Zhai, Chunpeng, and Santoso Wibowo. 2023. "A Systematic Review on Artificial Intelligence Dialogue Systems for Enhancing English as Foreign Language Students' Interactional Competence in the University." *Computers and Education: Artificial Intelligence* 4:100134.