

A SYSTEMATIC LITERATURE REVIEW OF ARTIFICIAL INTELLIGENCE USAGE AND EFFECTIVENESS IN EFL STUDENTS' LEARNING

Devina Aulia Puteri¹, Emma Rosana Febriyanti², Inayati Fitriyah Asrimawati³

^{1,2,3}English Education Study Program, Faculty of Teacher Training and Education,
Universitas Lambung Mangkurat

¹1910117120017@mhs.ulm.ac.id, ²emma.rosana@ulm.ac.id,

³inayati.asrimawati@ulm.ac.id

ABSTRACT

With the recent rise of demand for an all-encompassing tool in the form of the technologically advanced Artificial Intelligence (AI), this systematic literature review examines the effectiveness of AI in the field of English learning education for English as a Foreign Language (EFL) students based on its use and effectiveness by analyzing case studies through multiple research papers and journals, guided by the PRISMA (2020) framework. Its aim is to understand Artificial Intelligence's roles in English classroom teaching and its impact on students' English learning. The data for this systematic review are sourced from trusted peer-reviewed websites such as Google Scholar, ERIC, and DOAJ. Through the compiled data, the finding indicates that while there are positive improvements from AI integration in EFL learners' English teaching, these studies also reported the possible limitation and negative consequences in overly using AI as a crutch in EFL students' learning. Without proper guidance from teachers and the appropriate human interaction and connection, AI could encourage bad learning habits in students. Overall, this review concludes that AI has its role in furthering English education, with its own use and effectiveness based on teachers support, appropriate task, and guideline.

Keywords: Artificial Intelligence, AI, AI for English Learning

ABSTRAK

Dengan meningkatnya permintaan akan alat yang komprehensif dalam segala bidang yang berupa Kecerdasan Buatan (AI), tinjauan literatur sistematis ini meneliti efektivitas AI di bidang pendidikan pembelajaran bahasa Inggris untuk siswa Bahasa Inggris sebagai Bahasa Asing (EFL) berdasarkan penggunaan dan efektivitasnya dengan menganalisis studi kasus melalui berbagai makalah dan jurnal penelitian, yang dipandu oleh kerangka kerja PRISMA (2020). Tujuannya adalah untuk memahami peran Kecerdasan Buatan dalam pengajaran bahasa Inggris dan dampaknya terhadap pembelajaran bahasa Inggris siswa. Data untuk tinjauan sistematis ini bersumber dari situs web terpercaya yang telah ditinjau seperti Google Scholar, ERIC, dan DOAJ. Melalui data yang dikumpulkan, temuan menunjukkan bahwa meskipun ada peningkatan positif dari integrasi AI dalam pengajaran bahasa Inggris bagi pembelajar EFL, studi-studi ini juga melaporkan keterbatasan dan konsekuensi negatif dari penggunaan AI yang berlebihan. Tanpa bimbingan yang tepat dari guru dan interaksi serta koneksi manusia yang sesuai, AI dapat mendorong kebiasaan belajar yang buruk pada siswa. Secara keseluruhan, tinjauan ini menyimpulkan bahwa AI memiliki peran dalam memajukan

pendidikan bahasa Inggris, dengan penggunaan dan efektivitasnya bergantung pada dukungan guru, tugas yang sesuai, dan pedoman.

Kata Kunci: Kecerdasan Buatan, AI, Kecerdasan Buatan dalam Pembelajaran

A. Introduction

Advancement in tools and technology is synonymous with human evolution. Every decade or so there will come a new innovation that revolutionizes the way we as a society function and live our life. For example, Nurdiana (2021) explained the history of various industrial eras that humanity has lived through. The Industry 1.0 era began with the transition of handmade labor to mechanized production as the first Industrial Revolution. Then came the Industry 2.0 era with the introduction of electricity and assembly lines, that then continued to the beginning of the 20th century with the invention of computers and digital automation kickstarting the Industry 3.0 era, before finally reaching our newest technological advancement yet with the Industry 4.0 to 5.0 era: the combination of automation with cloud cyber technology to be more “human-like”, or more widely known as AI, Artificial Intelligence.

The term itself is not new. Artificial Intelligence has been present as long as computers have existed, acting as the basis for any type of code in all sorts of technology. Tahiru (2021) cited John McCarty as the person that coined the term back in 1956. According to Merriam Webster definition, Artificial Intelligence is the capability of computer systems or algorithms to imitate intelligent human behaviour. It mimics human brains to solve problems and generate solutions (Jegede, 2024). It is an advanced tool that only a select few can utilize. However, with the recent development of ChatGPT by OpenAI in 2022, accessing these advanced AI

algorithms to solve human problems has never been easier. This then led to global adoption of AI for everyday use. The data show that AI tools such as ChatGPT have been visited around 3 billion times with 500 million active users per month (Liu, Wang, 2026). Through this massive usage, it came as no surprise that AI soon adapted to many sectors of human society, with the most important of all as a tool for learning in the field of education.

Educators are no strangers in utilizing technology for learning. For every breakthrough in technology, it is the teacher's job to adapt it as a tool to teach students in an engaging and immersive way. Educators are no longer tied to the traditional face-to-face whiteboard classroom type of teaching, now they have more medium to employ, such as video, recorder, internet, virtual classroom, and online quizzes in the form of websites called Kahoot! and Blooket (Tao, Zou. 2023). This use of technology in teaching is valuable in teaching language, particularly in English learning. For English educators, technology in English Language Teaching (ELT) is essential in achieving the ideal education program. Various studies have found a direct positive correlation between technology integration in English learning to student's comprehension of the English lesson (Nurmala et al., 2023).

The recent push for the newest teaching advancement by implementing AI in English classrooms invites both excitement and concern. Previous studies suggest that AI brings its own benefit

in assisting students by giving immediate feedback and immersive learning experience. This is illustrated by Kathuri, Mulwa, and Kahiga (2025) in their study of analysing the impact of ChatGPT as support for EFL students writing skill in a university in Kenya, they conclude that AI is an effective tool for improving EFL student English writing capability. In Surabaya, a similar study was conducted. Hertiki, Alifiah, and Nordin (2025) investigate EFL student perception of implementing ChatGPT in English learning. They found that students are mostly positive about the AI implementation, noting the benefits such as time efficiency, increased productivity, and its adaptability with independent learning. However, Hertiki, Alifiah, and Nordin speak of the students' concern for the technology, pointing out over-reliance on AI can degrade students cognitive ability, the dubious source and lack of credibility as a negative that educators need to navigate. Another study by Hiniz (2024) analyzes a year's worth of generative AI usage in English language learning, with findings indicating potential negative impacts to students' cognitive skills and concerns over unchecked plagiarism that AI inadvertently encourages.

Based on this contrasting perception of the effectiveness of Artificial Intelligence use in English learning, it became evident the importance of compiling various research and study on the subject to further our understanding of AI usage in English classrooms into a comprehensive dissertation and analysis. The varying result of each study communicates a differing view and acceptance towards AI as a tool for learning. The instability of AI implementation in producing quality

English learning became the basis for this systematic literature review.

According to Lame (2019), systematic literature reviews are a way of synthesising scientific evidence to answer a particular research question in a way that is transparent and reproducible, while seeking to include all published evidence on the topic by appraising the quality of the evidence. By using the systematic literature review method, this study aims to review and analyze the use and effectiveness of AI for EFL learners through peer-reviewed scientific papers, journals, and studies, with the hope of identifying the benefit and limitation of implementing AI in EFL classroom as a contribution for teachers, students, and future researchers for further study and development.

Literature Review

To analyze the use and effectiveness in implementing Artificial Intelligence for EFL student learning, compilation of previous studies are important to begin our research. Questions such as what type of AI can be used in English learning, their usefulness in English learning settings, and what their impact on EFL learners are imperative as the basis for this systematic literature review.

In his study "The Use of Artificial Intelligence in English Language Teaching", Akbarani (2023) argues that integration of AI in English teaching is important in this new industrial era. He cited Ribeiro (2020), pointing out the benefit of Artificial Intelligence as a tool for data collection, personalized independent learning, and aid for both teachers and students to learn the English language. Through his research, Akbarani (2023) found that AI tools such as ChatGPT, Quilbot,

Grammarly, Plagiarism Checker, and [Paraphrasingtool.com](https://www.paraphrasingtool.com) are deemed effective by 50% of his sample subjects in helping them learn the English language, with 30% choosing neutral, and 20% of the sample subjects disagreeing on the effectiveness of AI tools in English learning.

Another study by Yuan (2023) aims to test the efficacy of AI chatbots for EFL learners in primary education by dividing 72 students into two groups: one group will employ the traditional teaching method, while the experimental group will implement AI chatbots in their learning curriculum. After 3 months of this experimentation, Yuan compares test scores from pre- and post- AI chatbots implementation to find that students' oral proficiency skills have improved significantly with the experimental group compared with the traditional one. The chatbot helps students to fix personal errors and provides a more personalized teaching experience to immerse them in the lesson. Yuan concluded that AI chatbots can be used in language learning classrooms with positive results and effectiveness depending on teachers' involvement by refining their teaching method when integrating AI.

In opposition to the benefit of AI in English classrooms, Alkhatib et al. (2026) argues that there are unintended negative consequences by primarily using AI to teach. He noted the disruption of teachers' roles in students' learning, lamenting that the hand-off approach could lead to students not building their own cognitive skill. He argues AI "efficiency" in finishing tasks can erode critical thinking skills in students and reduce their creativity when making their own literacy. His research of AI dependency between

250 undergraduate EFL students finds that students with higher attachment to AI have a higher risk of decreased cognitive autonomy, and reduced ability in critical thinking and linguistic creativity. Alkhatib suggests a more moderate use of AI with teachers and human-centeredness as the primary source for students in their English learning.

To summarize these findings, the use and effectiveness of Artificial Intelligence for English teaching are still debated. The experts' views on AI are varied. While the potential benefits can be argued, the possible negative impact to students is a valid source of concern. Before there could be a definitive way to use AI, this study aims to answer AI roles in English teaching, the type of AI that can be used in an English classroom, and its effectiveness in teaching English for EFL learners by studying previous empirical studies.

B. Research Method

This study used a systematic literature review design by analyzing empirical studies on the use and effectiveness of Artificial Intelligence as a tool for teaching English as a Foreign Language (EFL) students. To help organize the data in a methodical and structured way, this study followed Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. These guidelines structured the review procedure into four sequential phases: identifying relevant studies, screening records, assessing eligibility, and determining final inclusion (Page et al., 2021).

Data Sources and Search Strategy

The data were collected from three widely used and peer-reviewed

databases: Google Scholar, ERIC, and DOAJ. These were selected on the basis of their ease of accessibility and relevance to educational research. The search was conducted using targeted keywords such as *“Artificial Intelligence for English learning,” “Artificial Intelligence as tools for English language learning,”* and *“The effectiveness of Artificial Intelligence in English learning”*, adapted to each database.

Table 1.1 Presents the combinations of keywords used across databases

Database	Keyword Used
Google Scholar	“Artificial Intelligence for English language learning,” “The use of Artificial Intelligence in English language learning”
ERIC	“The role of Artificial Intelligence in English language learning,” “The effect of Artificial Intelligence in English classroom”
DOAJ	“Using Artificial Intelligence to teach EFL students,” “Type of Artificial Intelligence for teaching English”

The scope of the search was limited to empirical studies published between 2020 and 2026, written in English, and focusing on the use of Artificial Intelligence for developing EFL learners’ English skill.

Selection Process

In the identification stage, a total of 30 studies were retrieved from the selected databases. 10 from Google Scholar, 10 from ERIC, and another 10 from DOAJ. After removing studies that do not correlate with the research question, 23 unique studies remained for screening. During the screening phase, titles and abstracts were examined to determine

relevance based on the inclusion criteria: (1) using Artificial Intelligence as a primary or central instructional medium in the research, (2) a focus on Artificial Intelligence as a tool for EFL learners, (3) analysis on the benefit and limitation of Artificial Intelligence as a tool for English learning, and (4) the presence of empirical data.

In the eligibility stage, 23 full-text articles were assessed in detail. 11 studies were excluded due to reasons such as the absence of empirical evidence or misalignment with the research focus. As a result, 12 studies met all inclusion criteria and were selected for the final review.

Table 1.2 outlines the inclusion and exclusion criteria

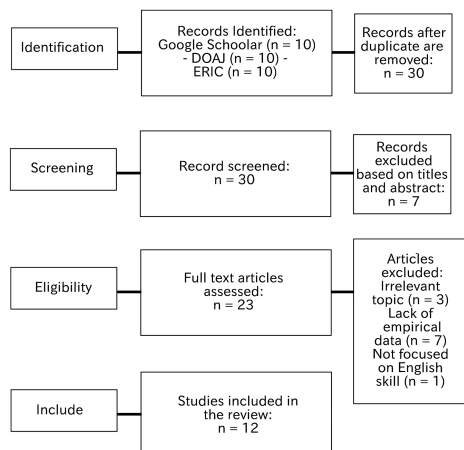
Criteria	Inclusion	Exclusion
Publication Date	Studies published between 2020 and 2026	Studies published before 2020
Language	Articles written in English.	Articles written in languages other than English.
Focus	Studies examining Artificial Intelligence roles in EFL learning.	Studies unrelated to Artificial Intelligence roles in EFL learning.
Type of Study	Peer-reviewed empirical journal articles	Theoretical or opinion-based articles
Context	Research with the basis in EFL teaching contexts	Research outside EFL or non-instructional contexts

Analysis Procedure

The final 12 studies were analyzed using thematic analysis to

identify recurring patterns and key findings related to Artificial Intelligence use and effectiveness in EFL students' learning, by analyzing its teaching impact on the 4 core pillars of English learning: Speaking, Listening, Reading, and Writing. The analysis focused on three points: (1) Artificial Intelligence roles in teaching English, (2) The effectiveness of Artificial Intelligence for students as a medium to learn English, and (3) Teachers and students perception in using AI for learning English. Each study was categorized based on its research objectives, methodological design, instructional approach, and reported outcomes.

As proof of transparency and replicability, all stages of the review process: keyword selection, database searches, screening decisions, and inclusion rationale were documented methodically and systematically by using the PRISMA 2020 framework. The PRISMA flow diagram was used to visually represent the study selection process:



C. Result and Discussion

This systematic literature review analyzed 12 empirical studies published between 2020 and 2026 that investigated the effectiveness of Artificial Intelligence as a medium for improving English as a Foreign

Language (EFL) learners' English skills. The findings were synthesized using thematic analysis and categorized into AI usage for the 4 core pillars of English learning: (1) Speaking, (2) Listening, (3) Reading, and (4) Writing, with studies on the benefits and limitations of AI for EFL teaching.

Table 2.1 Summarizing findings from studies about AI in teaching English Speaking

Author: Indari (2023)

Research Subject: Using AI tools ELSA to detect EFL students' pronunciation.

Study Finding and Implication: The AI tool ELSA efficiently detects students' speaking errors by checking their intonation, fluency, and pronunciation. Indari (2023) noted that the tool can help teachers and students in catching these errors, but it cannot replace teachers' roles in righting this error without the human communication aspect between the teacher and students

Author: Isolatus et al. (2024)

Research Subject: Using AI tools MySpeaker Rhetoric to provides feedback on EFL students practicing public speaking

Study Finding and Implication: AI tools are used to test its capability to provide aid if at the time a human cannot ask another human for feedback. 64.5% of the total students in this experiment agree that they learn something new by using the AI tools, in comparison 90% of the students agree that their peers' feedback is helpful to their public speaking skill. This implies that students are more receptive to their peer assessment than the AI.

Author: Junaidi (2020)

Research Subject: Using AI tools LVA to improve EFL students' English speaking skill.

Study Finding and Implication: By dividing students into 2 groups that use the tools LVA to learn English speaking (Experimental) and a group that do not (Controlled), Junaidi (2020) finds the AI tools LVA is effective in teaching English speaking due to the Experimental group scoring higher than the Controlled group.

Based on these studies, the AI tools used to help teach English speaking lessons mostly have a positive impact and reception by EFL students. Indari (2023) and Junaidi (2020) share a similar result where their AI tools of choice assist with students' intonation, fluency, and pronunciation. EFL students have a hard time with pronunciation, this is usually due to native accent influencing the speakers' tone and inflection (Agung et al., 2021). To combat this problem, Indari (2023) cited Kholis (2021), stating that the application English Language Speech Assistant (ELSA) aims to improve hearing, pronouncing, proclaiming, chanting, and affirming English words in the oral language. Meanwhile, Lyra Virtual Assistant (LVA) is a personal AI assistant that uses natural language to answer a variety of topics, make recommendations, and operate based on the user's command (Junaidi, 2020). By interacting with LVA, it is hoped that students can roleplay an actual conversation and practice their English speaking skill. By using AI applications such as ELSA and LVA, correcting EFL students' mispronunciations are made more efficient and interactive.

Similarly, Isolatus et al. (2024) focus their study on AI as a tool to help students by providing comments and feedback to help their speaking performance like an actual coach, teacher, or mentor would. Students find the feedback from the AI to be direct and unbiased, but they also note that the AI feedback can be confusing as the tool cannot analyze the context, subject, or the target audience of their performance. The tool MySpeaker Rhetoric also cannot provide further elaboration of its feedback. Compare this to feedback from fellow EFL learners, students find their peer

feedback to be satisfactory and more understandable due to the nature of face-to-face contact. Students can ask each other for elaboration. However, students admit that their peer feedback can be inconsistent or biased. There are pros and cons to both types of feedback sources.

Interestingly enough, Indari (2023) and Isolatus et al. (2020) both agree that human contribution is needed when proceeding with an automatic teaching system. Indari argues that the AI tool ELSA cannot provide the students with cognitive and mental aspects. AI cannot understand context or student's mental fortitude. Indari emphasizes the roles of teachers as the middlemen between students and unchecked AI usage. Isolatus et al. agree with this sentiment, their study notes AI incapability to consider context in a student's speaking performance. Overall, while all the studies agree in AI tools usage and effectiveness in assisting English speaking lessons, further development and teachers involvement is needed to assist the students correctly.

Table 2.2. Summarizing findings from studies about AI in teaching English Listening

Author: Yu et al. (2023) Research Subject: Using AI speech synthesis technology to test its effectiveness in teaching English listening skills to EFL students Study Finding and Implication: Experimental (with AI) and Controlled (no AI) groups are formed to test the capability of AI speech in improving student English listening skill. The Experimental groups scores are a bit higher than that of the Controlled one. 69.23% of students agree that the AI speech technology effectively helps them to differentiate English words, while 23.07% think that the AI have very little impact, and another 7% of students feel that the implemented technology is not

helpful at all. Yu et al. (2023) conclude that the AI tech needs more improvement to be more convincingly used for EFL context

Author: Lv & Zhang (2024)

Research Subject: Using AI tools New Concept English App to help improve EFL students' English listening ability

Study Finding and Implication: Three groups each consisting of 30 EFL learners are formed: Experimental (with AI), Controlled (no AI), and Quasi-Experimental (where the teaching methods are mixed). Over a 12 week period, Lv & Zhang (2024) found that the Experimental group did not have a significant improvement compared to the other two groups, meaning that the effects of the New Concept English App are minimal at best. Though most students agree that the AI implementation increased their learning confidence and improved their learning attitude.

Author: Zuwanda & Pasaribu (2025)

Research Subject: Using AI application of Deep Learning-based technology to enhance EFL student's listening and speaking skills.

Study Finding and Implication: 30 EFL students are separated into two groups: Experimental (teaching method with AI) and Controlled (no AI). Based on the pre- and post-test score of the two groups, the Experimental group scores relatively higher in their post-test compared to the Controlled group. Zuwanda & Pasaribu (2025) concluded that Deep Learning-based AI is very effective in immersing students in their lessons and significantly improved EFL learners' listening and speaking ability due to interactivity and immediate feedback from the application.

Based on these studies, the effectiveness of AI tools for EFL learners' listening skills are relatively mixed. The reasons are due to the different quality of AI tools that were used and lack of synergy between the teaching method and students' enthusiasm for the technology. Students' perceptions on each AI tool are also varied, meaning that AI is not fully accepted yet in a classroom setting. Yu et al (2023) conclude their research with the admission that the

speech synthesis technology need more improvement to be able to be implemented optimally for an English teaching context, and Lv & Zhang (2024) agree with this notion as they also conclude that the effect of New Concept English App did not resulted in a significant improvement to the EFL students' listening capability with calls for further study on the subject.

This became a recurring issue as research on AI implementation for English listening lessons is still very new. Zawanda & Pasaribu (2025) stated that there is little empirical study that is focused solely on AI use on enhancing EFL learners' listening skill. However, based on the research sample that fit the criteria of this systematic literature review, more than 50% of students agree that the AI tools impacted them positively, with the application of New Concept English AI becoming more integrated in students life after the initial study (Lv & Zhang, 2024) and the students who use Deep Learning-based AI are more receptive to the lesson than they did with conventional teaching method (Zawanda & Pasaribu, 2025).

These findings suggest that Artificial Intelligence needs more time, experiment, development, and extensive research before educators can fully use AI implementation for EFL listening classrooms. A careful comparison between the conventional teaching method and the new AI innovation are needed to fully realize the full potential of this technological empowerment in the context of teaching EFL learners (Lv & Zhang, 2024).

Table 2.3. Summarizing findings from studies about AI in teaching English Reading

Author: Kusnanik & Burhan (2026)

Research Subject: Using AI-based

interactive learning media to improve EFL learners reading comprehension.

Study Finding and Implication: 60 elementary students are divided into two groups: Experimental (receive instruction by AI) and Controlled (conventional teaching method). By comparing pre- and post-test scores between the two groups, Kusnanik & Burhan (2026) found that the Experimental group reading comprehension improved significantly. Students can quickly identify themes in a story and summarize it. This is due to AI immediate feedback, correction, and interactive content delivery while the Controlled group has modest improvement without the AI personalized assistant. This implies that the interactivity of AI applications improve student cognitive function by giving them guided assistance. AI can be used for EFL learners at an early stage of education.

Author: Shafiee Rad (2025)

Research Subject: Using AI-based programs RTM to reinforce independent, self-regulated, structured learning to improve EFL students' reading ability.

Study Finding and Implication: By dividing students into two groups, Shafiee Rad (2025) found that the Experimental group that uses the RTM platform to regulate their reading activity gains higher scores than the Controlled group (conventional teacher-led classroom). Students have a positive experience with the AI programs, crediting the platform text-to-speech feature on immersing students and pushing their cognitive ability to comprehend the text and understand complex passages better. In addition the AI program has an in-built dictionary to encourage students to pursue independent language learning, expand their vocabulary, and with a personalized test it will challenge students on their reading comprehension after they are done with their reading. This ease of access is AI main benefit to push students to do their own self-regulated study.

Author: Azmaien (2025)

Research Subject: Using Meta-AI and the Social Media WhatsApp to gauge EFL learners reading comprehension capability.

Study Finding and Implication: The study found the Experimental group with integration of Meta-AI with Whatsapp improves the EFL learners reading skill compared to the traditional teaching method by having an algorithm that analyzes the user

proficiency level and catering to their skill level. Meta-AI simulates real-life conversation in the form of text to help students practice reading and expose them to relevant vocabulary. However, Azmaien (2025) questions if this is true comprehension. She warns of the danger of overreliance on AI that can halt a student's independent problem solving ability. Relying on AI too much can make students dependent on it and deny them an opportunity to form their own conclusion. Azmaien emphasized the importance of human interaction as a catalyst for learning.

Based on these studies, AI for teaching EFL learner reading skills are mostly dependent on its role to assist the student with relevant information to help them comprehend the text better. AI provides advanced tools that traditional teaching methods do not have. With AI, EFL students can easily access programs such as a built in dictionary, personalized correction, immediate feedback, and a ready to use text-to-speech to add to student immersion in the lesson. All of these tools in one application, with a touch of a button. Kusnanik & Burhan (2026) and Shafiee Rad (2025) both agree on AI potential as an assistant for independent learning. Different from the traditional teaching method, students now have more flexibility in their learning due to AI ease of access. But, this ease of access is also a weakness of AI.

Azmeim (2025) are concerned by AI automatic easy answers as it undercut students' work and give them an immediate solution. This could lead to overdependence. Generative AI denies students the ability to comprehend the text by themselves, it encourages passive learning when students are used to answers being handed to them. AI as a source of learning is also not perfect, as its algorithm depends on procedural data that can be wrong without humans to

double check on them. Another limitation of AI is how dependent it is on the internet and not all students have the same level of device that can access these AI tools. There is also another concern of how unprotected these AI sites are, students can easily get their data breached if they are not careful. There need to be clear boundaries between students' learning and the overuse of AI. Azmein (2025) circumvented this by pushing for teacher importance in the classroom. Teachers should be the human interaction that connects with students first before they fully rely on Artificial Intelligence for their English learning.

Overall, while AI is an effective medium in enhancing student English reading comprehension, most experts agree overrelying on it is not good for EFL learner' development. There needs to be a balance between human lessons and AI integration.

Table 2.4. Summarizing findings from studies about AI in teaching English Writing

Author: Rosdiana et al. (2024)
Research Subject: Using AI tools such as Quill Bot, Grammarly, ChatGPT, DeepL, Perplexity AI, and EssayWriter to improve EFL students' English writing and students' perception on using AI.
Study Finding and Implication: Rosdiana et al. (2024) conclude that students use AI as a time saving process and it helps them find the necessary reference quicker. With the assistance of Artificial Intelligence like Grammarly, EFL students get an automated correction of their grammar mistakes. With ChatGPT, students that struggle in coming up with their own term to express their idea will be assisted with suggestions and phrases. AI tools help them to write in English more consistently. However, because of AI ease of access and availability some students admit that they circumtise their own writing and use AI tools to write the majority of their words for them. The use of AI is different for students depending on that student's proficiency in

English. Students that still have difficulty in forming their words will use AI more to facilitate their writing, so it is important for teachers to circumvent this by emphasizing the basics of writing to EFL students.

Author: Aini & Basthomi (2025)
Research Subject: Using AI tools to improve EFL students' English writing and analyzing its integration in teaching writing.
Study Finding and Implication: Aini & Basthomi (2025) acknowledge AI revolutionary tech in improving EFL students' writing capability, with tools such as ChatGPT, Quillbot, and WordTune helping to correct students' typos, grammars, and paragraph structure. AI can help bridge the perceived high level of skill to write English academically by using various tools to aid students in their writing process. It is hoped that AI can help improve EFL students' English proficiency. But, Aini & Basthomi point out that for this to work teachers need to have the pedagogical understanding of AI itself before integrating it to their classroom. Teachers need to be aware of the challenges and the ethical usage of AI before they could fully equip it into their classroom.

Author: Li et al. (2024)
Research Subject: Using AI tools ChatGPT to improve EFL students' English writing skill and their perception in using ChatGPT in their writing process.
Study Finding and Implication: To analyze ChatGPT effectiveness in assisting medical students in China on their English academic writing, Li et al. (2024) tested 27 students by making them write a mini essay before asking them to use ChatGPT to revise their essay in 2 weeks time. By using the standardized scoring system, the essay before using ChatGPT are scored 46.45 ± 3.59 . In contrast, the post essay that get corrected with ChatGPT achieved a manual score of 50.68 ± 2.03 . This implies that ChatGPT can be used to help students in improving their English writing. According to students' answers to the post experiment questionnaire, 24% of students have a very positive view on using AI in learning, 52% of students are generally positive, while 24% hold a neutral view on the technology. When asked about AI limitation, 96% students agree on the challenges in verifying the authenticity of the information

that AI gave them, 72% point out the lack of human creative thinking, and 40% of students identified language and cultural differences as potential issues.

Based on these studies, there are a lot of AI tools that specifically help improve English writing. These tools act as automatic correction to typo, help enhance sentence structure, fix syntax, and further provide aid by suggesting ideas and phrases that students might have trouble coming up with. Rosdiana et al. (2024) noted several AI tools that are popular with EFL students, such as: Quill Bot, Grammarly, ChatGPT, DeepL, Perplexity AI, and EssayWriter. Aini & Basthomi (2025) noted several other AI applications that can help writing such as Write Sonic, Jetpack, and Hyperwrite. By using these tools, students reported that they use them to save on time. With AI, writing has become more efficient for EFL learners. Students agree that the perceived high barrier for writing in formal academic ways that get stunted due to EFL students having English as their second language can be leaped over with the help of AI. AI gives students the confidence in tackling complex subjects and expressing their ideas in a grammatically correct way.

However, these absolute benefits to AI can be viewed as a double edge sword. Aini & Basthomi (2025) caught students that let AI work on their task fully with minimal contribution from themselves. This can be counted as cheating, as it defeats the purpose of student learning. The subject for Li et al (2024) research also commented on AI lack of human creativity, while they agree AI can help massively on their English writing, the automated process of AI cannot be held accountable with its lack of authenticity and credibility. There

needs to be a balance between AI usage and students' contribution to their own learning. All three studies agree that teachers have an obligation to monitor students' usage of AI and supplement them with the basics of writing to push students to experiment and write on their own terms.

To conclude, AI should be a tool that helps amplify EFL students ability and not be the sole replacement for actual learning. Teacher contributions are important to combat the negative usage of AI in writing and dissuade students from over relying on an unchecked tool with dubious authenticity and credibility.

D. Conclusion

This systematic literature review examined the usage and effectiveness of using Artificial Intelligence (AI) as a medium for teaching English as a Foreign Language (EFL) contexts by analyzing findings from 12 empirical studies published between 2020 and 2026. Guided by the PRISMA 2020 framework, the review provides a comprehensive overview of how Artificial Intelligence contributes to the development of EFL learners' English skills.

To summarize the studies that have been reviewed, AI has various usage and effectiveness in aiding educators in teaching English for EFL learners. For teaching speaking, AI was used in a way to assist students' English pronunciation, intonation, and fluency. For teaching listening, AI was used to analyze accent, formal and informal way of speaking, and dialogue comprehension. For teaching reading, it was mainly used to help students reading comprehension with tools such as text-to-speech and built-in dictionaries to aid EFL students understand the text better. And for

writing, various tools exist to assist students correct their grammar, sentence structure, and even suggest ideas in the brainstorming phase. This proof that AI has many benefits that can be utilized in EFL teaching context.

However, the review found many studies highlighting the danger of overrelying on AI in students' learning. There are very real concerns of cognitive degradation from the effect of overusing AI as a replacement for actual learning. Students that solely rely on AI to finish their task have not achieved actual understanding of the subject, as they found it easier to just let AI do their work instead of thinking for themselves. Experts also pointed out the dubious nature of AI credibility as a source of information, finding it hard to navigate ethically due to its generative function that cannot be cited thoroughly. Due to this, the suspicion of plagiarism in students' work has skyrocketed. Furthermore, there is the concern of AI completely replacing teachers as the authoritative figure for students' learning, as students would rather circumvent human effort by using machines as their source of knowledge.

In conclusion, Artificial Intelligence can be considered an effective medium for teaching English skills to EFL learners with many uses when employed with pedagogical guidance and purposeful instructional strategies from teachers as the classroom authorities. While it offers a varied and flexible way of learning with immersive and high learner engagement, the educational value of AI depends on how it is implemented in the classroom, preferably with clear boundaries and limitations. Future research is recommended to explore the effects, comparative instructional

models, and the integration of Artificial Intelligence with other digital learning for EFL learner studies.

REFERENCE

- Agung, A., Laksmi, S., & Yowani, L. (2021). Common Pronunciation Problems of Learners of English.
- Aini, N., & Basthomi Y. (2025). Integration of Artificial Intelligence (AI) in Learning English Writing in Higher Education. *Journal of Learning for Development* 12(2), 364-371.
- Akbarabi, R. (2024). Use of Artificial Intelligence in English Language Teaching. *International Journal of English Learning and Applied Linguistics (IJELAL)*, 4(1). 14-23. <https://doi.org/10.21111/ijelal.v4i1.10756>
- Alkhatib, O. J., Shafiq, M. H., Hameed, S., & Khan, A. M. (2026). The Dark Side of AI in Education: Unintended Consequences on English Language Learning and Teaching. *Journal of Applied Linguistic and TESOL (JALT)*, 9(1). 1-14. <https://doi.org/10.63878/jalt1782>
- Azmaien, U. (2025). Integrating Artificial Intelligence and Social Media for English as Foreign Language (EFL) Learning: A Study on Meta-AI's Influence on Reading Comprehension. *Journal of Information System and Informatics*. 7(2), 1-23. <https://doi.org/10.51519/journalisi.v7i2.1070>
- Hertiki, H., Alifiah, F., & Nordin, R. (2025). English Education Students' Perception of ChatGPT AI in English Learning Tool. *Magister Scientiae* 53(2). 127-137. <https://doi.org/10.33508/mgs.v53i2.5809>
- Hiniz, G. (2024). A Year of Generative AI in English Language Teaching

- and Learning - A Case Study. *Journal of Research on Technology in Education*, 58(2). 291-311. <https://doi.org/10.1080/15391523.2024.2404132>
- Indari, A. (2023). Detection of Pronunciation Errors in English Speaking Skills Based on Artificial Intelligence (AI). *Jurnal Serunai Bahasa Inggris*, 15(2), 67-77.
- Isotalus, P., Eklund, M., & Karppinen, K. (2025). Artificial intelligence as a feedback provider in practicing public speaking. *Communication Teacher*, 39(1), 78-85. <https://doi.org/10.1080/17404622.2024.2407910>
- Jegede, O. O. (2024). Artificial Intelligence and English Language Learning: Exploring the Roles of AI-Driven Tools in Personalizing Learning and Providing Instant Feedback. *Universal Library of Languages and Literatures*, 1(2), 6-19. <https://doi.org/10.70315/uloap.ullli.2024.0102002>
- Junaidi, J. (2020). Artificial Intelligence in EFL Context: Rising Students' Speaking Performance with Lyra Virtual Assistance. *International Journal of Advanced Science and Technology*, 29(5), 6735-6741. <https://doi.org/10.3969/j.issn.2005-4238.2020.29.005>
- Kathuri, R. W., Mulwa, P. K., & Kahiga, R. M. (2025). The Impact of ChatGPT-Based Learning Support on English Essay Writing Skills Among Undergraduate Students at the University of Nairobi, Kenya. *Higher Education Research*, 10(5). 197-204. <https://doi.org/10.11648/j.her.20251005.13>
- Kusnanik, N. W., & Burhan L. I. (2026). Artificial Intelligence-Based Interactive Learning Media for Improving Reading Comprehension in Elementary Education. *CENDEKIA: Jurnal Pendidikan Terintegrasi*, 2(1). 66-87. <https://doi.org/10.63982/cendekia.zvngyi62>
- Lame, G. (2019). Systematic Literature Reviews: An Introduction. *Proceedings of the Design Society: International Conference on Engineering Design*, 1(1). 1633-1642. <https://doi.org/10.1017/dsi.2019.169>
- Lee, Y.-J., Davis, R. O., & Lee, S. O. (2024). University Students' Perceptions of Artificial Intelligence-Based Tools for English Writing Courses. *Online Journal of Communication and Media Technologies*, 14(1), e202412. <https://doi.org/10.30935/ojcm/14195>
- Li, J., Zong, H., Wu, E. et al. (2024). Exploring the Potential of Artificial Intelligence to Enhance the Writing of English Academic Papers by Non-Native English-Speaking Medical Students - the Educational Application of ChatGPT. *BMC Med Educ* 24(1), 736. <https://doi.org/10.1186/s12909-024-05738-y>
- Liu, Y., & Wang, H. (2026). Who on Earth is Using Generative AI? *World Development*, 199. <https://doi.org/10.1016/j.worlddev.2025.107260>
- Lv, Z., & Zhang, L. (2025). Investigating the Effectiveness of Artificial Intelligence in English Listening Teaching: A Case Study of the New Concept English AI. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 20(1), 1-19. <https://doi.org/10.4018/IJWLTT.381303>

- Nurdiana, N., & Pandin, M. G. R. (2021). Industrial Revolution: A History of Industrial Revolution and Its Influence in Manufacturing Companies. *Historia Madania: Jurnal Ilmu Sejarah*, 5(2), 137–151. <https://doi.org/10.15575/hm.v5i2.13063>
- Nurmala, I., Irianto, S., Franchisca, S., Amsa, H., & Susanti, R. (2023). Technology-Enhanced Language Learning: A Meta Analysis Study On English Language Teaching Tools. *Journal on Education*, 6(1). 2188-2195.
- Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021;372:n160. doi: 10.1136/bmj.n160
- Rosdiana, S., Noercolies, M. A., & Fauzan, M. F. (2024). The Use of Artificial Intelligence in Teaching Writing Skills. *EDUCASIA: Jurnal Pendidikan, Pengajaran, Dan Pembelajaran*, 9(1), 45-56. <https://doi.org/10.21462/educasia.v9i1.251>
- Shafiee Rad, H. (2025). Reinforcing L2 Reading Comprehension Through Artificial Intelligence Intervention: Refining Engagement to Foster Self-Regulated Learning. *Smart Learning Environment*, 12(1). 12-23. <https://doi.org/10.1186/s40561-025-00377-2>
- Tahiru, F. (2021) AI in Education: A Systematic Literature Review. *Journal of Cases on Information Technology*, 23(1), 1-20. <https://doi.org/10.4018/jcit.2021010101>
- Tao, Y., & Zou, B. (2023). Students' Perceptions of the Use of Kahoot! in English as a Foreign Language Classroom Learning Context. *Computer Assisted Language Learning*, 36(8), 1668–1687. <https://doi.org/10.1080/09588221.2021.2011323>
- Yu, C., Wu, L., Li, J., & Li, S. (2023). English Listening Teaching Method Under Artificial Intelligence Speech Synthesis Technology. *ACM Transactions on Asian and Low-Resource Language Information Processing*. <https://doi.org/10.1145/3615866>
- Yuan, Y. (2024). An Empirical Study of the Efficacy of AI Chatbots for English as a Foreign Language Learning in Primary Education. *Interactive Learning Environments*, 32(10), 6774–6789. <https://doi.org/10.1080/10494820.2023.2282112>
- Zuwanda M. E., & Pasaribu G. R. (2025). The Application of Deep Learning-Based Artificial Intelligence in Enhancing English Listening and Speaking Skill. *Ontologi: Jurnal Pembelajaran dan Ilmiah Pendidikan*, 3(2), 33-41. <https://doi.org/10.65787/ontologi.v3i2.642>