

THE USE OF AI IN INCREASING MOTIVATION TO LEARN ENGLISH FOR UNIVERSITY STUDENTS

Fhilan Fernanda Banun

* e-mail: fhilan.banun@gmail.com

ABSTRAK

This study explores the impact of Artificial Intelligence (AI) technology on students' motivation in learning English, focusing on first-semester students of the English Language Education Program. A descriptive quantitative approach was used, with data collected through questionnaires from 24 respondents. The results show that AI applications like ChatGPT, Grammarly, and Gemini significantly enhance students' comprehension, interest, and confidence in learning. Specifically, 75% of respondents found AI helpful in understanding difficult material, 66.6% found learning more engaging, and 58.3% experienced increased confidence in using English. Challenges included limited internet access, lack of personalized features, and the need for user training. The study concludes that the structured integration of AI can improve English language learning. It also recommends that educators and institutions support AI usage by providing adequate infrastructure and training for students.

Keywords: Artificial Intelligence (AI), Learning Motivation, English Language

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INTRODUCTION

Artificial Intelligence (AI) refers to computer systems capable of performing tasks that typically require human skills and abilities (Empati et al., 2024). AI technology enables machines or computer systems to mimic human capabilities, such as learning, thinking, and decision-making. AI operates by analyzing data and using algorithms to recognize patterns, make predictions, and generate decisions based on available information. This technology is designed to learn from experience, adapt to new situations, and improve performance without direct human intervention. With its growing capabilities, AI can expedite and simplify various processes, including in the field of education. AI can help create more personalized, efficient, and effective learning experiences, motivating individuals to continue developing. Over time, AI continues to open new opportunities to enhance the quality and methods of learning.

The advancement of technology, particularly Artificial Intelligence (AI), offers opportunities to enhance educational quality, especially in foreign language learning. The expansion of digital technology in the 21st century and the availability of extensive educational resources allow AI to be integrated into various educational contexts (Abimanto & Mahendro, 2023). In this regard, online English learning supported by AI through social media presents new opportunities, enabling interactive communication via text or voice. AI also creates a flexible, personalized, and responsive learning experience while increasing motivation through easy access and customization to individual needs (Jamiluddin et al., 2022). The growing use of technology in education and its impact on student motivation has become a primary focus in improving the effectiveness of the learning process. With the rapid development of technologies like ChatGPT, it is essential to understand how these affect student engagement and motivation in learning (Nufus, 2024). However, despite the widespread application of these technologies, the implementation of AI to enhance English learning motivation among students remains suboptimal. Many students in the English Language Education program experience decreased motivation due to monotonous teaching methods that fail to adapt to individual needs. Therefore, it is necessary to investigate how AI implementation can significantly contribute to increasing motivation in English language learning.

The use of technology in education allows for richer learning experiences through quick access to learning resources and personalized feedback. AI provides a unique ability to tailor content to individual needs and offers responsive interactive practice. For instance, applications like ChatGPT, Grammarly, and Gemini help students correct errors in real-time, improve their understanding of the material, and motivate them to continue practicing. This technology not only supports text-based

learning but also creates a flexible and adaptive environment, allowing students to learn at their own pace and according to their specific needs. This study further examines the impact of AI in facilitating learning based on individual needs to enhance motivation in English Language Education students. Although AI technology has begun to be applied in English learning, its implementation still faces various challenges. Many students experience decreased motivation due to the lack of interactive learning methods that fail to address their individual needs.

AI's rapid development plays a crucial role across various sectors, including education. Despite this, many still do not fully exploit AI's potential to improve learning quality (Inggris et al., 2024). AI's application in education has made significant progress, from learning chatbots to adaptive systems that can adjust learning content based on students' abilities. Several applications, such as ChatGPT, Gemini, and Perplexity, have demonstrated AI's potential in supporting language learning. AI technology can create more engaging learning experiences to encourage students to be more motivated to learn. However, research on AI implementation in higher education, particularly within the English Language Education program, remains limited. This study seeks to fill this gap by exploring how AI can be effectively applied to enhance student learning motivation.

The conceptual framework of this study focuses on the relationship between AI technology usage and student learning motivation. AI will be examined as an independent variable, encompassing features such as personalized learning, real-time feedback, and adaptive interaction. Student learning motivation will be the dependent variable, covering aspects such as interest, engagement, and perception of English learning. Using educational motivation theory, this research will investigate how these AI features can influence and improve students' learning motivation.

With the rapid advancement of technology, AI is being applied in various aspects of life, including education. AI helps create a more interactive and adaptive learning environment, enabling more personalized learning. Applications such as ChatGPT, Grammarly, and Gemini offer innovative solutions to challenges in English language learning, such as difficulties in grammar understanding or improving writing skills. However, despite the recognized potential of AI, its use still faces barriers, such as the need for adequate internet access and relevant training. This study aims to explore how AI technology affects the learning motivation of first-semester students in the English Language Education program, particularly in terms of their interest, engagement, and confidence in learning English.

This research can provide valuable insights on how to leverage AI technology to overcome motivation challenges in English learning. Moreover, the implementation of this technology is expected to create a more interactive and engaging learning environment for students. The findings of this study aim to not only benefit English Language Education students in improving their language skills but also offer guidance to instructors and educational institutions in designing more innovative and effective learning strategies. These findings could also contribute to the literature in the field of educational technology and enhance the understanding of AI's role in learning motivation.

Several studies have demonstrated the effectiveness of AI in language learning, including research highlighting the use of chatbots and adaptive systems to improve interaction and learning interest. Previous studies on student motivation in foreign language education also emphasized the importance of personalized and interactive approaches to sustain learning interest. However, few studies specifically explore the impact of AI on the learning motivation of students in the English Language Education program. This research aims to expand upon previous studies by applying AI to a more specific and in-depth context.

METHODS

This study employs a descriptive quantitative method to describe the impact of Artificial Intelligence (AI)-based technology on students' motivation in learning English. This approach was chosen because it allows for a systematic and accurate depiction through the collection and analysis of numerical data. In its implementation, the study involves a number of respondents to ensure that the data collected are representative and relevant to the research objectives. The focus of this study is on the relationship between the frequency of AI use, the types of applications used, and the obstacles faced by students during the learning process. With this approach, the data collected can be analyzed to identify patterns and trends related to students' learning motivation.

The population for this study consists of first-semester students from the English Language Education Program, particularly those with experience using AI-based technology in learning English. The sample includes 24 students from Class B of the first semester, deemed representative in providing relevant data. The age range of the respondents is between 16 and 25 years, with the majority falling between 18 and 20 years of age. This data is expected to reflect the variation in experiences and perspectives of students regarding the use of AI in English language learning. The sample selection is based on the students' direct experience with utilizing AI technology during their learning process.

The instrument used in this study is a closed-ended questionnaire, developed based on the research variables. The questionnaire consists of several sections, including respondent demographics, types of AI applications used, frequency and duration of usage, the impact of AI use on learning motivation, and obstacles faced. Questions were formulated using a 1-5 Likert scale to measure respondents' perceptions of the statements provided. Prior to distribution, the research instrument was piloted to ensure its validity and reliability. Thus, the data collected is expected to yield accurate and credible results.

Data collection was conducted through the online distribution of the questionnaire via Google Forms to the pre-selected respondents. The use of an online questionnaire was chosen for its time efficiency and its ability to quickly reach all respondents. The data collection process began with the distribution of the questionnaire link to the students, followed by monitoring the completion of the questionnaires to ensure data completeness. The obtained data were then analyzed using descriptive statistical methods to observe the frequency distribution, percentages, and averages of each research variable. The results of the data analysis were presented in tables, graphs, and diagrams to facilitate interpretation and conclusion drawing.

The study was conducted through several stages, starting with the preparation phase, which involved the development of the research instrument and questionnaire validation. The next phase was data collection, during which the questionnaire was distributed to the predetermined sample. After the data were collected, data analysis was conducted to generate research findings aligned with the objectives. The final stage was reporting the research results, which involved preparing a report based on the analysis and interpretation of the data. Through these systematic stages, the study aims to provide a comprehensive understanding of the impact of AI technology use in enhancing students' motivation to learn English.

FINDING AND DISCUSSIONS

The research findings were obtained from data collected through a questionnaire distributed to first-semester students of the English Language Education Program. These results will be discussed in detail to provide insights into the impact of Artificial Intelligence (AI)-based technology on students' motivation to learn English. The study reveals several key findings related to the frequency of AI application usage, its impact on various aspects of learning motivation, and the challenges faced by students in utilizing this technology during their learning process. The study involved 24 students from Class B of the first semester of the English Language Education Program who had experience using AI-based technology in English language learning. The respondents' ages ranged from 16 to 25 years, with the majority (70.9%) being between 18 and 20 years old. The most commonly used AI application among the respondents was ChatGPT, followed by other applications such as Gemini, Grammarly, and Perplexity.

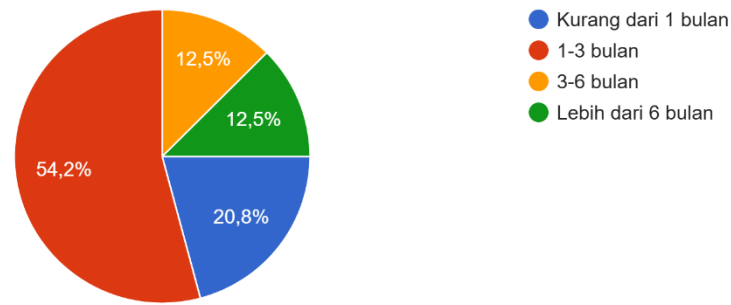


Diagram 1 : Experience Using AI in Learning

AI-based technology has revolutionized the learning process, enriching students' learning experiences (Ronsumbre et al., 2023). The use of technology in education facilitates broader access to learning resources, offers more interactive experiences, and supports collaborative learning (Sunandi et al., 2023). The study's findings indicate that the majority of respondents (54.2%) have used AI-based applications for 1-3 months, while 20.8% have used AI for less than one month. This significant proportion highlights that students who have just started using AI technology are already experiencing its impact on their learning, particularly in terms of motivation enhancement. Despite the relatively short usage duration, the adaptive and interactive features of AI allow it to provide immediate benefits, even for new users. On the other hand, students who have used AI for more than six months (12.5%) tend to demonstrate a deeper understanding of the learning material. Prolonged use of the technology allows users to become more familiar with its features, thereby maximizing its impact. However, it is important to note that respondents with longer usage experience also reported some technical challenges, such as limited internet access and the need for further training.

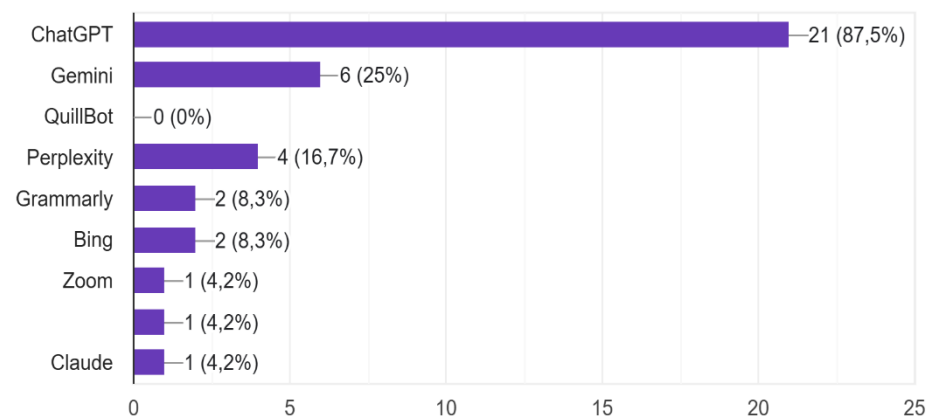


Diagram 2 : AI Applications Frequently Used

Based on the data obtained, ChatGPT is the most frequently utilized AI application by students to delve into various theories in learning (Rosiana et al., 2024). According to the respondents, 21 students (87.5%) actively use this application. This popularity can be attributed to the flexibility of ChatGPT in providing comprehensive, text-based answers, which is particularly helpful in learning English. Applications like Gemini and Perplexity, although having fewer users, still show potential in supporting English language learning through their interactive features. The frequency of usage also plays a crucial role in the effectiveness of learning. Around 33.4% of respondents stated that they frequently use AI, while 54.3% use it in specific situations. This high frequency indicates that AI is not just a supplementary tool but has become an integral part of students' learning routines. These findings support the learning habit theory, where structured and consistent learning can enhance effectiveness and learning outcomes. Therefore, integrating AI into the learning process can provide a more personalized learning experience, offer quick feedback, and assist students in achieving better learning results (Yassir & Saharuna, 2024). Additionally, using AI allows students to quickly access various learning resources, enabling them to explore materials independently. Interaction

through AI applications also helps students receive clearer explanations based on the questions they pose. The personalization features in these applications allow learning to be tailored to each student's level of understanding and pace. However, some students still require additional assistance to fully optimize the use of this technology. With appropriate training, the use of AI can be more effective in enhancing the quality of learning and student motivation.

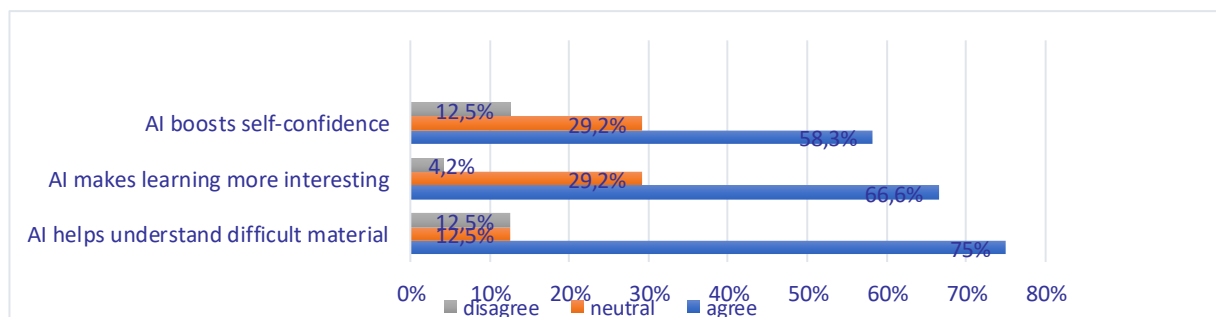


Diagram 3 : Aspects of Student Learning Motivation

The introduction of AI has brought about various challenges that need to be addressed to ensure that student motivation remains high (Belajar, 2024). This study also found a significant increase in student motivation after using AI technology. A total of 75% of respondents stated that AI helped them understand difficult material, while 66.6% felt that AI made learning more engaging. Additionally, 58.3% of respondents mentioned that AI boosted their confidence in using English. These findings align with Vygotsky's (1978) theory of the role of tools in learning. AI acts as a supportive tool that provides immediate feedback and personalization tailored to individual needs, encouraging students to be more active and confident in the learning process, especially in practicing English skills such as speaking, reading, and writing.

Moreover, the interactive features of AI applications, such as adaptive exercises, study reminders, and error analysis, also help students maintain their motivation. These features offer timely and relevant support, making it easier for students to set clear learning goals and achieve them. With instant feedback, students can quickly correct their mistakes, which boosts their confidence in learning. Overall, these features play a crucial role in creating a more structured and effective learning experience.

Despite the clear positive impact, there are several barriers that need attention. One of the main challenges is limited internet access, which hinders the optimal use of AI (Iskandar et al., 2023). Most AI applications require a stable connection to provide the best services, and this condition is not always available to all students. Additionally, some respondents felt that they needed further training to use AI applications effectively. This challenge highlights the need for orientation programs or initial training before students begin using AI technology in their learning. Without proper guidance, the full potential of AI may not be realized by users.

Another obstacle is the lack of feature personalization in certain AI applications. Respondents felt that AI did not always support their specific needs, such as exercises for particular topics or higher levels of difficulty. This indicates that developers need to continuously improve the adaptability of features to better suit the diverse needs of users. With increased personalization, AI applications are expected to provide a more effective learning experience that aligns with the goals of each student.

AI-based feedback systems have great potential to enhance various elements of student learning, including understanding the material, learning motivation, and the overall quality of education. However, to achieve more consistent and valid results, improvements in measurement tools are necessary. Furthermore, further research is needed on the factors influencing students' views of this system. Therefore, the integration of AI technology in higher education must continue to develop and be optimized to provide greater and more significant benefits for the learning process (Inovasi et al., 2024).

From the research results, it is evident that AI has significant potential as a tool for learning English, especially in enhancing student motivation. However, the effectiveness of this technology's use heavily relies on accessibility and available support. Respondents who used AI regularly showed

greater increases in motivation compared to those who used the technology less frequently. Additionally, the identified barriers highlight the importance of technological infrastructure and user training as supporting factors. By addressing these challenges, AI can become a more inclusive and effective tool to improve the quality of English learning among students.

CONCLUSION

A study of 24 first semester English Education students showed that the use of Artificial Intelligence (AI)-based technology had a positive impact on motivation to learn English. Most respondents reported benefits from AI, with 75% finding it helpful in understanding difficult material, 66.6% finding learning more interesting, and 58.3% experiencing increased confidence. ChatGPT was the top choice due to its flexibility and ability to provide comprehensive answers, followed by other apps such as Gemini, Grammarly, and Perplexity. Regular use of AI improved motivation and understanding more significantly than sporadic use. However, barriers such as limited internet access, lack of training, and suboptimal personalization of features hinder the full potential of AI.

To maximize the potential of AI, adequate technological infrastructure and proper training are required. Students need to use AI in a structured and consistent manner, and undergo training to understand AI features. Educators and educational institutions can use this research as a reference for integrating AI in learning. Educators are encouraged to provide initial guidance and training, while institutions need to improve technological infrastructure. Further research can explore the use of AI in English language learning with larger respondents or comparative studies between technologies. This research can serve as a basis for the development of AI adaptive and personalization features to meet students' learning needs, so that AI can play a role as an inclusive solution in improving the quality of education.

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