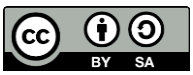
IDEAS

Journal on Language Teaching and Learning, Linguistics and Literature

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Volume 13, Number 2, December 2025
pp. 8795 - 8805



Issued by English study program of IAIN Palopo

Artificial Intelligence in English as a Foreign Language: Opportunities and Challenges Faced by Islamic Tertiary Institutions

Renggi Vrika[1], Meli Fauziah[2]
[1]Universitas Islam Negeri Imam Bonjol Padang, West Sumatra
[2]Institut Agama Islam Negeri (IAIN) Curup, Bengkulu
Corresponding E-Mail: renggivrika.FAH@uinib.ac.id

Received: 2025-12-05 Accepted: 2025-12-31
DOI: 10.24256/ideas. v13i2.8690

Abstract

Artificial Intelligence (AI) has become a disruptive force in the world of education, especially in the context of learning English as a Foreign Language (EFL). This study aims to identify opportunities and challenges in the use of AI-based tools in EFL learning in Islamic Tertiary Institutions. A descriptive qualitative approach was used by involving 30 students and 10 lecturers from various Islamic Tertiary Institutions in Indonesia. Data were collected through semi-structured interviews and analyzed using thematic techniques. The results of the study show that AI can give instant feedback and can be an academic writing support in general. However, there are challenges in the form of ethical issues, related to academic integrity and over-reliance on AI, institutional readiness, including data security, and limited digital pedagogical training as well. This study concludes that even AI integration has great potential in creating more inclusive and creative language learning in the digital era, it requires clear ethical guidelines, lecturer capacity building, and institutional policies aligned with Islamic educational values.

Keywords: *Artificial Intelligence, digital pedagogy, English as a Foreign Language learning, Islamic tertiary institutions*

Introduction

The development of digital technology has significantly changed the face of global education in the last two decades. Artificial Intelligence (AI) is one of the most influential innovations in modern learning systems. It is because of its ability to analyze data, personalize learning experiences, and provide instant feedback based on user performance. In the context of learning English as a Foreign Language (EFL), AI functions not only as a technological tool, but also as a pedagogical partner

capable of detecting individual learning needs, automatically assessing errors, and recommending appropriate corrective strategies. Various cutting-edge studies show that AI-based adaptive learning systems can improve student motivation, engagement, and learning outcomes in a more effective way than traditional approaches (Jaleniauskienė et al., 2023; Sharma & Sharma, 2023). Platforms such as ChatGPT, Grammarly, Quillbot, and Elsa Speak, for example, have been shown to assist learners in improving sentence structure, pronunciation, and academic writing skills independently.

In the Islamic higher education context, the application of AI in English learning is a strategic issue relevant to the need. It is used to improve quality and global competitiveness. Students in Islamic colleges generally have diverse linguistic, cultural, and educational backgrounds. This condition often leads to gaps in basic language skills, such as vocabulary, grammar, and speaking skills. Research shows that AI can be an effective bridge in delivering a more inclusive and contextual learning experience, for example, through Natural Language Processing (NLP)-based learning and adaptive algorithms that adjust material based on individual performance (Sumakul et al., 2022; Vera, 2023). AI-based tools have the potential to address these gaps by providing individualized practice opportunities and continuous feedback beyond classroom constraints.

Despite these opportunities, the adoption of AI in the Islamic university environment is inseparable from challenges. Some lecturers have expressed anxiety about students' overreliance on AI-generated outputs. Similar concerns have also been found in some international studies, where faculty feel they are not pedagogically and ethically ready to integrate AI effectively (UNESCO, 2021; Vargas-Murillo et al., 2023). Students often use AI excessively without understanding the principles of critical thinking and independent evaluation of the results of AI. This condition can hinder the development of reflective and analytical thinking skills (Sharma & Sharma, 2023). Moreover, many institutions lack clear policies and sufficient professional development programs to guide responsible AI use.

Although AI is commonly discussed in the context of EFL and higher education, few studies address Islamic tertiary institutions within which educational practices are blended with moral, spiritual, and ethical values. There is very little insight into how AI as a pedagogical card and an ethical dilemma engages lecturers and students. Thus, this study investigates lecturers' and students' experiences of AI in EFL learning at Islamic tertiary institutions, identifies opportunities and challenges, generates context-sensitive understandings, and offers ethically sound guidelines to integrate AI.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Method

This study uses a descriptive qualitative approach, which aims to describe in detail the perception, experience, and practice of using artificial intelligence (AI) in English language learning. This approach was chosen because it allows researchers to gain a deep understanding of the subjective meanings constructed by lecturers and students in the context of the use of AI in academic environments (Creswell & Poth, 2016). This qualitative approach enables a deeper understanding of social phenomena in education, especially the dynamic interactions between humans and learning technologies.

The participants of this study totalled 40 people, consisting of 30 students and 10 lecturers from 3 different Islamic tertiary institutions located in West Sumatra. The selection of participants was carried out by a purposive sampling technique, which involved selecting individuals who have direct experience in using AI-based applications or tools, such as *Grammarly, ChatGPT, Elsa Speak,* and *Quillbot*, in English learning activities. The purposive technique was chosen because it allows researchers to identify relevant informants and be able to provide rich and meaningful data (Palinkas et al., 2015).

The data was collected from March to May 2025 using semi-structured interviews online and face-to-face. The interviews were 15-25 minutes in duration. The interview guide centered around four main topics: the types of AI tools used, perceived benefits for English skills, challenges and ethical concerns raised by the decision to integrate these new technologies into classroom practice, and institutional readiness. Sample guiding questions were: What AI tools do you normally use to support learning/teaching English? and what worries about AI use in schoolwork does you have? Data were analyzed using the Braun & Clarke (2006) six-step thematic analysis. Data organization and coding were facilitated by NVivo 14. Trustworthiness was established via member checking and source triangulation. Ethical principles were followed by obtaining informed consent and anonymizing participants.

Results

The results of the study show that the integration of artificial intelligence (AI) in English language learning opens up great opportunities to improve the effectiveness and quality of learning in Islamic tertiary institutions. Most lecturers and students consider that the use of AI enriches the learning experience through quick feedback, personalized learning, and the availability of extensive and interactive learning resources.

> **S5 :** *Hmm. Saya suka menggunakannya karena ChatGPT membantu saya dalam* ***mengoreksi*** *kesalahan* ***dengan cepat****.* **HP**
> (I like it because AI helps me **fix** my grammar **faster**.)

S18 ***:*** *Yaa, waktu* ***saya baraja mangecek****, AI mambantu saya aaa katiko pengucapan saya salah, jadi bisa maulangi dengan benar.* ***DD***
[Yaa, when I **practice speaking**, it helps me aaa if my pronunciation is wrong, so (I) can repeat until it sounds correct.]

Apps like Grammarly, ChatGPT, Quillbot, and Elsa Speak are the tools that students use most often to improve their writing and speaking skills. S5 and S18 said that Grammarly helps students understand common mistakes in academic writing, such as grammar, punctuation, and formal style, while ChatGPT is used to test the logic of arguments, expand vocabulary, as well as understand the context of more complex academic communication. Meanwhile, Elsa Speak supports pronunciation and intonation exercises with voice recognition-based feedback, something that is difficult for individual lecturers to do. The application of this technology encourages students to become more confident and independent in practicing English outside the classroom, as well as fostering continuous learning habits according to the principles of *self-regulated learning*.

However, the characteristics of students in Islamic tertiary institutions have their own uniqueness. Many come from a background of conventional pesantren, where English is not taught during secondary education. They commented that most have only received basic English lessons in primary school, which has little effect on their language proficiency. This condition makes the gap in English language skills quite significant when they enter higher education.

T3 **:** *Mahasiswa yang memiliki* ***latarbelakang berbeda*** *bisa belajar dengan caranya sendiri menggunakan AI, jadi mereka* ***tidak merasa tertinggal****.* ***CD***
(Students with **different backgrounds** can learn at their own pace using AI, so they **don't feel left behind**.)

The presence of AI-based learning tools helps address these gaps in real terms. T3 believes that through platforms like ChatGPT and Grammarly, students are able to ask questions, explore meaning, and discuss various English topics with more confidence. Although they realized that not all answers from AI are completely accurate, they showed a critical attitude by verifying through other, more credible sources. These findings show that the use of AI not only improves linguistic skills but also fosters critical and reflective thinking awareness in their learning process.

In addition to helping students, AI integration also provides significant benefits for lecturers. This technology allows for time savings in the task correction process while improving the accuracy of assessments. Vera (2023) shows that an AI-

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

based feedback system can speed up writing evaluation without compromising the quality of academic guidance.

> **T6** **:** … *menggunakan AI untuk memberikan* ***feedback*** *bisa* ***menghemat waktu****.* **LH**
> (…. Using AI for giving **feedback** can **save time**.)

For lecturers at Islamic universities, T6 said that AI serves as a reflective tool to monitor students' language development individually and adjust data-driven teaching strategies. Thus, AI plays a role not as a substitute for educators, but as a pedagogical partner that strengthens the learning process to be more effective, collaborative, and contextual.

However, behind these various benefits, there are also a number of challenges that need to be considered.

> **S22** **:** *Hmm* ***Malas*** *untuk mencek grammar sendiri. Bagusan menggunakan AI,* ***bisa langsung diperbaiki*** **grammar***nya.* **FR**
> [Hmm (I) **feel** lazy to check grammar manually. It's better to use AI, which can **fix the grammar instantly**.]

> **S15** **:** *Kalau mati lampu, tidak ada internet, saya merasa* ***kurang percaya diri*** *ketika menjawab menggunakan bahasa Inggris… waktu presentasi.* **SM**
> (If the light is off, no internet connection, I feel **less confident** with my English… when doing a presentation.)

Found that one of the main concerns of lecturers is the increasing dependence of students on automated systems, which can weaken critical and reflective thinking skills. S22 and S15 reflected that they tended to receive feedback from AI applications passively without conducting an in-depth analysis of the truth. These findings are in line with the studies of Son et al. (2025) and Sotomayor Cantos et al. (2023), which affirm that the use of AI without pedagogical guidance may inhibit the development of high-level cognitive processes that are important in language learning. In addition, the issue of academic ethics and data security is also a serious concern. Both lecturers and students are concerned that personal data and papers sent to global servers could be misused or used for AI model training without explicit permission (Sotomayor Cantos et al., 2023; UNESCO, 2021).

Another challenge lies in the readiness of institutions and digital ecosystems in Islamic universities.

L1 : ***Tanpa arahan yang tepat****, mahasiswa akan menganggap alat ini sebagai* ***jalan pintas*** *bukan sebagai alat untuk membantu mereka belajar.* **MR**
(**Without proper instruction**, students will see the tool as a **shortcut** rather than a learning aid.)

L4 : *Kita harus membuat* ***aturan yang jelas*** *terkait* **originality***. AI bisa membantu untuk belajar bahasa, tapi ide dan argumen harus tetap datang dari mahasiswa.* **HA**
(We should make **clear policies** about **originality**. AI can help with language, but ideas and arguments must still come from the students.)

Although some campuses have started introducing digital literacy training and providing AI-based learning platforms, implementation is still uneven. A number of lecturers assess the need for institutional support in the form of ethical guidelines, adequate digital infrastructure, and clear policies related to the use of AI for academic purposes. There is a gap between institutional policy vision and practice on the ground, as L1 and L4 believe. They hoped that AI would not be limited to occasional use. However, it would be meaningfully embedded in the curriculum, such as through AI literacy courses or 21st-century learning modules adopted by universities abroad.

Overall, the results of this study confirm that the success of the application of AI in English language learning in Islamic tertiary institutions depends heavily on the balance. It is between technological innovation and the strengthening of academic ethical values. Educational institutions need to position AI as part of a digital transformation strategy. It is not only oriented towards efficiency, but also towards the development of character, academic responsibility, and global competence of Muslim students. Institutional policy support, ongoing training for lecturers, and collaboration between universities are key factors in building an adaptive, inclusive, and ethical learning ecosystem in the AI era.

Discussion

The results of this study reinforce various previous findings that the application of artificial intelligence (AI) can improve the effectiveness and efficiency of language learning. This is through a more personalized, adaptive, and collaborative learning experience (Dwivedi et al., 2021; Holmes et al., 2019; Zawacki-Richter et al., 2019). In the context of learning English as a Foreign Language (EFL), AI has been proven to be able to support the individual learning process by adjusting the level of difficulty, learning style, and user needs. Through technologies such as *machine learning* and *natural language processing*, students can get automatic feedback on language errors in real time. While lecturers can use interaction data to

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

evaluate learning progress more objectively and efficiently. System integration like this also allows for *personalized learning*, where students are no longer passive recipients of knowledge but the main actors in managing the learning process.

However, the application of AI in the Islamic higher education environment presents a new dimension that is more complex than public institutions. The learning process in Islamic universities is not only oriented towards the achievement of academic competence, but also towards the formation of students' character, moral values, and spiritual integrity. Thus, the use of AI in this context must consider aspects of ethics, justice, and Islamic values in each stage of its implementation (Arini et al., 2022; Wei, 2023). For example, AI algorithms that generate automated content or feedback need to be monitored so as not to contradict Islamic principles of morality and scientific manners. This challenge emphasizes the need for a *technological humanism* approach, namely, the use of technology that remains in favor of human values and spirituality (UNESCO, 2021).

In the context of a pedagogical approach, the results of the study show that the integration of AI is in line with the principle *of student-centered learning*, where students are encouraged to become independent, creative, and reflective learners. AI supports this learning model by providing a learning environment that is flexible, responsive, and rich in digital resources (Forero-Corba & Bennasar, 2024; Moulieswaran & Kumar, 2023). However, without adequate pedagogical supervision, the role of lecturers has the potential to shift from *learning facilitators* to *technological supervisors*, where human interaction between teachers and learners is increasingly reduced (Holmes et al., 2022; Butarbutar, 2024). This shift can reduce the meaning of *humanistic learning*, which is learning that puts emotional connection, empathy, and social values at the core of the learning process.

The findings from the interviews also reveal the urgent need for digital pedagogy training for lecturers in Islamic universities. Most lecturers are aware of the great potential of AI in supporting language learning, but do not yet have the techno pedagogical competence to integrate the technology effectively. This condition is in accordance with the results of the study of Vera (2023), which affirmed that the readiness of teaching staff is a key factor in the successful implementation of AI in higher education. Therefore, increasing digital literacy and continuous training for lecturers is a strategic priority so that AI can be used creatively, reflectively, and still based on Islamic values. AI should not be seen as a threat to religiosity or intellectual autonomy, but rather as a means of expanding access to science, enriching pedagogical practices, and improving the global competence of Muslim students (Malik et al., 2023; Slimi & Carballido, 2023).

In addition to the pedagogical aspect, the results of the research also emphasized the importance of regulations and ethical frameworks in the use of AI in the world of education. In line with UNESCO (2021) guidance on *AI and Education: Guidance for Policy-makers*, every educational institution needs to develop policies that uphold the values of justice, transparency, and social responsibility. In the

Islamic university's context, this can be realized through the establishment of ethical guidelines for the use of AI based on *maqāṣid al-syarī'ah*. It is, namely, Islamic principles that emphasize benefit, honesty, and accountability in every aspect of life, including education (Elmahjub, 2023). Thus, AI integration is not only directed at achieving academic efficiency, but also at the enforcement of moral and spiritual values.

Furthermore, the success of the application of AI in Islamic education also depends on institutional readiness and an inclusive digital ecosystem**.** Educational institutions need to provide technological infrastructure, data security systems, and administrative support that allow collaboration across faculty and between universities. This collaboration not only strengthens research and teaching capacity but also encourages the creation of *a knowledge-sharing ecosystem* that is oriented towards sustainability and social justice (Dwivedi et al., 2021). With this support, lecturers and students can make optimal use of AI to develop English language competencies while strengthening Islamic character in the era of digital transformation.

Conclusion

This research shows that the application of AI in learning English as a Foreign Language in Islamic tertiary institutions presents great opportunities for increasing student learning effectiveness, independence, and engagement. AI-based technology has opened up a new space for more personalized, adaptive, and flexible learning, where students can receive instant feedback and practice language skills at their own pace. AI also plays a role in fostering students' confidence and independence to learn beyond the confines of traditional classrooms, thereby expanding the learning experience into global and digital contexts. However, behind these great opportunities, this research also highlights a number of challenges. It still needs to be overcome, including academic ethics issues, personal data protection, and the limited pedagogical readiness of educators in integrating technology effectively and responsibly.

In order for the integration of AI in language learning in Islamic universities to run optimally, systematic support from various parties is needed. First, lecturers need to receive ongoing professional training that focuses on developing digital pedagogical competencies and reflective abilities to utilize technology without neglecting Islamic humanistic values and religiosity. Second, Islamic higher education institutions must have clear policies. It includes in favor of the ethics of using AI, including guidelines that govern the authenticity of academic work, data security, and limitations on the use of technology in the learning evaluation process. Third, there is a need for collaboration between Islamic universities, both at the national and international levels, to share best practices, experiences, and resources in the development of AI-based curriculum, research, and training.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

With these strategic steps, Islamic universities have great potential to become pioneers in creating innovative, characterful, and ethical language learning models in the midst of global digital transformation. AI integration is not only about technological efficiency, but also about how Islamic educational institutions can deliver learning that balances between technological sophistication and the values of spirituality, morality, and humanity. Thus, AI can be an instrument that strengthens the role of Islamic universities as a center for the development of civilized science. It is also oriented towards the benefit of the ummah in the era of the digital revolution.

This study is limited by its qualitative scope, relatively small sample size, and focus on three Islamic tertiary institutions, which may limit the generalizability of the findings. Future research could involve a larger number of institutions, adopt mixed-methods designs, and include classroom observations to examine how AI is enacted in real instructional settings. Despite these limitations, the present study contributes empirical evidence to the growing discussion on AI in EFL by foregrounding the distinctive ethical and pedagogical considerations of Islamic higher education. Ultimately, AI integration in Islamic universities should not be understood solely as a matter of technological efficiency, but as a strategic educational effort. It is used to balance innovation with spirituality, morality, and human-centered learning in the digital era.

Acknowledgement

The authors express their sincere gratitude to the lecturers and students from the participating Islamic tertiary institutions for their valuable contributions to this study. Appreciation is also extended to the supporting institutions for facilitating the research process. All constructive feedback from colleagues is gratefully acknowledged. Any remaining errors are solely the responsibility of the authors.

References

Arini, D. N., Hidayat, F., Winarti, A., & Rosalina, E. (2022). Artificial intelligence (AI)-based mobile learning in ELT for EFL learners: The implementation and learners' attitudes. International Journal of Educational Studies in Social Sciences (IJESSS), 2(2). https://doi.org/10.53402/ijesss.v2i2.40

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2). https://doi.org/10.1191/1478088706qp063oa

Creswell, J., & Poth, C. (2016). Second Edition QUALITATIVE INQUIRY& RESEARCH DESIGN Choosing Among Five Approaches. In SAGE Publications (Vol. 3).

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on

emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management, 57. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Elmahjub, E. (2023). Artificial Intelligence (AI) in Islamic Ethics: Towards Pluralist Ethical Benchmarking for AI. Philosophy and Technology, 36(4). https://doi.org/10.1007/s13347-023-00668-x

Forero-Corba, W., & Bennasar, F. N. (2024). Techniques and applications of Machine Learning and Artificial Intelligence in education: a systematic review. RIED-Revista Iberoamericana de Educacion a Distancia, 27(1). https://doi.org/10.5944/ried.27.1.37491

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial Intelligence in Education. Promise and Implications for Teaching and Learning.

Jaleniauskienė, E., Lisaitė, D., & Daniusevičiūtė-Brazaitė, L. (2023). ARTIFICIAL INTELLIGENCE IN LANGUAGE EDUCATION: A BIBLIOMETRIC ANALYSIS. Sustainable Multilingualism, 23(1). https://doi.org/10.2478/SM-2023-0017

Malik, A. R., Pratiwi, Y., Andajani, K., Numertayasa, I. W., Suharti, S., Darwis, A., & Marzuki. (2023). Exploring Artificial Intelligence in Academic Essay: Higher Education Student's Perspective. International Journal of Educational Research Open, 5. https://doi.org/10.1016/j.ijedro.2023.100296

Moulieswaran, N., & Kumar, P. N. S. (2023). Investigating ESL Learners' Perception and Problem towards Artificial Intelligence (AI) -Assisted English Language Learning and Teaching. World Journal of English Language, 13(5). https://doi.org/10.5430/wjel.v13n5p290

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. Administration and Policy in Mental Health and Mental Health Services Research, 42(5). https://doi.org/10.1007/s10488-013-0528-y

Qu, J., Zhao, Y., & Xie, Y. (2022). Artificial intelligence leads the reform of education models. Systems Research and Behavioral Science, 39(3). https://doi.org/10.1002/sres.2864

Sharma, S., & Sharma, D. (2023). Integrating artificial intelligence into education. International Journal of Advanced Academic Studies, 5(6). https://doi.org/10.33545/27068919.2023.v5.i6a.1004

Sinthiya, B. (2023). English Language Learning in the Metaverse: Exploring the Potential of AR and VR. Shanlax International Journal of English, 12(S1-Dec). https://doi.org/10.34293/rtdh.v12is1-dec.52

Slimi, Z., & Carballido, B. V. (2023). Systematic Review: AI's Impact on Higher Education - Learning, Teaching, and Career Opportunities. In TEM Journal (Vol. 12, Issue 3). https://doi.org/10.18421/TEM123-44

Son, J.-B., Ružić, N. K., & Philpott, A. (2025). Artificial intelligence technologies and applications for language learning and teaching. Journal of China Computer-

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Assisted Language Learning, 5(1). https://doi.org/10.1515/jccall-2023-0015

Sotomayor Cantos, K. F., Varas Giler, R. C., & Castro Magayanes, I. E. (2023). Artificial Intelligence In Language Teaching And Learning. Ciencia Latina Revista Científica Multidisciplinar, 7(4). https://doi.org/10.37811/cl_rcm.v7i4.7368

Sumakul, D. T. Y. G., Hamied, F. A., & Sukyadi, D. (2022). Artificial Intelligence in EFL Classrooms: Friend or Foe? LEARN Journal: Language Education and Acquisition Research Network, 15(1).

UNESCO. (2021). AI and education: guidance for policy-makers. In AI and education: guidance for policy-makers. https://doi.org/10.54675/pcsp7350

Vargas-Murillo, A. R., Pari-Bedoya, I. N. M. D. L. A., & Guevara-Soto, F. D. J. (2023). The Ethics of AI Assisted Learning: A Systematic Literature Review on the Impacts of ChatGPT Usage in Education. ACM International Conference Proceeding Series. https://doi.org/10.1145/3606094.3606101

Vera, F. (2023). Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges. Transformar Electronic Journal, 4(2).

Wei, L. (2023). Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1261955

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? In International Journal of Educational Technology in Higher Education (Vol. 16, Issue 1). https://doi.org/10.1186/s41239-019-0171-0