

Literature Review

Artificial Intelligence: What Makes It Different for Language Learning? A Systematic Review

*Zidni Ma'ruf, Ahmad Khoirul Akhir Tanjung

Politeknik Negeri Sriwijaya, Indonesia

*Corresponding author: zidni.ma'ruf@polsri.ac.id

Submitted: 20/06/2025

Revised: 09/10/2025

Accepted: 01/11/2025

How to cite this article: Ma'ruf, Z. & Tanjung, A. K. A. (2025). Artificial intelligence: What makes it different for language learning? A systematic review. *IJELR: International Journal of Education, Language, and Religion*, 7(2), 142-154. <https://doi.org/10.35308/ijelr.v7.i2.12587>

Abstract

AI-based language tools are now widely used in English learning and teaching because they can offer a personal, efficient, and interactive educational experience. Therefore, this research aims to explore the advantages and disadvantages of AI in the field of language acquisition by reviewing the literature systematically. Thematic analysis of 22 studies between 2023 and 2025 was conducted. The results indicate that AI facilitates personalized learning and feedback, time efficiency, learning engagement, skill development, accessibility, and teachers' support. Nevertheless, the review also highlights a number of limitations, including over-dependence on technology, environments that may compromise academic integrity and critical thinking, concerns related to data privacy, challenges of accuracy and reliability, pedagogical and technical issues, as well as cultural and language barriers. These findings underscore the need to consider the judicious and ethical use of AI to extend its utility in English language education.

Keywords

artificial intelligence; English teaching and learning; systematic review; personalized learning; challenges

Introduction

The rapid development of technology has had a significant impact on many areas, including education. In recent times, the impact of artificial intelligence (AI) on language learning applications has become significant. Vall and Araya (2023) assert that AI is a programmed device that uses artificial intelligence models to support its users. Similarly, Stewart et al. (2020) AI as a machine that replicates human intelligence, which learn from experience and enables large data processing to constant progress for a period of time. This remarkable tool has the ability to translate automatically in a short time by text or voice and give the users instant feedback.

In the context of English language education, AI is more than a mechanical device - it's a companion on the path to learning. Through individualized pacing and customization to learning needs, AI enables users to have more personal and meaningful learning experiences. Therefore, with tools like intelligent chatbots, real-time speech recognition, and personalized writing feedback, students are provided with opportunities for active practice, which enhances their engagement in the learning process and supports alignment with curricular goals. language practice input. Through such technologies, students can receive support when they need it — outside the classroom — promoting self-reliance and keeping them more actively engaged in the process.

This ability to process large datasets and tailor the system according to the requirements of individual learners is what makes it a strong contender in the realm of education. Thus, Godwin-Jones (2023), Lodge et al. (2023), and Morandini et al. (2023), all tools, such as ChatGPT, are also changing the battlefield of language teaching and learning. AI doesn't supplant educators but is rather a valuable resource for both teachers and students. According to Luckin et al. (2016), the use of AI will enable teachers to easily locate areas in which their students excel, as well as areas that may need more attention, to provide more focused and efficient teaching interventions. For undergraduates, AI allows a transition from traditional lectures to personalized and interactive forms of education, with enhanced learning experience and performance. This makes for excellent tools for assessments and feedback as well (Zawacki-Richter et al., 2019). In this connection, Aljanabi (2023) argued that AI can offer an adaptive assessment experience for learners. This highly sophisticated system is able to create individualized test content and tasks for each learner's language level, learning objectives, and personal interests.

Even though AI is a valuable learning method, there are some difficulties in using AI in language education. Potential ethical dilemmas could also occur, as highlighted by Francis and Subha (2024), such as data privacy breaches, algorithmic problems, digital divides, and so on. These are the problems that we need to fundamentally solve to get the best out of these new technologies. Similarly, Dwivedi et al. (2023) pointed out numerous deficits of AI: it is fed by outdated data, it is not transparent about where it comes from, and it tends to produce generic and repetitive text. Additionally, Zhong et al. (2023) point out that AI may weaken learners' critical thinking capabilities. This drop is because AI gives users so much information. Overdependence on that technology may put students in the position of accepting the answers that they are handed. They might, as a result, lack a sense of problem and critical concern towards laziness in their quest for knowledge.

Due to the significance of this topic, many studies have investigated the issue in recent years regarding its effect on language. Just to name a few, significant studies on the effects of AI on language learning in contemporary settings are those conducted by Sujatna et al. (2024), Francis and Subha (2024), Keli, L. (2024), Kohnke and Ulla (2024), Songsiengchai (2025), and Netragaonkar. (2022). Although these studies contain useful information, they are confined to certain regions and situations, implying that they have been limited in their implications. Thus, it is important to make comprehensive inferences on the results so that the reader can have a clearer perspective. This study sought to assess critical evidence from twenty-two high-quality studies on the effect of AI on language learning in response to the following main question: What are the advantages and drawbacks of integrating AI in language learning? By being aware of these dynamics, students and teachers can successfully identify and utilize the advantages of AI and confront its new challenges in language learning.

Method

Research Design

Given the growing AI applications in education, the advantages and drawbacks of the integration of AI in language learning in such a rapidly changing world are also being investigated in this study. To



achieve this objective, 22 studies that were related to this topic were reviewed systematically to generate an in-depth understanding of the phenomenon. Systematic review is a technique of evaluating, synthesizing, and reconciling evidence on a given topic (Petticrew, M. & Roberts, H. 2006). By utilizing this method, the study is confident of a strict and evidence-based analysis, which diminishes the bias effect on the data and increases the reliability of the findings. Furthermore, this method can also be used to find the trend, the gap in the literature, and the direction in which the research should progress in the future, thereby contributing meaningful insights to the field of language education and educational technology.

Data Sources

In order to maintain methodological rigor and relevance, this study sets a very strict standard for literature inclusion. It uses information from reputable databases like Google Scholar, Science Direct, ERIC, and ResearchGate to make sure the reviewed and synthesized previous works meet the high-quality standards. Moreover, the literature review was restricted to not only credible sources, but also methodologically sound and thematically relevant studies to the research aims. Given our goal to concentrate on the most up-to-date research, this study limited the review to studies published in the past three years (2023–2025), with the 2025 range covering early-access and in-press publications. This is a selection choice that seeks to keep the relevance of the reviewed literature for the academic and the practical contexts, thereby strengthening the foundation for the present analysis.

Research Procedures and Analysis

This study was carried out using a rigorous methodology and careful analysis to guarantee the data's authenticity. The method employed by the authors can be described in three principal stages: planning, execution, and reporting. Researchers developed a strategy and a list of key questions during planning. To do this, the investigation designed a suitable strategy, indicating that the search terms and keywords for this research were established. Concurrent with the conduct phase, the researchers performed an in-depth search of the literature to locate suitable studies from trusted sources, including Google Scholar, Science Direct, ERIC, and ResearchGate. Second, the researchers then extracted relevant data by synthesizing the findings through thematic analysis. Finally, in the reporting stage, the researchers synthesized the thematic analysis into a narrative description highlighting what was seen as both advantages and drawbacks of integrating AI in language learning.

Results

There are 22 previous studies as data in the current study, and all of them are selected from reliable sources, such as Google Scholar, Science Direct, ERIC, and Research Gate. The publication period of these studies was 2023–2025 to ensure the findings reflect the most recent developments. To better understand the rise of interest in AI and language learning over time, the researchers examined the number of studies published each year. Distribution of these studies is shown in Figure 1.

The figure shows a remarkable growth in AI-related papers in 2024, which indicates a good research vigor at that time. This increase points to a recent recognition of the role of AI in transforming language learning. While it appears that the number drops in 2025, it should be pointed out that the year has not finished, so many studies are likely still underway. The total number published by 2025 will likely grow and cross the total number published in 2024 as research in this field continues to expand.

After synthesizing 22 previous studies on the use of AI in learning languages, the researchers sorted the results into two main themes: advantages and drawbacks. Each of these themes was then further subdivided into several categories in order to understand in depth the role of AI in language learning in this modern era. For instance, the benefits of AI in language learning are: personalized learning and feedback; efficiency and time saving; engagement and motivation; skills development; accessibility and



inclusion; and teacher support. These advantages illustrate that AI has a tremendous potential to individualize learning styles and promote learners’ autonomy.

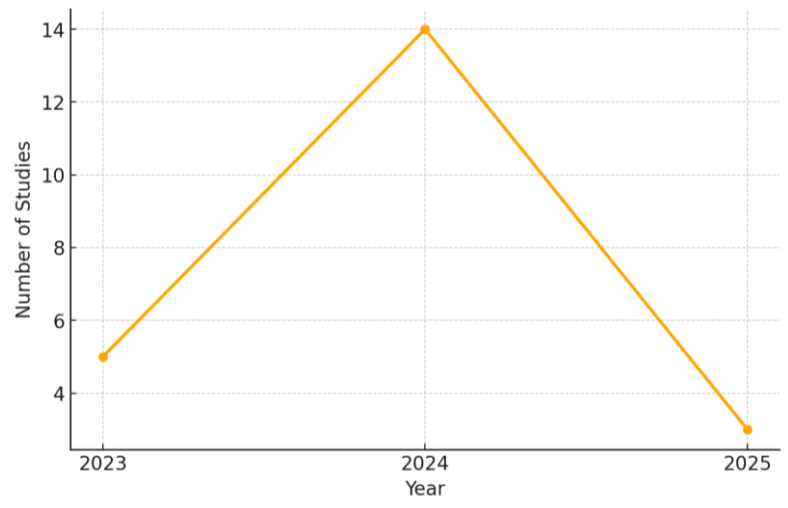


Figure 1. Trends in AI research publications on language learning

Table 1. Advantages of using AI in language learning

Advantages	Authors	Publication Year
Personalized Learning & Feedback	Okolo, C. J. et al.	2024
	Mananay, J. A.	2024
	Ghimire, P, R., et al.	2024
	Vall & Araya	2023
	Creely, E.	2024
	Subiyantoro, S.	2023
	Onyema, E. M.	2024
	Oranga, J. et al	2024
	Dugošija, T.	2024
	Batubara, M, H. et al	2024
	Liando, N, V, F. et al	2025
	Martynyuk, O.	2024
	Rukiati, E. et al	2023
	Abbasi, K, J. et al	2025
	Vieriu, A, M. & Petrea, G.	2025
	Keli, L.	2024
Efficiency & Time-Saving	Rane, N, L.	2023
	Tasci, S. & Tunaz, M.	2024
	Vall & Araya	2023
	Batubara, M, H. et al.	2024
	Ghimire, P, R. et al	2024
Engagement & Motivation	Mananay, J. A.	2024
	Karatas, F. et al	2024
	Dugosija, T.	2024
	Vieriu, A, M., & Petrea, G.	2025
Skill Development	Laili, R, N. et al	2024
	Ajepe, I., & Yusuf, A, B.	2024
	Mananay, J. A.	2024
	Karatas, F. et al	2024
	Martynyuk, O.	2024
	Abbasi, K, J. et al	2025
Accessibility & Inclusion	Okolo, C. J. et al.	2024
	Karatas, F. et al	2024
	Liando, N, V, F. et al	2025



Teacher Support	Syarifudin, A, S.	2023
	Subiyantoro, S.	2023
	Ghimire, P, R., et al.	2024
	Batubara, M, H. et al.	2024
	Keli, L.	2024
	Oranga, J. et al.	2024
	Creely, E.	2024

From Table 1, it can clearly be seen that there is a total of 41 identified data points from across 22 previous research studies. The largest portion, 39%, centers on *Personalized Learning & Feedback*, showing that this is the most frequently explored benefit of AI in language education. *Skill Development* follows at 14.6%, while *Efficiency & Time-Saving*, *Accessibility & Inclusion*, and *Teacher Support* each contribute 12.2%. Interestingly, *Engagement & Motivation* is the least discussed focus area, comprising only 9.8%, suggesting a potential gap for future research in this domain, as illustrated in Figure 2 below.

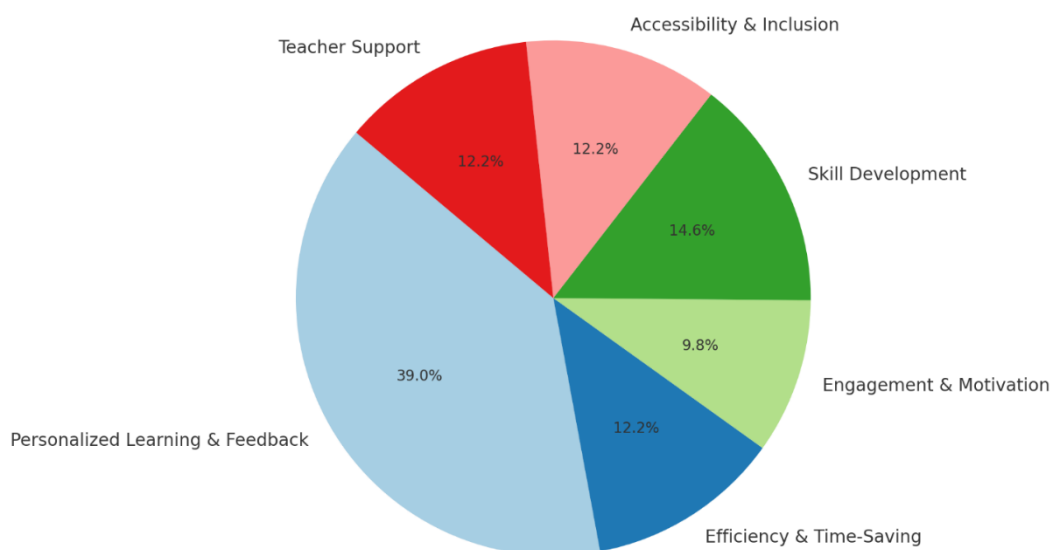


Figure 2. Distribution of research focus areas

Although AI has immense potential for language learning, there are also many drawbacks of AI integration in language learning, such as overdependence on technology, reduced academic integrity, and diminished critical thinking skills, data privacy and ethical matters, accuracy and reliability issues, pedagogical and technical challenges, and language and cultural limitations. These concerns reflect the continued requirement to carefully integrate AI in the educational context, particularly when it comes to language learning, and striking the right balance between technological assistance and traditional pedagogical methods.

Table 2. Drawbacks of using AI in language learning

Drawbacks	Authors	Publication Year
Overreliance on Technology	Ajepe, I., & Yusuf, A, B.	2024
	Oranga, J. et al	2024
	Vieriu, A, M. & Petrea, G.	2025
	Laili, R, N. et al	2024
	Onyema, E, M.	2024
	Dugosija, T.	2024
Decreasing Academic Integrity &	Rane, N, L.	2023
	Ajepe, I., & Yusuf, A, B.	2024
	Creely, E.	2024

Critical Thinking	Onyema, E, M.	2024
	Keli, L.	2024
Data Privacy & Ethical Concerns	Subiyantoro, S.	2023
	Dugosija, T.	2024
	Batubara, M, H. et al.	2024
	Liando, N, V, F. et al	2025
	Martynyuk, O.	2024
	Rukiati, E. et al	2023
	Vieriu, A, M., & Petrea, G.	2025
	Keli, L.	2024
Accuracy & Reliability Issues	Rane, N, L.	2023
	Creely, E.	2024
	Dugosija, T.	2024
	Liando, N, V, F. et al	2025
	Rukiati, E. et al	2023
	Keli, L.	2024
	Onyema, E, M.	2024
Pedagogical & Technical Challenges	Okolo, C. J. et al.	2024
	Mananay, J, A.	2024
	Syarifudin, A, S.	2023
Language & Cultural Limitations	Ajepe, I., & Yusuf, A, B.	2024
	Syarifudin, A, S.	2023
	Martynyuk, O.	2024
	Abbasi, K, J. et al	2025

A total of 33 research concerns were identified from Table 2. The highest fraction, 24.2%, is assigned to Data Privacy & Ethical Concerns, which is, as far as the literature is concerned, the largest part of the literature addressed issue. Other concerns: Accuracy & Reliability Issues come next at 21.2%, with Overreliance on Technology and Decreasing Academic Integrity & Critical Thinking at 18.2% and 15.2% respectively. Language & Cultural Limitations accounts for 12.1% and Pedagogical & Technical Challenges is the least addressed area with only 9.1%, as shown in the Figure 3 below:

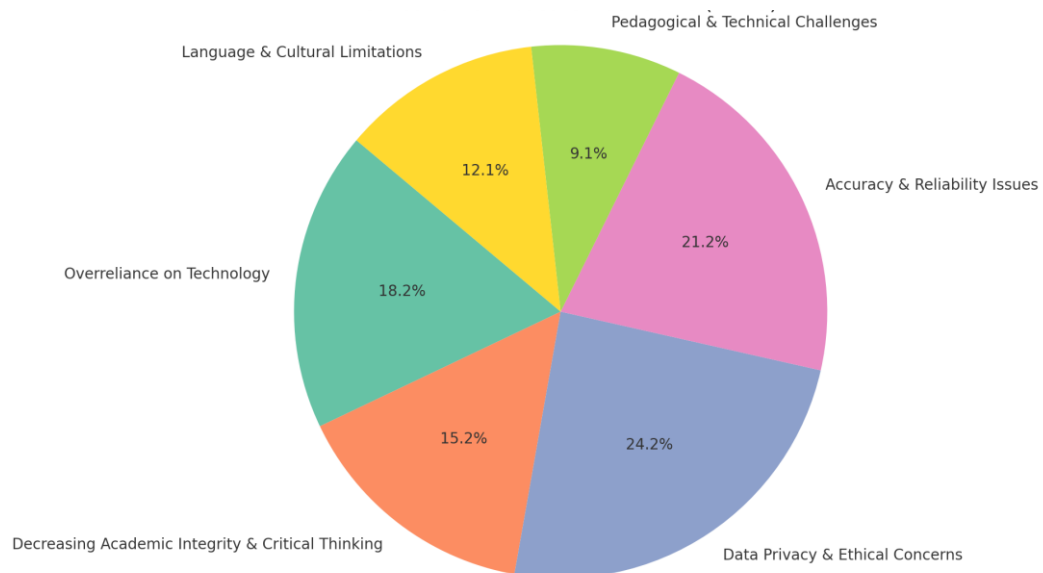


Figure 3. Distribution of research concerns

Discussion

The findings of the current research have given a clear picture that the integration of AI in language learning has both advantages and drawbacks. The advantages and drawbacks will be discussed below.

Advantages

Personalized Learning and Feedback Experiences

One major finding which has 39% data from the literature has clearly identity that by integrating AI in language learning, the students will have personalized learning and feedback experiences as revealed by Okolo et al. (2024), Mananay (2024), Ghimire et al. (2024), Vall and Araya (2023), Creely (2024), Subiyantoro (2023), Onyema (2024), Oranga (2024), Dugosija (2024), Batubara (2024), Liando (2025), Martynyuk (2024), Rukiati et al. (2023), Abbasi et al. (2025), Vieriu and Petrea (2025), and Keli (2024). All of them have agreed that using AI in language learning will give personalized learning and feedback experiences for the students.

In the first study conducted by Okolo et al (2024), the researchers tried to find out the opportunities and challenges of using AI in language learning by focusing on the adaptive learning systems that are tailored to educational contexts to individual learners' needs. Furthermore, the study also examined the AI's historical evaluation, their applications in educational settings, specifically for language learning, as well as their future trends, which revealed that AI technologies have their own advantages, such as personalized learning & feedback, accessibility, and inclusion.

Similarly, research conducted by Mananay (2024) utilized a mixed-method approach to investigate the integration of AI in language teaching and learning, discovered that there is a contribution of interactive simulations to improve language instruction, adaptive learning, as well as personalized learning & feedback. Similarly, a study carried out by Ghimire et. al (2024), which examined the use of AI in English language teaching and learning via exploratory research, confirmed the positive effect of the use of AI in language learning, such as the efficiency of teaching, the engagement of the students, as well as improving writing skills.

The harmony findings are also revealed by the rest of the research, even though their research employed different methods, places, and participants. Studies conducted by Vall and Araya (2023), Creely (2024), Subiyantoro (2023), Onyema (2024), Oranga (2024), Dugosija (2024), Batubara et al. (2024), Liando et al. (2025), Martynyuk (2024), Rukiati et al. (2023), Abbasi et al. (2025), Vieriu and Petrea (2025), and Keli (2024) agreed that the integration of AI technologies has positive implications for giving personalized learning & feedback for the students in language learning. Therefore, it is clear that much research suggests that AI has the potential to address learner needs more effectively than traditional methods, which contributes to the improvement of students' engagement, autonomy, and academic outcomes in language learning.

Efficiency and Time Saving

The second advantage of the integration of AI in language learning is efficiency and time-saving, which is revealed by Rane (2023), Tasci and Tunaz (2024), Vall and Araya (2023), Batubara et al. (2024), and Ghimire et al. (2024), which contribute to 12.2% of the data. Interesting data revealed by Rane (2023) that the integration of AI in the language learning classroom is not only beneficial for the students, but also for the teacher. Rane (2023) found that by integrating AI in the language learning classroom, teacher has the ability to automate their tasks such as crafting assignments, grading papers, and furnishing feedback to their students. Therefore, the teacher will have more time to give special attention to crucial educational responsibilities. Similarly, Tasci and Tunaz (2024) also found the same finding that 36% of the teacher participants agree that the integration of AI in language learning can reduce the time required for various tasks, which enables the participants to achieve their goals more effectively. Therefore, one



cannot deny that the integration of AI surely gives a significant contribution to saving teaching and learning time.

Engagement and Motivation

Another important advantage of the integration of AI in language learning is engagement and motivation. This finding, revealed by Mananay (2024), Karatas et al. (2024), Dugosija (2024), and Vieriu and Petrea (2025), represents 9.8% of the total data analyzed. To mention a few, Karatas, F. et al. (2024) conducted qualitative research that involved 13 students studying at the School of Foreign Language at the University in Turkey. The research found that AI integration in the language classroom significantly improves the motivation of the students and learning engagement, which contributes to a more engaging learning experience. This finding is in line with what was found by Dugosija (2024), that leveraging AI in the language classroom has a significant impact on enhancing students' engagement through interactive AI applications. This finding is supported by research conducted by Vieriu and Petrea (2025). They stated that AI applications in the context of language learning provide assistants to help students access relevant information quickly, organize tasks, and receive instant feedback, thereby enhancing efficiency and engagement in the educational process.

Skill Development

Skill development is another advantage of leveraging AI in the language classroom. This data is supported by some researchers, including Laili (2024), Ajepe and Yusuf (2024), Mananay (2024), Karatas et al. (2024), Martynyuk (2024), and Abbasi et al. (2025), who contribute 14.6% of the total data. Descriptive qualitative research conducted by Laili et al. (2024) examined students' attitudes toward using ChatGPT as a learning aid in English learning, involving 45 health science students. The finding revealed that AI is valued for its ability to explain complex topics, expand vocabulary, and help with writing. Ajepe and Yusuf (2024) also found the same finding that leveraging AI in the English language classroom can significantly improve speaking and listening skills. It is because AI tools may examine students' comprehension and usability, and therefore improve students' listening ability. Furthermore, AI can also be used for speaking activities, which become free conversation practice for the students. This feature is also able to assess students' ability, such as delivery, content, vocabulary, and grammar, in the context of speaking skills.

Accessibility and Inclusion

The fifth advantage of leveraging AI in the English language classroom is accessibility and inclusion, which contributes 12.2% to the total data. This advantage is revealed by Okolo et al. (2024), Karatas et al. (2024), Liando et al. (2025), Syarifudin (2023), and Subiyantoro (2023). The most recent study by Liando et al. (2025) found that the integration of AI in language teaching and learning can give accessibility and inclusion to the students because it enables personalized learning pathways and supports learners with different abilities. AI tools can provide features such as speech-to-text, real-time translation, and adaptive feedback, which help bridge learning gaps and promote equal participation. In the same vein, Subiyantoro (2023) stated that AI can enhance students' learning experiences through personalized instruction tailored to individual needs and preferences, as well as by providing 24/7 learning accessibility beyond regular class hours.

The last advantage of leveraging AI in the English language classroom is teacher support. This data is supported by the research conducted by Ghimire et al. (2024), Batubara et al. (2024), Keli (2024), Oranga et al. (2024), and Creely (2024), which contributes to 12.2% of the total data. Another interesting finding revealed by Ghimire et al. (2024) stated that leveraging AI in the English language classroom not only gives advantages to the students but also to the teachers. AI positively influences teaching efficiency as the teacher can easily automate administrative tasks, such as grading and lesson planning. Additionally, it allows teachers to focus more on interactive and creative aspects of teaching, thereby improving overall classroom engagement. Even though the research method, time, and place are



different, this data is supported by the other research conducted by Batubara et al. (2024), Keli (2024), Oranga et al. (2024), and Creely (2024), which strengthens this finding.

Drawbacks

Overreliance on Technology

Despite all of the significant advantages, leveraging AI in English language learning also has its drawbacks, such as overreliance on technology, decreasing academic integrity & critical thinking, data privacy and ethical concerns, accuracy & reliability issues, pedagogical & technical challenges, and language & cultural limitations. Approximately 18.2% of the studies reviewed highlighted that the integration of AI in English language learning may affect overreliance on the use of technology (Ajepe & Yusuf, 2024; Oranga et al. 2024; Vieriu & Petrea, 2025; Laili et al., 2024; Onyema, 2024; Dugosija, 2024). Ajepe and Yusuf (2024) stated that despite many advantages of AI technologies, it also has the impact of leading both students and lecturers to be lazy in doing tasks on their own. It is mainly because AI makes tasks easier to do things automatically, such as grading and writing assignments, which leads to less work to do compared to traditional tools for less effort. Both lecturers and students may grow overly reliant on AI-based tools, making it difficult for them to perform tasks without technological assistance. Specifically, students are advised to limit their use of AI, as developing essential skills and competencies requires independent learning rather than excessive dependence on AI technologies (Oranga et al., 2024; Vieriu & Petrea, 2025). Aware of this issue, some schools have banned the use of AI during school hours by all of their students in order to minimize the reliance on AI for assignments and examinations (Onyema, 2024). Supporting this idea, Dugosija, T. (2024) found that the integration of AI in English language learning will cause overreliance on technology, which could reduce human interaction, which may negatively impact the social and communicative elements of language learning.

Decreasing Academic Integrity and Critical Thinking

Another drawback of the integration of AI in the English language classroom is decreasing academic integrity and critical thinking (Rane, 2023; Ajepe & Yusuf, 2024; Creely, 2024; Onyema, 2024; Keli, 2024). This data contributes 15.2% of the total data taken from the literature in this research. According to Rane (2023), despite AI's advantages in English language education, human touch is still significantly needed. Human interaction plays a vital role in shaping critical thinking, inspiring creativity, and strengthening emotional intelligence. In the same vein, Ajepe and Yusuf (2024) stated that the lack of critical thinking exists when integrating AI in the English language classroom. It is because students will rely on the AI, which leads to a decrease in critical thinking and problem-solving skills. Such elements are key to academic performance and can impede the development of important competencies among learners. This idea is supported by the other researchers conducted by Creely (2024), Onyema (2024), and Keli (2024), who found that the integration of AI in English language learning will put the students in a passive stance rather than actively thinking and doing their assignments in language learning.

Privacy and Ethical Concerns

The most dominant drawback of integrating AI in the English language classroom is data privacy and ethical concerns, which contribute 24.2% of the total data. This drawback was discovered by the research conducted by Subiyantoro. (2023), Dugosija (2024), Batubara et al. (2024), Liando et al. (2025), Martynyuk (2024), Rukiati et al. (2023), Vieriu and Petrea (2025), and Keli (2024). To mention a few, qualitative research conducted by Subiyantoro (2023) revealed that the integration of AI effectively demands awareness of ethical standards and data privacy. Data security and privacy protection must remain at the forefront to ensure their use is both safe and responsible. What was found by the other researchers is in line with this view. When users use AI, the application may collect the interaction information about teachers and students, and there might be a risk that this data could be exploited (Dugosija, 2024; Batubara et al., 2024; Liando et al, 2025). Therefore, it is a must for the users to ensure the protection of their privacy. Thus, their personal information can be protected, safe, and responsible.



Accuracy and Reliability Issues

The next important drawback that one cannot deny is about accuracy and reliability issues. This drawback contributes 21.2% of the total data and was revealed by Rane (2023), Creely (2024), Dugosija (2024), Liando et al (2025), Rukiati et al (2023), Keli (2024), and Onyema (2024). As revealed by Creely, E. (2024), with the growing integration of AI in language learning, maintaining a balance between factual accuracy and authentic communication is crucial. Addressing this issue is key for educators to effectively incorporate AI into well-rounded language instruction. In addition, AI does not possess the capacity for critical reflection to judge whether its outputs are accurate or appropriate (Rane, 2023; Dugosija, 2024). Rukiati et al. (2023) also stated that AI platforms rely on their algorithms and data from the internet to make decisions and answers, which can be influenced by human biases. Thus, it is really important for users to cross-check the results given by AI applications in order to ensure their accuracy and reliability, and not solely rely on AI.

Pedagogical and Technical Challenges

Pedagogical and technical challenges are another drawback of integrating AI in the English language classroom (Okolo et al., 2024; Mananay, 2024; Syarifudin, 2023), which contribute 9.1% to the total data. An interesting finding from Okolo et al. (2024) stated that although AI might provide all of its advantages, AI also has a technological barrier for teachers and the need for effective teacher training. It is because not all teachers are familiar with or comfortable using advanced AI tools in their teaching practices. Without proper support and training, the integration of AI in education may widen the digital gap among educators and limit its overall effectiveness. Similarly, Mananay (2024) and Syarifudin (2023) also pointed out the pedagogical & technical challenges from the integration of AI in the English language classroom. A large number of teachers lack preparation to integrate AI effectively in their classes, as well as the challenges of aligning the AI with existing pedagogical goals. Furthermore, limited access to technological resources and infrastructure, especially in remote and rural regions, poses a barrier to fair and equal integration of AI in language learning.

Language and Cultural Limitations

The last drawback of integrating AI in the English language classroom is language and cultural limitations, which contribute 12.1% to the total data. This drawback was revealed by Ajepe and Yusuf (2024), Syarifudin (2023), Martynyuk (2024), and Abbasi. et al. (2025). As Syarifudin (2023) found, the presence of numerous languages and dialects poses obstacles to creating AI tools that can reliably understand and produce content in languages that are not widely represented. Similarly, Martynyuk (2024), Ajepe and Yusuf (2024), and Abbasi et al. (2025) stated that AI has yet to match teachers in guiding students to develop emotional awareness and interact effectively across different cultures. Rather than substituting conventional instruction, AI should serve to enhance it—particularly in contexts that demand detailed linguistic clarification.

Conclusion

In summary, this systematic review has presented an extensive analysis of the advantages and drawbacks of the use of AI in English language teaching and learning. The review of the previous research identified a clear consensus that AI supports personalized learning, time efficiency, enhanced student engagement, improved language skills, greater accessibility, and teacher support. Numerous studies demonstrate how AI facilitates individualized instruction and immediate feedback that are responsive to each student's unique learning needs — something more traditional tools struggle to offer. This customization has been demonstrated to enhance student autonomy, motivation, and achievement. Furthermore, when AI reduces teachers' administrative load, teachers have more time to focus on meaningful instruction and creative pedagogy.



However, the study also suggests that such gains do not come without drawbacks. Instability and ethical and accuracy/reliability and other problems arise: concerns for overdependence on technology, damage to the integrity and critical thinking in education, and ethical considerations involving data privacy are notable. Pedagogical and technical barriers—particularly in low-resource settings—also make things more complicated, as they have limitations in terms of language diversity and cultural context. These are the limitations that highlight the importance of thoughtful and balanced inclusion of AI (in which technology should serve to supplement, not further depersonalize human-oriented language education).

Acknowledgement

The authors would like to express our sincere gratitude to Politeknik Negeri Sriwijaya for their support and motivation in conducting the study. As lecturers in the D3 English Program, the development of this systematic review has been a rewarding intellectual process that has allowed us to appreciate the function of AI in EFL education. We would also like to express our appreciation to the researchers whose work has provided the base for our study and to the many colleagues and students whose feedback and enthusiasm have helped maintain our commitment to examining novel and meaningful directions in language teaching.

References

- Abbasi, K. J., Lashari, A. A., & Golo, M. A. (2025). Use of artificial intelligence as an online platform for English language teaching at tertiary level. *International Journal of Social Sciences Bulletin*, 3(2), 502–510. <https://doi.org/10.5281/zenodo.14921342>
- Ajepe, I., & Yusuff, A. B. (2024). Language teaching and learning: Exploring AI-related benefits and challenges in the education field. *Multidisciplinary Journal of Arts and Language Education (MJALE)*, 5(1), 344–355.
- Aljanabi, M. (2023). Chat GPT: Future directions and open possibilities. *Mesopotamian Journal of Cybersecurity*, 3, 16-17.
- Batubara, M. H., Moha, L., Nugroho, A. Y., Ummah, S. S., & Suhardianto. (2024). Application of AI and learning analytics in English education: Benefits and challenges. *International Journal of Language and Ubiquitous Learning*, 2(3), 395–405. <https://doi.org/10.70177/ijlul.v2i3.1378>
- Creely, E. (2024). Exploring the role of generative AI in enhancing language learning: Opportunities and challenges. *International Journal of Changes in Education*, 1(3), 158-167. <https://doi.org/10.47852/bonviewIJCE42022495>
- Dugošija, T. (2024). Benefits and challenges of artificial intelligence in English language teaching. *Knowledge – International Journal*, 62(2), 275–280.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., et al (2023). So what if ChatGPT wrote it? Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71(10), 26-42.
- Francis, J., & Subha, M. (2024, October). *An overview of natural language processing (NLP) in healthcare: Implications for English language teaching*. In 2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC) (pp. 824–827).
- Ghimire, P. R., Neupane, B. P., & Dahal, N. (2024). Generative AI and AI tools in English language teaching and learning: An exploratory research. *English Language Teaching Perspectives*, 9(1–2), 30–40. <https://doi.org/10.3126/eltp.v9i1-2.68716>
- Godwin-Jones, R. (2022). Partnering with AI: Intelligent writing assistance and instructed language learning. *Language Learning & Technology*, 26(2), 5-24. <https://doi.org/http://doi.org/10125/73474>



- Karataş, F., Abedi, F. Y., Gunyel, F. O., Karadeniz, D., & Kuzgun, Y. (2024). Incorporating AI in foreign language education: An investigation into ChatGPT's effect on foreign language learners. *Education and Information Technologies*, 29, 19343–19366. <https://doi.org/10.1007/s10639-024-12574-6>
- Keli, L. (2024). English education in the era of artificial intelligence in China: Opportunities and challenges. *International Journal of Advanced Engineering, Management and Science (IJAEMS)*, 10(6), 23–29. <https://dx.doi.org/10.22161/ijaems.106.3>
- Kohnke, L., & Ulla, M. B. (2024). Embracing generative artificial intelligence: The perspectives of English instructors in Thai higher education institutions. *Knowledge Management & E-Learning: An International Journal*, 16(4), 653–670. <https://doi.org/10.34105/j.kmel.2024.16.030>
- Laili, R. N., Wirawati, W. A., & Nashir, M. (2024). Student's perception on the use of artificial intelligence (AI) ChatGPT in English language learning: Benefits and challenges in higher education. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 4(3), 1389–1403. <https://doi.org/10.47709/educendikia.v4i03.5272>
- Liando, N. V. F., Tatipang, D. P., Rorimpandey, R., Kumayas, T., Saudah, K., & Iskandar, I. (2025). AI-powered language learning: A blessing or a curse for English language education? *Studies in English Language and Education*, 12(1), 301–311. <https://doi.org/10.24815/siele.v12i1.34842>
- Lodge, J. M., de Barba, P., & Broadbent, J. (2023). Learning with generative artificial intelligence within a network of co-regulation. *Journal of University Teaching & Learning Practice*, 20(7). <https://doi.org/10.53761/1.20.7.02>
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- Mananay, J. A. (2024). Integrating artificial intelligence (AI) in language teaching: Effectiveness, challenges, and strategies. *International Journal of Learning, Teaching and Educational Research*, 23(9), 361–382. <https://doi.org/10.26803/ijlter.23.9.19>
- Martynyuk, O. (2024). AI tools in foreign language teaching: Pros and cons of Ukrainian and foreign practices. *Comparative Professional Pedagogy*, 14(2), 65–73. [https://doi.org/10.31891/2308-4081/2024-14\(2\)-7](https://doi.org/10.31891/2308-4081/2024-14(2)-7)
- Morandini, S., Fraboni, F., De Angelis, M., Puzzo, G., Giusino, D., & Pietrantoni, L. (2023). The impact of artificial intelligence on workers' skills: Upskilling and reskilling in organisations. *Informing Science: The International Journal of an Emerging Transdiscipline*, 26, 39–68. <https://doi.org/10.28945/5078>
- Netragaonkar, Y. D. (2022). Role of artificial intelligence (AI) in higher education. *International Journal of Food and Nutritional Sciences*, 11(10), 1–7.
- Okolo, C. J., Ezeonwumelu, C. G., Barah, C. I., & Ugwu, N. J. (2024). Personalized language education in the age of AI: Opportunities and challenges. *Newport International Journal of Research in Education*, 4(1), 39–44. <https://doi.org/10.59298/NIJRE/2024/41139448>
- Onyema, E. M., Anichebe, G. E., Richard-Nnabu, N. E., Udeh, C. C., Justice, I. F., Ugboaja, S. G., & Edeh, C. D. (2024). ChatGPT application in educational setting: Benefits and drawbacks. *Tropical Journal of Applied Natural Sciences*, 2(3). <https://www.researchgate.net/publication/385620895>
- Oranga, J., Matere, A., & Ndaita, J. (2024). ChatGPT (AI) integration into teaching and learning: Opportunities and challenges. *Technium Education and Humanities*, 9, 102–110.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Blackwell Publishing.
- Rane, N. L. (2023). Enhancing the quality of teaching and learning through ChatGPT and similar large language models: Challenges, future prospects, and ethical considerations in education. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4599104>
- Rukiati, E., Wicaksono, J. A., Taufan, G. T., & Suharsono, D. D. (2023). AI on learning English: Application, benefit, and threat. *Journal of Language, Communication, and Tourism*, 1(2), 32–40.
- Songsienchai, S. (2025). Implementation of artificial intelligence (AI): Chat GPT for effective English language learning among Thai students in higher education. *International Journal of Education & Literacy Studies*, 13(1), 302–312. <https://doi.org/10.7575/aiac.ijels.v.13n.1p.302>



- Stewart, J. C., Davis, G. A., & Igoche, D. A. (2020). Ai, Iot, and Aiot: Definitions and impacts on the artificial intelligence curriculum. *Issues In Information Systems*, 21(4), 135-142.
- Subiyantoro, S. (2023). Exploring the impact of AI-powered chatbots (ChatGPT) on education: A qualitative study on benefits and drawbacks. *Jurnal Pekommas*, 8(2), 157–168.
- Sujatna, M. L., Astarina, A. N., & Heryono, H. (2024). AI for language learning: Friend or foe? *Linguistic, English Education and Art (LEEA) Journal*, 7(2), 456–467. <https://doi.org/10.31539/leea.v7i2.9331>
- Syarifudin, A. S. (2023). Challenges and opportunities of implementing AI in language learning in Indonesia. *Transformational Language, Literature, and Technology Overview in Learning (TRANSTOOL)*, 3(1), 49–60.
- Tasci, S., & Tunaz, M. (2024). Opportunities and challenges in AI-assisted language teaching: Perceptions of pre-service EFL teachers. *Araştırma ve Deneyim Dergisi (Research and Experience Journal)*, 9(2), 74–83. <https://doi.org/10.47214/adeder.1575897>
- Vall, R. F., & Araya, G. F. (2023). Exploring the benefits and challenges of AI-language learning tools. *The International Journal of Social Sciences and Humanities Invention*, 10(1), 7569–7576. <https://doi.org/10.18535/ijsshi/v10i01.02>
- Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*, 15(3), 343. <https://doi.org/10.3390/educsci15030343>
- 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.
- Zhong, B. L., Shang, J. J., & Wang, J.H. (2023). ChatGPT's war on education. *Chongqing Higher Education Research*, 3, 3-25.

