



Opportunities and Challenges of Artificial Intelligence in English Language Education at Higher Education Institution

Tenika Illananingtyas

Universitas Islam Tribakti Lirboyo Kediri

tenikaillananingtyas07@gmail.com

Keyword

Artificial Intelligence (AI), English, Higher Education

Abstract

This study aims to examine Artificial Intelligence (AI) in English language teaching at higher education. The research focuses on the opportunities and challenges in English language teaching. A qualitative approach using phenomenological methods was employed to explore the experiences of lecturers in utilizing AI during the language learning process, through surveys and in-depth interviews. Data were collected via questionnaire created using Google Forms and distributed to English lecturers. The research sample consisted of 10 English lecturers from East Java. Analysis of the questionnaires and interview transcripts revealed that the presence of AI technology has introduced both opportunities and challenges in English teaching and learning. AI has transformed the way English is taught in higher education. Lecturers utilize various AI tools for purposes such as enhancing learning motivation, answering and solving queries, paraphrasing, and reviewing literature. The study also highlighted the benefits of AI in teaching and learning. However, AI also presents new opportunities and challenges for the future of English language teaching. Therefore, English lecturers are encouraged to continuously improve their digital skills to adapt to these advancements.

Introduction

The integration of AI into language learning has transformed the way people acquire in learning foreign languages. Leveraging AI technology has made learning methods more engaging, personalized, and efficient. Unlike traditional approaches like repetitive drills and rote memorization, which can often feel dull and demotivating, AI provides customized solutions to individual needs. For instance, AI-powered language learning

*correspondence Author



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apps assess users' strengths and weaknesses to deliver targeted, engaging materials that optimize learning outcomes. Foreign language education plays a crucial role in Indonesia's education system. This subject is expected to shape individuals who can communicate with foreigners using various languages from other countries. Additionally, foreign language learning is anticipated to help students absorb global knowledge and technology more effectively. Therefore, foreign language education has become a necessity in Indonesia's education system and is even mandated starting from junior high school, senior high school, and continuing to higher education. One of the foreign languages with international status is English.

Manufactured insights started to play a part in learning exercises at both schools and colleges (Molenaar, 2021). AI has ended up an essential component within the development of instructive innovation. This, of course, has express suggestions for human work life within the future. When talking about educational technology, we must decently recognize that it completely utilized in instructing and learning. In today's progressively competitive period, there are still instructive teach that have not actualized innovation in their educating exercises. In a perfect world, schools nowadays ought to take advantage of the developing innovations that can ease the work of both instructors and understudies (Tjahyanti, et al., 2022). Schools can use applications or media that can computerize errands such as giving input, selecting fitting learning materials, and adjusting the educational modules with students' needs.

AI also facilitates realistic language practice through simulated conversations with virtual native speakers, enhancing students' speaking and listening skills in authentic contexts. Moreover, instant feedback on pronunciation and grammar, enabled by AI algorithms, allows learners to progress more rapidly and with greater precision. Additionally, AI enhances language learning through features like gamification, conversational practice with chatbots, and real-time translation tools that help students acquire new vocabulary and phrases in practical settings. By addressing the shortcomings of traditional methods, AI offers a more enjoyable and effective learning experience for learners worldwide.

With the progression of technology, methods for learning English have evolved significantly. One of the most recent advancements enhancing the learning process is the use of artificial intelligence (AI). Despite the widespread recognition of the importance of mastering English, many students still encounter obstacles in their learning journey. Common challenges include: First, Traditional Teaching Approaches where any schools continue to rely on conventional teaching methods that are less engaging and lack interactivity. Second, Insufficient Access to Resources consist of some schools' face limitations in accessing adequate learning tools, such as books, software, or qualified educators. Third, Lack of Motivation and Interest which usually students often struggle

with motivation and exhibit low interest in learning English, viewing it as either too challenging or irrelevant to their everyday lives. The last, Time Constraints is packed school schedules and extracurricular commitments leave students with limited time to focus on learning English.

A lecturer who is expected to continuously innovate and keep up with the latest technological developments in education has challenged us to find solutions to various issues arising in the teaching-learning process. One recurring problem in English language teaching is the lack of student enthusiasm in class. This is often caused by the lack of innovation, engaging models, and enjoyable teaching techniques from the teacher. Now, teaching methods have tended to be teacher-centered rather than student-centered. However, the Merdeka Curriculum currently implemented in Indonesia requires teachers to deliver lessons that focus on students and encourage their active participation in the learning process.

Within the context of this inquire about, there's a critical have to be look at the affection of counterfeit insights (AI) technology on English dialect educating and learning in higher instruction in Indonesia. In this case, think about that we are going clarify the affection of AI innovation on English dialect educating in higher instruction, centering on two fundamental viewpoints: Opportunities and Challenges of Artificial Intelligence Applications in English Language Education

Method

The research focuses on understanding students' experiences with AI in language learning, particularly regarding motivation, engagement, and material comprehension. A qualitative approach utilizing a phenomenological method was adopted to delve into these experiences. Data collection involved in-depth interviews with 10 university lecturers and participatory observations in classrooms where AI tools were used as learning aids. The data was analyzed using thematic analysis to identify key themes arising from the participants' insights. The integration of AI in language learning presents considerable potential to improve student motivation and engagement, accelerate material comprehension, and offer a more personalized and interactive educational experience. However, despite its growing adoption, the impact of AI on language learning at the higher education level remains underexplored. This study investigates how AI influences foreign language learning in higher education and examines the challenges and opportunities associated with its implementation.

The findings indicate that integrating AI into language learning significantly boosts students' motivation and engagement. Features such as instant feedback, interactive exercises, and gamification elements make the learning process more engaging and enjoyable. Students reported feeling more motivated due to the autonomy AI tools

provide and the immediate feedback they receive, enhancing their overall learning experience.

Result and Discussion

The use of artificial intelligence (AI) in language learning has become a hot topic in the world of education. From one perspective, proponents of this technology emphasize AI's great potential to enhance the effectiveness of language learning in innovative ways (Ali, 2020; Altmäe et al., 2023; Biswas et al., 2024; Malik et al., 2023). AI has the ability to personalize the learning process according to individual needs, provide immediate feedback, and create a more engaging and interactive learning experience through various applications, chatbots, and text analysis tools (Ali, 2020; Altmäe et al., 2023; Huang, 2022; Kühl et al., 2022; Park & Kwon, 2024). This advancement is seen as a significant step in improving the accessibility of language learning, particularly for those who face limitations in access to teachers or educational resources.

Previous research has examined various aspects of integrating artificial intelligence (AI) technology into language learning, highlighting its potential to enhance learning outcomes while addressing certain challenges. Studies by Godwin-Jones (2022), Huang (2022), Park & Kwon (2024), and Pikhart (2020) reveal that AI tools significantly improve students' language skills and comprehension. Additionally, research by Altmäe et al. (2023), Han & Lee (2024), Huang (2022), and Kuhl et al. (2022) investigates the broader potential and challenges of AI in education, including its role in language learning. These studies consistently demonstrate that AI can positively impact language acquisition and comprehension.

In the Indonesian context, several researchers have explored AI's application in language learning. For instance, Oktavianus et al. (2023) studied the use of AI for learning and assessment, while Abimanto & Mahendro (2023) investigated its role in English language learning, finding it beneficial for improving students' comprehension. Similarly, Sholihatin et al. (2023) researched AI's effectiveness in Indonesian language learning, showing that AI assists students by facilitating learning and providing accessible learning references. These findings collectively underscore AI's potential to transform language education by enhancing skills and comprehension across different linguistic contexts.

The majority of students reported that using AI in language learning significantly enhances their motivation. Interactive features such as instant feedback and educational games make the learning process more enjoyable and encourage active participation. Saputra, H. N., Rahmat, R., and Komalasari, K. (2024) emphasized that AI-based digital learning has substantial potential to boost students' motivation and enthusiasm during the learning process. AI technology facilitates interactive and engaging teaching by providing personalized content tailored to individual needs and interests. This approach not only

creates a more enjoyable and relevant learning experience but also motivates students to actively participate in their education. Enhanced motivation positively influences student creativity. When students feel inspired and challenged, they are more inclined to explore new ideas, engage in critical thinking, and produce innovative solutions. As noted by Yustiasari Liriwati, F. (2023), AI-based digital learning not only supports mastery of subject material but also fosters creative and adaptive thinking skills, which are essential in the digital era.

Learning English with AI offers a wealth of opportunities to enhance language skills in an engaging and efficient way. AI-powered tools, such as language learning apps and conversational bots, provide personalized experiences tailored to each learner's proficiency level and objectives. By leveraging advanced algorithms, these tools analyze user performance, pinpoint areas for improvement, and adjust lesson plans accordingly, ensuring targeted instruction that allows learners to progress at their own pace. A standout feature of AI in English learning is its capability to simulate real-life conversations. Virtual assistants and chatbots engage learners in interactive dialogues, offering immediate feedback on grammar, vocabulary, and pronunciation. This instant feedback enables users to correct errors in real time, improving retention and boosting confidence in using the language. Additionally, AI tools often utilize speech recognition technology, providing a platform for learners to practice speaking and refine their accents in a supportive environment. AI also enhances the accessibility and flexibility of English learning. With resources available anytime and anywhere, learners are no longer restricted by traditional classroom settings. Gamified features like quizzes, challenges, and rewards make the learning experience enjoyable and motivating. Furthermore, AI exposes learners to a variety of accents, dialects, and cultural nuances, enriching their understanding of the language and its global context. Inclusive learning is another significant advantage of AI. Features like text-to-speech benefit visually impaired learners, while adaptive exercises cater to individuals with learning disabilities, addressing their specific needs. As AI technology continues to evolve, it holds the promise of even more innovative and effective methods for mastering English, solidifying its role as a transformative tool in language education.

Challenges in Enhancing AI Utilization in English Language Learning is improving the use of AI in English language learning is highly complex and involves several key factors. Below are the explanations:

1. Lack of Understanding and Awareness About AI

Many educators do not fully grasp the basic concepts of AI, let alone its applications in education. Most lecturers view AI as a complex or irrelevant technology for daily teaching needs. This lack of understanding is a major obstacle to implementing AI in classrooms.

2. Limited Confidence in Using Technology

New technology is often perceived as difficult by those unfamiliar with it. A lack of confidence among lecturers in operating and applying AI prevents the optimal integration of this technology into learning processes.

3. Insufficient Training and Support

Comprehensive training is a crucial solution, but such training facilities are often unavailable or inadequate. Education about AI's potential needs to be continuous, emphasizing hands-on practice and case studies relevant to English teaching.

4. Limited Infrastructure and Resources

Not all educational institutions have access to the software or hardware required to support AI technology. Moreover, budgets for providing these resources are often limited, particularly in schools located in remote areas.

5. Resistance to Change

Some educators feel comfortable with traditional teaching methods and are reluctant to try new approaches. They fear AI might replace their roles or fail to deliver significant results.

6. Lack of Relevant AI Content

In English language learning, there is still a lack of AI-based content tailored to local needs. This includes learning materials, teaching aids, and AI applications capable of accurately processing and understanding English.

7. Ethical and Privacy Issues

The use of AI in education raises concerns about student data usage. Regulations regarding data privacy and security must be considered to ensure AI implementation is widely accepted.

Recommended Solutions from case above are:

First, AI Education and Socialization for Educators: Conduct seminars, workshops, and practical training to enhance lecturers' understanding and skills. Second, Provision of Technological Infrastructure by Provide access to user-friendly AI tools and applications. Third, Collaboration with Technology Experts by Connect educational institutions with AI technology developers to create relevant solutions. The last, Development of Local AI Content and Tools by Create AI applications that support English learning, such as language-learning chatbots or automated essay analysis systems. With these approaches, the implementation of AI in English language learning can be significantly improved, creating a more innovative and effective learning experience.

Conclusion

This study demonstrates that integrating AI into language learning at the higher education level offers significant benefits, including enhanced student motivation and improved material comprehension. However, it also highlights challenges, such as the risk of students becoming overly reliant on technology and a possible decline in direct teacher-

student interaction. To address these challenges, teachers must regularly evaluate and adapt their use of AI to ensure that it effectively supports the teaching and learning process. This involves maintaining a balance where technology enhances, rather than detracts from, the core principles of student-centered learning.

In addition, it is crucial to address and mitigate potential challenges and risks associated with AI integration, such as excessive dependence on technology, privacy concerns, and the diminished personal connection in learning. By adopting a balanced and cautious approach, educators can ensure that AI serves as a valuable tool to enhance the quality of language learning, fostering both engagement and meaningful educational outcomes.

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