

Boosting Students' Learning English Experiences in Islamic Higher Education: The Integration of Artificial Intelligence

Dedi Efrizal¹

¹Universitas Islam Negeri Fatmawati Sukarno Bengkulu, Bengkulu, Indonesia

Corresponding author e-mail: dedi.efrizal@mail.uinfasbengkulu.ac.id

Article History: Received on 18 August 2024, Revised on 19 October 2024,
Published on 5 November 2024

Abstract: The objective of this study is to analyze and elucidate the incorporation of AI technology into the English language instruction process in Islamic universities in Indonesia. It also seeks to identify the obstacles and possibilities that emerge from this integration. The study employed a qualitative methodology, including observations, interviews, and documentation studies to gather data from both lecturers and students at Fatmawati Sukarno State Islamic University (UIN), Bengkulu during the academic year 2024-2025. The findings demonstrated that AI has the potential to enhance the efficiency of English language acquisition by means of tailored and interactive learning. AI facilitates the rapid enhancement of students' proficiency in speaking, writing, listening, and reading by delivering precise and immediate feedback. Nevertheless, the presence of inadequate infrastructure and a lack of digital literacy among teachers and pupils pose significant barriers that must be surmounted. In order to maximize the capabilities of AI, this paper proposes numerous approaches such as providing training to lecturers, revising the curriculum, and fostering collaboration between educational institutions and stakeholders. Incorporating AI into English language education in Islamic universities not only enhances students' linguistic abilities, but also equips them to confront worldwide technologies-driven issues.

Keywords: Boosting, Integration of Artificial intelligence, Islamic Higher Education, Students' Learning English Experiences

A. Introduction

During a period of swift technological advancement, proficiency in the English language is gaining significance and applicability in many domains. English has emerged as a worldwide language that exerts primary influence over international communication in the fields of commerce, education, and information technology (Rajprasit et al., 2022). The primary rationale for the significance of English is in its role as the primary language for the development, documentation, and dissemination of most sophisticated technologies and digital advancements. Numerous prominent technological corporations, like Google, Microsoft, and Apple,

employ English as the predominant language for the creation of their goods and services (Rao, 2019). Furthermore, the majority of technology-oriented technical books, tutorials, and online forums, including software documentation, are accessible in English. Therefore, possessing the understanding and proficiency to use this material is essential for individuals aiming to maintain competitiveness in the technology industry.

Proficient English language skills also grant enhanced availability of online learning materials, like Massive Open Online Courses (MOOCs), video tutorials, and webinars that are typically exclusively offered in English (Satria et al., 2024). Fluency in English enables persons to stay updated on the most recent advancements in technology and science by accessing international journals, conferences, and scientific publications. Moreover, in an ever more interconnected global professional environment, proficiency in English is essential for effective cooperation among teams from different countries and cultures. Numerous international corporations have English as their designated working language, so those who possess fluency in English have an enhanced opportunity to establish a successful career in a global setting (Chandra et al., 2024). Moreover, English also assumed a significant role in the development of applications and websites. Proficiency in English is crucial for technology developers as programming languages, software utilities, and user interfaces predominantly rely on English terminology (Qiao & Zhao, 2023). Indeed, in a society propelled by technology progress, proficiency in the English language is not merely an extra ability, but an essential requirement that allows individuals to access, comprehend, and actively engage in worldwide technical breakthroughs.

In the current stage of rapid technological advancement, students in Islamic higher education are confronted with a pressing necessity to achieve a high level of proficiency in English language abilities (Ma & Wang, 2024). Given its status as an international language, English serves as the primary conduit for accessing global knowledge, particularly in academic and professional settings. Proficiency in English is essential for students in Islamic higher education, who often pursue studies in many fields including religious, social, economic, and technical subjects, in order to expand their knowledge beyond Arabic or Indonesian literature (Huang, 2024). A multitude of significant academic materials, including international scholarly journals, the most recent books, and ongoing research in diverse disciplines, are published in the English language. Proficiency in reading and comprehending English literature is crucial for staying updated with worldwide advancements and actively participating in scholarly communications.

Besides, several scientific conferences, international seminars, and online learning platforms (such as Coursera, edX, or Khan Academy) predominantly employ English as the primary language. Excellent English proficiency among students confers a competitive edge in their ability to acquire information from other regions

of the world, therefore enhancing the caliber of their research and intellectual perspectives (Rintaningrum, 2023). Furthermore, within the framework of technological advancement in Islamic colleges, proficiency in the English language is essential. English terminology serves as the foundation for most software, digital tools, and computer languages. Without a proficient mastery of this language, students will have challenges in comprehending and implementing technology in their academic pursuits and future professional endeavors (Weng et al., 2024). Moreover, numerous Islamic colleges are currently engaging in partnerships with international universities, manifesting in student exchange programs, collaborative research initiatives, or dual degree programs (Munadi, 2020). Proficient command of the English language is the primary prerequisite for students to engage actively in this setting. Proficient English-speaking students will provide greater flexibility in an international setting and enable effective communication with peers and scholars from diverse nations (Zhang, 2014). Such enrichment not only enhances their academic experience but also broadens their global network, which might prove advantageous in their future professional endeavors.

Proficiency in English among graduates of Islamic universities will enhance their employability in the global labor market, encompassing multinational corporations and international institutions, within an ever more interconnected world of work (Hidayat, 2024). Within the realm of business, commerce, and diplomacy, English frequently serves as the primary medium of communication. Hence, in order to equip students for the demands of globalization and swift technological advancements, a proficient mastery of the English language is not only crucial, but also essential for individuals aspiring to compete on an international scale and make valuable contributions to the global society across most domains.

The application of AI has provided significant prospects for students in Islamic colleges to enhance their English language proficiency in a more effective and tailored manner (Weng et al., 2024). AI provides a groundbreaking approach to language acquisition by establishing a flexible, interactive, and customized setting that can be adapted to suit specific requirements and cognitive capacities. One of the primary benefits of artificial intelligence in language acquisition is its capacity to offer precise and immediate feedback (Zhang, 2014). AI language learning applications like Duolingo, Grammarly, or Google Translate enable students to acquire grammar, vocabulary, and pronunciation skills with greater efficiency. An artificial intelligence system has the capability to identify errors committed by users and offer prompt rectifications and precise recommendations, therefore enabling expedited and more profound learning (Qiao & Zhao, 2023).

AI platform offers a wide range of interactive learning resources, including video, audio, and conversation simulations, that facilitate the simultaneous development of listening, speaking, reading, and writing skills in pupils. The artificial intelligence

system can also track the user's learning progress and then modify content or difficulty levels according to individual learning outcomes (Ninaus & Sailer, 2022). This holds particular significance for students attending Islamic colleges who may possess different degrees of English competence. Assistance from artificial intelligence enables individuals to acquire knowledge at their preferred speed, tailored to their individual requirements and limitations, without experiencing any sense of being left behind in the learning journey. Moreover, AI has the capability to generate immersive learning environments that closely resemble real-world settings. This can be achieved through the use of technologies like chatbots or virtual assistants that can authentically replicate English interactions (Becker et al., 2023). Students can engage in conversational exercises with artificial intelligence, receive prompt feedback, and familiarize themselves with many communication situations, encompassing both professional and casual settings. This is particularly advantageous for students attending Islamic colleges who may have limited chances to directly engage with native English speakers in their learning environment. Artificial intelligence technology enables individuals to engage in interactions that closely resemble genuine discussions, therefore greatly enhancing their English communication abilities. In addition, artificial intelligence can also be employed in more sophisticated automated translation. Academic students can employ AI translation tools to enhance their comprehension of English academic materials with greater speed and precision (Chandra et al., 2024). This facilitates their access to worldwide reservoirs of information that may have formerly been challenging to comprehend owing to linguistic constraints. Employing such technologies can optimize efficiency and facilitate the acquisition of current scientific knowledge in diverse academic disciplines.

Within the realm of Islamic education, AI can operate as a valuable instrument for integrating English language acquisition with religious studies. An instance of this is when students can use AI programs to interpret or comprehend Islamic literature composed in English, therefore expanding their knowledge without compromising the fundamental nature of the religious material (Alnasib, 2023). This presents significant prospects for students of Islamic colleges to enhance their competitiveness in the global arena, encompassing academic, professional, and da'wah domains. Given these several benefits, AI is a very efficient solution for students in Islamic universities who aspire to really excel in English. The application of artificial intelligence in language acquisition provides unparalleled adaptability, customization, and availability (Effectiveness, 2024). This enables students to optimize their capacity in acquiring English language skills autonomously and effectively, without any constraints placed by time or geographical location. Ultimately, acquiring a proficient mastery of English with the assistance of artificial intelligence will enable Islamic higher education students to effectively compete in the global market, expand their access to various employment prospects, and make

valuable contributions to the advancement of science and the general improvement of the Ummah.

Prior research findings from scientific publications indicate that the use of AI as a means to extensively enhance English language proficiency has gained significant attention in academic research (Weng et al., 2024). These studies emphasize the capacity of AI to offer a more individualized, adaptable, and interactive learning experience compared to conventional learning approaches, ultimately facilitating English learners in acquiring language fluency more effectively and expeditiously. A recent study conducted by Ghory & Ghafory (Ghory & Ghafory, 2021) and published in *International Journal of Innovative Research and Scientific Studies*. This study employed AI to examine learning patterns, the degree of difficulty faced, and individual advancement in the acquisition of the English language. The artificial intelligence then tailors' educational resources according to the individual requirements of each learner. The findings indicate that AI that use machine learning to personalize educational resources can greatly enhance learning results. Participants that were taught utilizing the AI platform shown more rapid enhancements in language comprehension, vocabulary, and grammar abilities in comparison to the group that received instruction through traditional approaches. In their research published in *Canadian Journal of Language and Literature Studies*, Ghafar et al investigated the role of artificial intelligence technology on english language learning (Ghafar & Technical, 2023). The study demonstrated that AI has the potential to facilitate students in acquiring knowledge at a rate that aligns with their capabilities, therefore enabling them to adjust to various individual challenges. The artificial intelligence system employed in this research autonomously adapts course materials and assessments according to student performance, therefore enhancing the pedagogical experience by increasing effectiveness and efficiency.

In general, the findings indicate that artificial intelligence provides a novel approach to assist students in acquiring comprehensive English language proficiency. By employing an adaptive, personalized, and data-driven methodology, AI can enhance the learning process, therefore expediting learners' advancement in key language competencies like as writing, speaking, and text understanding.

Given the information provided, a notable innovation that can be identified in this study is the customization of AI to provide targeted assistance to students in Islamic colleges, who may encounter distinct obstacles in acquiring English language skills. For instance, students enrolled in Islamic colleges often engage in the study of religious literature or written works in Arabic, therefore diverging from the educational environment seen in conventional schools. This research has the potential to demonstrate the utilization of AI in enhancing English understanding through an interdisciplinary approach. AI technology can be employed not only for teaching general language abilities, but also in conjunction with learning resources

that are pertinent to the religious or cultural background of the student. Prior research has not extensively investigated this topic, tending to concentrate on teaching English for broad academic objectives without considering more particular contextual requirements. Hence, the researcher is highly interested in investigating the methods to enhance the English learning experience of students in Islamic universities by incorporating artificial intelligence. This study aims to explore the challenges and opportunities associated with integrating artificial intelligence in order to enable students in religious institutions to effectively utilize AI to enhance their English language skills.

B. Methods

The research approach used in this research is a qualitative approach with a qualitative descriptive method of the phenomenon of activities in each program at the institution in an effort to improve the quality of teaching English in artificial intelligence era in Islamic higher education in Bengkulu, Indonesia (Mirhosseini & Pearson, 2024). The selection of this location was based on the researcher's interest and consideration of learning circumstances of English education at Islamic higher education in digital era. The research subjects were of English lecturers and students who involved in educational process of English subject.

The data collection techniques used in this study are in accordance with the needs for data collection, the techniques used are; observation, interviews and documentation studies (Mirhosseini, 2020). Observations are carried out by researchers to see the natural activities carried out by research subjects and the interview was done to the English teacher, and students id Madrasah Aliyah of Islamic boarding school. Interviews allow researchers to gather information directly from participants. This information can be rich in detail and provide insights that might not be accessible through other methods. Furthermore, the interactive model developed by Miles and Hubermann was employed to conduct data analysis, namely: data collection, data reduction and presentation, drawing conclusions, and study validity through the use of triangulation techniques (Sumiran et al., 2022).

C. Results and Discussion

The role of artificial intelligence in enhancing language learning outcomes for students in Islamic higher education institutions

Empirical studies on the impact of AI on language learning outcomes for students at Islamic higher education institutions demonstrate that AI greatly enhances, speeds up, and intensifies the process of learning the English language. Within the realm of Islamic higher education, the imperative to achieve proficiency in English is becoming more pressing, considering its function as a worldwide language

employed in scientific literature, international religion, and intercultural exchanges. In order to explore the effective use of AI in facilitating English learning, this application extends beyond academic objectives to enhance comprehension of religious texts and broaden world communication opportunities for students.

Studies indicated that a primary benefit of AI in language acquisition is its capacity to offer individualized learning experiences (Weng et al., 2024). By employing machine learning algorithms, artificial intelligence can accurately detect the individual strengths and limitations of each pupil in linguistic abilities, including reading, writing, speaking, and listening (Dercle et al., 2022). Within Islamic higher education institutions, where students generally possess diverse linguistic origins, the capacity of artificial intelligence to customize learning materials on an individual basis shows to be highly advantageous (Hidayat, 2024). The research findings indicated that students who utilized AI-driven language learning platforms, such as Duolingo, Grammarly, or AI-based speech recognition programs, saw notable enhancements in their comprehension and practical application of the English language. This advantage is attained due to the AI system's provision of instant feedback on grammatical, spelling, or pronunciation faults, enabling pupils to promptly and efficiently rectify their mistakes.

Moreover, the research also demonstrated that artificial intelligence possesses the capacity to establish a more engaging and encouraging educational setting for students (Satria et al., 2024). AI can bridge the gap in Islamic colleges, where direct engagement with native English speakers may be restricted, by employing chatbots or virtual conversational agents. Conversational chatbots driven by artificial intelligence enable students to engage in independent English conversation, free from the concern of committing errors in the presence of others (Rintaningrum, 2023). The study revealed that chatbots based on artificial intelligence not only enhanced students' spoken fluency, but also comprehended the subtleties of language employed in academic and religious settings. These AI-driven interactions afforded students the chance to participate in simulated real-life dialogues, which are crucial components in the process of acquiring language skills.

Furthermore, the study emphasizes that artificial intelligence has significant potential to assist Islamic college students in overcoming the difficulties of comprehending academic material that is predominantly published in English. AI not only offers tools to enhance writing or speaking abilities, but also facilitates the analysis and translation of intricate materials (Jamila Sharipovna, 2023). Advanced artificial intelligence systems with natural language processing skills can be utilized to offer supplementary explanations to English academic texts or literature pertaining to Islamic studies. This is particularly advantageous for students who require a more profound comprehension of scientific and religious literature

published in the English language, but may have challenges in grasping intricate terminology or ideas.

The study also highlights that AI has a substantial impact on fostering students' motivation to sustain self-directed learning. The inherent adaptability of AI technology enables students to acquire knowledge at their individual speed, a particularly crucial aspect in Islamic higher education settings where students may possess very different degrees of linguistic competence. Artificial intelligence technology has the capability to customize educational resources according to the competence levels of pupils, so preventing them from experiencing excessive pressure or becoming easily bored with the provided material (Slamet, 2024). For instance, several artificial intelligence apps have the capability to evaluate the level of difficulty of an exercise that a student is encountering difficulties with and then adapt the succeeding difficulty level according to the student's previously achieved performance. Consequently, this facilitates a more seamless and efficient educational trajectory for pupils. Specially, the research emphasizes the capacity of artificial intelligence to facilitate the acquisition of the English language by including religious elements. Students in Islamic higher education frequently engages in the study of holy scriptures, which are taught in both Arabic and English languages. Optimization of AI can facilitate students in comprehending not just English literature pertaining to religion, but also in integrating language acquisition with Islamic material (Weng et al., 2024). Specifically, artificial intelligence can be designed to offer educational resources pertaining to religious subjects in the English language, or to accurately translate religious writings. Through this methodology, students have the opportunity to enhance their proficiency in the English language while simultaneously refining their understanding of religion, so contributing substantial value to their comprehensive education. Ultimately, the findings of this study suggest that artificial intelligence plays a crucial role in enhancing the quality of English language acquisition in Islamic higher education institutions. AI not only enhances the efficiency and adaptability of language learning, but also facilitates the acquisition of language abilities that are pertinent to academic and religious requirements (Alnasib, 2023). By utilizing AI, Islamic higher education institutions can establish a learning environment that is more inclusive and participatory. This, in turn, facilitates students in attaining enhanced English language competence for their academic, professional, and spiritual requirements.

Challenges and opportunities of integrating AI technology into English language curriculum at Islamic universities

Through interviews with several lecturers at the State Islamic University (UIN) Fatmawati Sukarno Bengkulu, the author identified that the use of AI technology into the English language education programmes in Islamic higher education institutions in Indonesia has notable obstacles and prospects. The main obstacles in

deploying AI include the absence of sufficient technology infrastructure at numerous institutions, particularly those located in distant regions, and the disparity in digital literacy among professors and students (Rachovski et al., 2024). Certain Islamic institutions of higher education may still encounter difficulties in ensuring consistent internet connectivity and sufficient technology resources to facilitate AI-driven education. Furthermore, there are apprehensions regarding the potential impact of AI on conventional teaching methods, particularly in the personalized approach that is heavily emphasized in Islamic values-based education. Educators may experience a sense of being inundated in their efforts to acquire knowledge and adjust to novel, intricate technology, while current educational programs may need significant modifications to reflect these transformations. Conversely, the possibilities offered by the integrated use of artificial intelligence are quite encouraging. AI can augment the learning process by offering an array of interactive resources, including learning chatbots, automatic text analysis software, and programs especially tailored to increase English speaking and writing abilities. Within the realm of Islamic higher education, AI can be modified to provide a more comprehensive and Islamic-compliant learning experience (Munadi, 2020). This can be achieved by developing learning applications that are specifically designed to align with Islamic principles and featuring materials that are pertinent to the socio-religious environment. Artificial intelligence can also facilitate the customization of learning for pupils by offering immediate feedback and adapting learning resources to suit individual proficiency levels. Furthermore, the incorporation of AI into the process of learning the English language can enhance the competitiveness of graduates from Islamic higher education institutions in the international market. This is achieved by improving their language proficiency and developing a more profound comprehension of technology. Therefore, despite the considerable obstacles, the potential of AI to enhance the quality of English language education in Islamic higher education in Indonesia is substantial and can be fully realized, provided that it is backed by meticulous planning, sufficient training for instructors, and robust infrastructure.

Through interviews with several lecturers at the State Islamic University (UIN) Fatmawati Sukarno Bengkulu, researchers have identified several key strategies that can be implemented to address the challenges of integrating AI technology into the English learning and teaching process at Islamic universities in Indonesia. First and foremost, it is imperative to enhance the technology infrastructure in Islamic educational institutions. This encompasses the enhancement of high-quality internet connectivity, the provision of sufficient hardware such as PCs and mobile devices, and the facilitation of AI-driven software technologies. University campuses located in less accessible regions should be given priority in the technology infrastructure support program to ensure they are not left behind in the implementation of artificial intelligence. Step two involves offering training and capacity building opportunities to lecturers and teaching staff. Enhancing digital literacy among

educators is crucial to guarantee their comprehension, utilization, and adoption of AI technology in the instructional process. Online training, workshops, and collaboration with educational technology specialists are all viable methods for conducting this training.

The third phase involves modification of the curriculum to synchronize with the utilization of AI technology (Jie & Sunze, 2023). A proposed modification to the current curriculum involves integrating AI components into English language instruction. This can be achieved by including automated text analysis software, AI-driven interactive learning platforms, and AI-powered speaking and listening programs that offer immediate feedback. It is imperative for the curriculum to incorporate ethical considerations and Islamic principles when using AI. This will ensure that the technology used remains pertinent and aligns with the educational standards of Islamic universities.

The fourth stage entails engaging students in the AI-driven learning process by acquainting them with AI tools and applications that are pertinent to the acquisition of English language skills (Avelino & Ismail, 2022). For instance, the utilization of artificial intelligence chatbots for conversational practice, or the implementation of automated grammar correction programs to enhance writing proficiency. Furthermore, the fifth crucial stage is to establish cooperation with many stakeholders, such as the government, the commercial sector, and the education community. Collaboration between Islamic institutions and technology firms can facilitate the provision of AI solutions that align with educational requirements, while simultaneously securing financial or technical support for the implementation of such technology. The government may further extend its assistance by devising rules that promote the integration of AI technology in education, together with offering incentives to educational institutions that successfully incorporate technology into their learning processes.

The ultimate phase is to regularly monitor and assess the integration of AI in the curriculum to verify the actual efficacy of the technology in enhancing students' English proficiency, and to adapt the implementation approach in case of emerging challenges. By adopting this comprehensive strategy, the obstacles in incorporating AI into the English curriculum at Islamic institutions can be gradually surmounted, thereby enabling the full utilization of this technology to enhance the educational quality (Rintaningrum, 2023).

Strategies for educators to effectively incorporate AI tools into teaching English as a second language within an Islamic framework

Through interviews with lecturers and policy makers at Islamic universities in Bengkulu, Indonesia, the author has identified several effective strategies for

lecturers to incorporate AI into the English language teaching process. These strategies highlight the need of adopting a comprehensive and organized approach. One of the initial approaches that instructors should embrace is to comprehend and investigate different categories of artificial intelligence technologies that can facilitate language acquisition. Proficiency in speech recognition apps for pronunciation practice, automatic text analysis software for grammar and writing assessment, and interactive chatbots for conversation practice are essential skills for lecturers (Ma & Wang, 2024). Proficient technological literacy is essential for lecturers to effectively use AI technology into teaching approaches, ensuring that it is not only used as a tool but also as an essential component of the learning experience.

The second phase involves modifying the curriculum and learning materials to align with the utilization of AI technology (Wang & Yu, 2024). Lecturers must create didactic resources that align with English language learning goals and leverage the benefits of artificial intelligence to facilitate more interactive and individualized learning. For instance, lecturers have the ability to create modules that utilize AI-driven learning platforms to facilitate students in honing their speaking skills through simulated real-life discourse. Alternatively, they can employ automated correction software for writing tasks, which can offer immediate and comprehensive feedback on grammatical, spelling, and stylistic mistakes. This incorporation of artificial intelligence can also enable educators to concentrate more on crucial elements of teaching, such as thorough linguistic analysis and individual guidance, while enabling technology to manage mundane duties.

Further approach is to provide customized learning, whereby artificial intelligence can be adapted to suit the specific requirements and capabilities of students (Zhang, 2014). By utilizing the data analysis capabilities of artificial intelligence, lecturers may create customized learning program that align with the initial learning capacities of individual students. For instance, artificial intelligence can detect specific areas in which a student is encountering difficulties, such as speech or mastery of grammar, and automatically recommend more targeted supplementary resources to enhance their proficiency in those areas. By implementing this approach, lecturers can facilitate a more comprehensive learning environment, where students with different degrees of linguistic proficiency can progress at their individual speed and requirements without experiencing any sense of being left behind or forgotten.

The lecturers must now construct collaborative learning environments that integrate artificial intelligence with human interaction (Ninaus & Sailer, 2022). Although AI can assist in several areas of learning, the direct engagement between instructors and students is still crucial, particularly in the setting of Islamic higher education where the instruction of moral and ethical principles is strongly focused. Lecturers should employ AI to enhance classroom conversations, enhance instructional resources, and

offer immediate feedback, while nevertheless maintaining consistent human engagement between lecturers and students. For instance, educators can employ artificial intelligence to impartially evaluate basic assignments, while nevertheless provide comprehensive analysis and relevant discourse on intricate subjects that demand analytical engagement.

The fifth approach is to incorporate continuous assessment of the application of artificial intelligence in education (Li et al., 2023). It is imperative for lecturers to consistently evaluate the efficacy of the technology they employ, by means of student performance scores and input from students themselves. Academic research indicates that the integration of AI in education should include flexibility and adaptability. This allows lecturers to explore more efficient alternatives in case an application or technology fails to deliver the intended outcomes. Moreover, this assessment enables educators to consistently enhance AI-driven instructional approaches, so establishing a dynamic and always evolving learning cycle.

An equally crucial last stage is establishing partnerships with other professors and the broader academic community to exchange knowledge and experiences in the application of artificial intelligence (Munadi, 2020). Discussion forums or working groups can be established by lecturers to especially address the incorporation of AI in English language instruction in Islamic universities. This would facilitate the exchange of best practices, obstacles, and implemented solutions. Furthermore, this partnership can facilitate the emergence of novel advancements in the application of artificial intelligence, which may not have been extensively investigated in Islamic colleges in Indonesia. By using these approaches, educators in Islamic institutions can successfully include AI into the process of teaching English, so enhancing the learning experience to be more advanced, comprehensive, and flexible in response to the demands of the present era. Not only will this enhance the quality of education, but it will also bolster the competitiveness of graduates from Islamic universities in the technology-dominated global job market.

D. Conclusions

In conclusion, this study emphasizes the significant contribution of AI in enhancing the standard of English language acquisition in Islamic colleges in Indonesia. Artificial intelligence provides adaptable and customized learning solutions, enabling students to adopt learning methods that align with their unique pace and requirements. Employing this technology not only enhances English language skills but also expands pupils' intellectual and religious perspectives. Furthermore, this study demonstrates that obstacles in the implementation of AI, such as inadequate infrastructure and digital literacy, may be surmounted by a well-developed approach, which includes providing training for instructors, revising the curriculum, and collaborating with different stakeholders. In general, AI has significant potential

to enhance the competitiveness of graduates from Islamic universities in the global market and assist them in overcoming obstacles in the modern age.

E. Acknowledgement

In particular, the author wishes to acknowledge the respondents, students, and Lecturers of English Education Study program at Universitas Islam Negeri (UIN) Fatmawati Sukarno Bengkulu for their valuable contributions to the creation of this work. Many thanks are extended to the researchers who have generously offered their expertise and granted permission for the authors to use their journal papers as references in the completion of this paper. The author readily admit that this material is not flawless because of the constraints of his knowledge. Therefore, the author needs much value constructive comments and recommendations. This article is expected to offer advantages and contribute positively to the future advancement of education, especially in teaching English subject at Islamic higher education.

References

- Alnasib, B. N. M. (2023). Factors Affecting Faculty Members' Readiness to Integrate Artificial Intelligence into Their Teaching Practices: A Study from the Saudi Higher Education Context. *International Journal of Learning, Teaching and Educational Research*, 22(8), 465–491. <https://doi.org/10.26803/ijlter.22.8.24>
- Avelino, N. M., & Ismail, H. H. (2022). Teachers' Levels of Knowledge and Readiness in Integrating 4IR Technologies: The Primary ESL Classroom Context. *International Journal of Learning, Teaching and Educational Research*, 21(3), 415–433. <https://doi.org/10.26803/ijlter.21.3.22>
- Becker, S. J., Nemat, A. T., Lucas, S., Heinitz, R. M., Klevesath, M., & Charton, J. E. (2023). A Code of Digital Ethics: laying the foundation for digital ethics in a science and technology company. *AI and Society*, 38(6), 2629–2639. <https://doi.org/10.1007/s00146-021-01376-w>
- Chandra, K. R., Muthumanikandan, M., Kathyayini, S., Akhila, H. G., Pathak, P., & Shivaprakash, S. (2024). The Impact of Artificial Intelligence Tools and Techniques for Effective English Language Education. *Nanotechnology Perceptions*, 20(S7), 897–903. <https://doi.org/10.62441/nano-ntp.v20iS7.74>
- Dercle, L., McGale, J., Sun, S., Marabelle, A., Yeh, R., Deutsch, E., Mokrane, F. Z., Farwell, M., Ammari, S., Schoder, H., Zhao, B., & Schwartz, L. H. (2022). Artificial intelligence and radiomics: fundamentals, applications, and challenges in immunotherapy. *Journal for ImmunoTherapy of Cancer*, 10(9), 1–17. <https://doi.org/10.1136/jitc-2022-005292>
- Effectiveness, T. (2024). *Applied Mathematics and Nonlinear Sciences Using Artificial Intelligence Technology to Improve Business English Language*. 9(1), 1–14.
- Ghafar, Z. N., & Technical, B. (2023). The Role of Artificial Intelligence Technology on English Language Learning: A Literature Review. *Canadian Journal of*

- Language and Literature Studies*, 3(2). <https://doi.org/10.53103/cjlls.v3i2.87>
- Ghory, S., & Ghafory, H. (2021). The impact of modern technology in the teaching and learning process. *International Journal of Innovative Research and Scientific Studies*, 4(3), 168–173. <https://doi.org/10.53894/ijirss.v4i3.73>
- Hidayat, M. T. (2024). English Language Proficiency and Career Opportunities: Perceptions of Indonesian University Graduates. *Language Value*, 17(1), 85–107. <https://doi.org/10.6035/languagev.7933>
- Huang, X. (2024). Research on the Construction of English Intelligent Teaching Mode in Colleges and Universities Facilitated by Artificial Intelligence Technology. *Applied Mathematics and Nonlinear Sciences*, 9(1), 1–11. <https://doi.org/10.2478/amns-2024-0657>
- Jamila Sharipovna, D. (2023). Modern English Teaching Methods. *Journal of Higher Education Theory and Practice*, 23(14), 182–185. <https://doi.org/10.33423/jhetp.v23i14.6392>
- Jie, Z., & Sunze, Y. (2023). Investigating pedagogical challenges of mobile technology to English teaching. *Interactive Learning Environments*, 31(5), 2767–2779. <https://doi.org/10.1080/10494820.2021.1903933>
- Li, P., Ning, Y., & Fang, H. (2023). Artificial intelligence translation under the influence of multimedia teaching to study English learning mode. *International Journal of Electrical Engineering and Education*, 60(2_suppl), 325–338. <https://doi.org/10.1177/0020720920983528>
- Ma, S., & Wang, T. (2024). Research on Strategies of English Teaching Reform in Colleges and Universities Supported by Artificial Intelligence Technology. *Applied Mathematics and Nonlinear Sciences*, 9(1), 1–17. <https://doi.org/10.2478/amns-2024-0260>
- Mirhosseini, S. A. (2020). Doing qualitative research in language education. In *Doing Qualitative Research in Language Education*. <https://doi.org/10.1007/978-3-030-56492-6>
- Mirhosseini, S. A., & Pearson, W. S. (2024). How do language education researchers attend to quality in qualitative studies? *Language Teaching*, 1–17. <https://doi.org/10.1017/S0261444824000053>
- Munadi, M. (2020). Systematizing internationalization policy of higher education in state islamic universities. *International Journal of Higher Education*, 9(6), 96–106. <https://doi.org/10.5430/ijhe.v9n6p96>
- Ninaus, M., & Sailer, M. (2022). Closing the loop – The human role in artificial intelligence for education. *Frontiers in Psychology*, 13(August), 1–7. <https://doi.org/10.3389/fpsyg.2022.956798>
- Qiao, H., & Zhao, A. (2023). Artificial intelligence-based language learning: illuminating the impact on speaking skills and self-regulation in Chinese EFL context. *Frontiers in Psychology*, 14(November). <https://doi.org/10.3389/fpsyg.2023.1255594>
- Rachovski, T., Petrova, D., & Ivanov, I. (2024). Automated Creation of Educational Questions: Analysis of Artificial Intelligence Technologies and Their Role in

- Education. *Vide. Tehnologija. Resursi - Environment, Technology, Resources*, 2, 465–467. <https://doi.org/10.17770/etr2024vol2.8101>
- Rajprasit, K., Sirisuksakulchai, J., Srimontra, K., Pitakpornsin, N., Letakulkit, P., Phaiboontham, P., & Dumrongruedee, S. (2022). Using Business English as a Lingua Franca for Written and Spoken Communication: Challenges Encountered by Thai Human Resources Professionals in An American Multinational Company. *3L: Language, Linguistics, Literature*, 28(4), 13–28. <https://doi.org/10.17576/3L-2022-2804-02>
- Rao, P. S. (2019). The role of English as a global language. *Research Journal Of English (RJOE)*, 4(1).
- Rintaningrum, R. (2023). Technology integration in English language teaching and learning: Benefits and challenges. *Cogent Education*, 10(1). <https://doi.org/10.1080/2331186X.2022.2164690>
- Satria, D., Zamzani, Nurhadi, & Arief, E. (2024). Technology and Language: Improving Speaking Skills through Cybergogy-Based Learning. *International Journal on Informatics Visualization*, 8(2), 710–716. <https://doi.org/10.62527/joiv.8.2.2215>
- Slamet, J. (2024). Potential of ChatGPT as a digital language learning assistant: EFL teachers' and students' perceptions. *Discover Artificial Intelligence*, 4(1). <https://doi.org/10.1007/s44163-024-00143-2>
- Sumiran, S., Waston, W., Zamroni, Z., & Mahmudah, F. N. (2022). The principal's role in improving the quality: A concepts framework to developing school culture. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.854463>
- Wang, L., & Yu, J. (2024). Research on the Reform of English Precision Teaching in Colleges and Universities Facilitated by Artificial Intelligence Technology. *Applied Mathematics and Nonlinear Sciences*, 9(1), 1–20. <https://doi.org/10.2478/amns-2024-0627>
- Weng, X., Ye, H., Dai, Y., & Ng, O. L. (2024). Integrating Artificial Intelligence and Computational Thinking in Educational Contexts: A Systematic Review of Instructional Design and Student Learning Outcomes. *Journal of Educational Computing Research*, 1–31. <https://doi.org/10.1177/07356331241248686>
- Zhang, Z. J. (2014). Influence of modern technology on the educational system. *Advanced Materials Research*, 1030–1032, 2746–2749. <https://doi.org/10.4028/www.scientific.net/AMR.1030-1032.2746>