A THESIS

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Magister Program in Language Education



FACULTY OF TEACHING TRAINING AND EDUCATION

SRIWIJAYA UNIVERSITY

2024

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DECLARATION

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certify that data thesis entitled "Teaching in The Technological Age: English Educators' Strategies for Effective AI Integration at UIN Raden Fatah Palembang" is my own work and I did not do any plagiarism or inappropriate quotation against the ethic and rules commended by the Ministry of Education Republic Indonesia Number 17, 2010 regarding plagiarism in higher education.

Therefore, I deserve to face the court if I am found to have plagiarized this work.

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DEDICATION

I dedicate this thesis to:

My beloved parents Bapak (Asgani) Mamak (Ani), brother (Herly & Fattar), and sisters (Selvi & Karina). Thank you for your endless prayers.

Motto:



"Educate your children according to their times because they were created for their times not yours" -Ali Bin Abi Talib-



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ABSTRACT

This study aims to explores the challenges and strategies in integrating artificial intelligence (AI) technology into English language teaching at Universitas Islam Negeri (UIN) Raden Fatah Palembang. Using a qualitative case study approach, data were collected through semi-structured interviews with five English lecturers. The findings indicate that primary challenges include limited technological infrastructure, insufficient professional development, and resistance to changes in traditional teaching methods. Additionally, the study found that lecturers employ strategies such as interactive teaching with AI-based tools, task automation, and adaptive learning to enhance student engagement and teaching effectiveness. This research provides valuable insights for higher education in stitutions in developing appropriate policies and support to facilitate AI integration in education.

Keywords: Artificial intelligence, English language teaching, Higher education,

UIN Raden Fatah Palembang.

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CHAPTER I INTRODUCTION

This chapter presents: (1) Backgroud of the Study, (2) Problems of the Study, (3) Objective of the Study, and (5) Significance of the Study.

1.1 Background of The Study

The 21st century has experienced rapid growth in technology, changing the way people live, work, and interact with the world. The speed of technological advancements has been impressive, driven by innovations in fields such as artificial intelligence, robotics, biotechnology, and information technology. These changes have had a big impact on everyday life and different sectors of society (Fricticarani et al., 2023).

Technology's influence can be seen everywhere in society. From communication and entertainment to healthcare and finance, technology has become an essential part of daily life. Mobile devices, smart appliances, and internet connections have created a highly connected world where information is easy to access, and communication is fast (Aksenta et al., 2023). This widespread use of technology has not only changed how people interact but also transformed how businesses operate and how governments work.

One of the biggest impacts of technological progress is seen in education. The traditional education system has changed with the introduction of technology. Online learning platforms, virtual classrooms, and educational apps have become common, giving students the ability to learn at their own pace and convenience (Saputra, 2020). This shift was especially important during events like the COVID-19 pandemic, when technology allowed education to continue despite the need for physical distancing.

The use of technology in education has not only made learning more accessible but also improved its quality. Interactive simulations, virtual labs, and online group projects give students more engaging learning experiences. Additionally, artificial intelligence is being used to create personalized learning experiences that meet the needs and styles of individual students (Yulianti et al., 2023). These technological advancements are not limited to developed countries but are also reaching rural and underserved areas, helping to close the education gap globally.

However, the widespread influence of technology in education also brings about concerns and challenges. Issues like the digital divide, privacy concerns, and the need for digital literacy are important factors to consider in ensuring that the advantages of technology in education are fairly distributed (Sa'diyah, 2023). Moreover, the rapid pace of technological changes requires educators and institutions to continuously adapt in order to keep up with the evolving landscape of educational technology.

Therefore, the technological advancements of the 21st century have had a significant impact on various areas of society, especially education. Technology has reshaped traditional education models and introduced new opportunities for learning. While these benefits are clear, it is essential to address challenges such as the digital divide and ensure equal access to technology to fully harness the potential of technological developments in education. The continued integration of technology into education signals a shift in how knowledge is acquired and shared in today's world.

Artificial Intelligence (AI) has become a powerful force in education, offering the potential to change traditional teaching and learning methods. The use of AI in education brings forward new solutions that meet the varied needs of students, teachers, and institutions. AI technologies, such as machine learning and natural language processing, can analyze large amounts of data, personalize learning experiences, and offer insights that could significantly improve educational outcomes (Marlin et al., 2023).

AI plays an important role in improving teaching and learning. Intelligent tutoring systems use AI algorithms to adapt to individual learning styles, providing tailored feedback and support to students. This personalization not only helps students progress at their own pace but also addresses diverse learning needs, creating a more inclusive and effective learning environment (Taruklimbong & Sihotang, 2023). In addition, AI-driven tools can help automate administrative tasks

for teachers, allowing them to focus more on individualized teaching and mentorship.

The potential of AI to solve educational challenges is clear in its ability to identify and assist struggling students. AI-powered analytics can examine student performance data to find patterns that may indicate academic challenges or gaps in understanding. Early intervention with targeted resources can then be applied to prevent academic problems and support student success. Additionally, AI helps create adaptive assessments that adjust difficulty based on a student's ability, giving a more accurate picture of their knowledge and skills (Minn, 2022).

AI not only helps address challenges in education but also encourages innovation in teaching methods and curriculum design. Virtual reality (VR) and augmented reality (AR) applications powered by AI offer immersive learning experiences, allowing students to engage with concepts in new and exciting ways. AI algorithms can process large amounts of data to identify emerging trends and tailor educational content to meet industry demands, preparing students for future job markets (Luan et al., 2020). This ability to adapt to real-world changes positions AI as a key factor in shaping modern education.

However, the use of AI in education does come with its own set of challenges. Ethical concerns, data privacy issues, and the need for responsible AI development must be carefully addressed. It is important to ensure that AI systems are fair and do not reinforce existing inequalities in education (Roshanaei et al., 2023). Furthermore, ongoing professional development for educators is crucial to effectively integrate AI into teaching practices.

Consequently, AI's role in education is transformative, enhancing teaching and learning, addressing challenges, and fostering innovation. Its potential to personalize learning, provide early support, and create immersive learning environments makes it a powerful tool for improving educational outcomes. However, careful attention to ethical issues and privacy concerns, along with continuous professional development for educators, is necessary to fully realize the benefits of AI in education. UIN Raden Fatah Palembang, also known as the State Islamic University of Raden Fatah Palembang, is a prominent institution in Indonesia that focuses on Islamic education. Established in 2004, the university has played a vital role in providing Islamic education, combining traditional values with modern academic disciplines. UIN Raden Fatah Palembang has offered a variety of programs, including those in Islamic studies, social sciences, and natural sciences, contributing to the educational development of the region (UIN Raden Fatah Palembang, 2022).

The state of English education at UIN Raden Fatah Palembang reflected the university's commitment to preparing students for a globalized world. English was considered a key skill for communication and academic growth, and UIN Raden Fatah Palembang recognized the importance of integrating English proficiency into its curriculum. However, like many institutions, there were challenges and opportunities for improvement in the English education programs at UIN Raden Fatah Palembang. Understanding the state of English education was essential for identifying areas where improvements, such as integrating AI, could lead to positive changes (Pokrivcakova, 2019).

The motivation for exploring AI integration at UIN Raden Fatah Palembang stemmed from recognizing AI's potential to enhance educational practices. In English education, AI applications could offer personalized learning experiences, adaptive assessments, and language learning tools that catered to individual needs. This exploration aligned with global trends in educational technology, acknowledging AI's role in solving challenges, encouraging innovation, and improving educational outcomes (UNESCO, 2020). The integration of AI in English education at UIN Raden Fatah Palembang aimed to equip students with the skills they needed to succeed in an increasingly interconnected and tech-driven world.

Incorporating AI into English education at UIN Raden Fatah Palembang also aligned with national efforts to improve education through technology. The Indonesian government had committed to advancing the quality of education through digital technologies, recognizing the potential of AI to support the country's educational goals (Ministry of Education and Culture, Indonesia, 2023). By exploring AI integration, UIN Raden Fatah Palembang contributed to the nation's broader efforts to use technology for improving educational outcomes and preparing students for future challenges.

However, the integration of AI in English education at UIN Raden Fatah Palembang had to be approached thoughtfully, considering local contexts, cultural differences, and ethical issues. Understanding the unique needs and perspectives of the university community was crucial for implementing AI in ways that aligned with the institution's values and objectives.

Most importantly, UIN Raden Fatah Palembang, as a leading Islamic educational institution in Indonesia, explored AI integration in English education. This exploration was driven by the university's commitment to providing a comprehensive, globally relevant education and aligned with national efforts to enhance education through technology.

At UIN Raden Fatah Palembang, the integration of AI in English education is a timely and vital topic. The university has been aware of the growing importance of AI in education and is exploring ways to leverage this technology to enhance teaching and learning. However, despite this awareness, the adoption of AI faces significant challenges. Many English educators at the university have expressed concerns about limited technological infrastructure and varying levels of familiarity with AI tools. These barriers have slowed the process of effective integration and led to uneven use of technology in the classroom.

In a preliminary study at UIN Raden Fatah Palembang, it became clear that English educators faced various challenges in their teaching practices, particularly related to technology integration, including Artificial Intelligence (AI). The study identified several issues, such as limited technological infrastructure and varying levels of technological proficiency among educators. The study also found that there was a range of approaches to using technology in teaching, with some educators embracing innovative methods, while others continued to rely on more traditional approaches. Furthermore, there was a lack of research on specific strategies for integrating AI into language teaching, highlighting the need for a detailed study to understand the current situation and suggest improvements for English education at UIN Raden Fatah Palembang.

The hope for the future is that AI can play a pivotal role in enhancing English education by providing personalized learning opportunities, adaptive assessments, and language learning tools that cater to the diverse needs of students. Integrating AI can not only address current educational challenges but also encourage innovation in teaching methods and curriculum design, aligning with global trends in educational technology (UNESCO, 2020). This exploration is particularly significant as it supports national goals for improving education through technology, as outlined by the Indonesian government (Ministry of Education and Culture, Indonesia, 2023).

Several studies have explored different aspects of AI integration in education, highlighting its potential benefits and challenges. First, Tang and Foley (2022) conducted a case study on using Content and Language Integrated Learning (CLIL) in an AI-powered English reading course. This study showed how AI could improve reading comprehension and language skills by combining content learning with language development. Second, Al-khresheh (2024) explored teachers' views on integrating ChatGPT into English language teaching. This study bridged technology and teaching, examining how AI tools affected classrooms worldwide. Third, Bekou et al. (2024) discussed the opportunities and challenges of using ChatGPT in English teaching in Morocco. Their research emphasized practical issues and cultural factors when adopting AI in education. Fourth, Ismail and Jabri (2024) studied AI in scientific writing strategies within educator training programs, demonstrating how AI could support the development of writing skills by offering personalized feedback. Finally, Koka (2024) examined how AI helped older educators adapt to changes in translation pedagogy, highlighting AI's role in professional development and lifelong learning for educators.

Recognizing the importance of educators' strategies in English education, especially at UIN Raden Fatah Palembang, a study titled "Teaching in the Technological Age: English Educators' Strategies for Effective AI Integration at UIN Raden Fatah Palembang" was conducted. This research explored the specific strategies used by educators to incorporate AI into their teaching, focusing on how these strategies impacted the teaching-learning environment and the changing role of technology in English education.

1.2 Problems of the Study

- a. What challenges do English educatorss at UIN Raden Fatah Palembang encounter in their teaching practices, especially in the context of integrating technology like AI?
- b. How do English educators at UIN Raden Fatah Palembang employ technology, such as AI, in their teaching methodologies?
- c. What specific strategies and methods do English educatorss at UIN Raden Fatah Palembang employ for integrating AI technologies into their language instruction?

1.3 Objectives of the Study

- To Explore the challenges faced by English educators at UIN Raden
 Fatah Palembang in their teaching practices, with a specific emphasis on the integration of technology, including AI.
- b. To investigate the current practices and approaches employed by English educators at UIN Raden Fatah Palembang in utilizing technology, such as AI, within their teaching methodologies.
- c. To explore and document the specific strategies and methods employed by English educators at UIN Raden Fatah Palembang for integrating AI technologies into their language instruction, including an examination of the factors influencing their adoption and implementation.

1.4 Significance of The Study

This research is expected to make meaningful contributions to the integration of AI in English language education. The primary objective is to serve as a valuable resource for students, providing insights to address challenges related to the use of AI in language learning. Furthermore, the study aims to offer English educators a reference point for refining their teaching strategies with AI technologies. Lastly, the research seeks to furnish the researcher with additional information and experiential knowledge in the context of integrating AI into English education. This contribution is expected to aid in the ongoing development of effective strategies for English educators navigating the technological landscape.

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