

Opportunities and Challenges of Using Artificial Intelligence in English Language Teaching (ELT) in Indonesia: A Historical Perspective

Putri Alifia Herdanu¹, Nuke Faradilla Syayyidati Al Haris², M. Busyro Sabaik³

¹English Education, Unisma, Indonesia, ²English Education, Unisma, Indonesia, ³English Education, Unisma, Indonesia.

correspondence: 22201073052@unisma.ac.id

ABSTRACT

This study investigates the historical development, opportunities, and challenges of using Artificial Intelligence (AI) in English Language Teaching (ELT) in Indonesia. Using a qualitative historical approach, the research draws on academic literature, policy documents, and interviews with key informants to trace the evolution of AI tools in ELT from early computer-assisted learning systems to recent AI-driven platforms such as ChatGPT and AI-powered writing assistants. The presence of AI brings two sides. It proposes great opportunities to support English language learning, such as easier access to information, writing assistance, and creating more interactive learning experiences. On the other hand, AI also poses a very serious challenge, including the risk of plagiarism, overdependence, and a decline in students' critical thinking skills. This article aims to analyse: (1) the opportunities of using AI in English language learning in Indonesia, and (2) the challenges faced in its implementation. This study concludes that AI can be an effective tool to support learning when used wisely, but it may also become a serious problem if not accompanied by proper learning guidance and regulations.

Keywords: Artificial Intelligence; English Language Teaching; Opportunities; Challenges; Indonesia

INTRODUCTION

Artificial Intelligence (AI) has been influencing education for decades, from early computer-assisted language learning systems to today's AI platforms like ChatGPT. In Indonesia, this historical shift demonstrates how learning tools have evolved from simple digital dictionaries and e-learning websites to interactive AI-powered applications that can generate text, answer questions, and provide instant feedback. This development is particularly important in English Language Teaching (ELT), where AI offers new ways to support learners in practicing, understanding, and using English more effectively. (BaiDoo-Anu & Owusu Ansah, 2023)

The opportunities of using AI in ELT are clear. Students can access information quickly, improve their writing with AI suggestions, and experience more interactive and personalized learning compared to traditional methods. In fact, in a survey conducted by study.com on teachers in the US, 66% of teachers agreed that by using ChatGPT, they hoped that students would be more helped in the learning process ("ChatGPT in The Classroom," 2023). However, many students prefer it because it is easy to use, supports multiple languages, and gives fast, detailed responses that can guide their learning (Lund & Wang, 2023; Fauzi et al., 2023). For Indonesian students who struggle to learn English and find resources, AI can quickly assist them and provide easy-to-understand methods or approaches.

However, this rapid growth of AI also brings challenges. Concerns about plagiarism, overdependence, and reduced critical thinking skills have become central in discussions among educators (Jarrah et al., 2023; Spennemann, 2023). Teachers worry that students may use AI as a shortcut, relying too easily on it instead of developing their own ideas and creativity (Limna et al., 2023). In a survey conducted by study.com, it was also found that 26% of students were found to have cheated using ChatGPT ("ChatGPT in The Classroom," 2023). At the same time, AI tools do not always produce accurate answers, which can result in misunderstandings among learners if not

used carefully and without teacher guidance (Cotton et al., 2024). These issues show that AI can be both a powerful learning tool and a potential problem, depending on how it is used.

While many previous studies have explored the general advantages and disadvantages of using AI or ChatGPT in education, few have focused specifically on how Indonesian EFL (English as a Foreign Language) learners experience and respond to these tools in real classroom or academic settings. Most existing research, such as BaiDoo-Anu and Owusu Ansah, (2023) and Fauzi et al., (2023), discusses the effectiveness of AI in improving productivity or writing accuracy, but there is still limited investigation into how students actually balance the benefits and risks of AI in their own learning process. This study fills that gap by examining Indonesian learners' perspectives, attitudes, and real practices when using AI tools like ChatGPT to support their English learning. It aims to understand not only the outcomes of AI use but also the ethical awareness, challenges, and learning strategies that students develop through their interaction with AI.

Based on this background, this study looks at the historical development of AI in English teaching in Indonesia and focuses on two main questions: (1) What are the opportunities of using AI in English language learning in Indonesia? and (2) What challenges are faced in its use? By exploring these questions, the research aims to show how AI can help to learning English while also pointing out the risks that come with its use.

LITERATURE REVIEW

Historical Perspective: From CALL to AI in Education

The use of technology in language learning has changed a lot over the years. In the beginning, students used Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) systems. These were early technologies that helped students practice skills such as listening, reading, grammar, and vocabulary. CALL and MALL gave students the chance to study outside the classroom and encouraged independent learning. In Indonesia, these systems played an important role because many learners did not have equal access to English teachers or study materials. CALL and MALL made English learning more flexible and helped students continue practicing English in their free time (Shalini Roy & Gandhimathi, 2025).

As technology continued to grow, new forms of digital learning began to appear. One of the most important changes was the arrival of Artificial Intelligence (AI). Unlike CALL, which only gave exercises, AI can understand students' questions and give personal responses. This shift marks the beginning of a new stage in educational technology. AI-based systems such as Chatbots and Large Language Models (LLMs), including ChatGPT, have become popular tools for students. They can write, explain, translate, and even give feedback on writing (Chen et al., 2024).

In the Indonesian context, ChatGPT helps students by making it easier to find learning materials, create outlines, and understand complex ideas. ChatGPT provides quick answers, supports students in writing academic essays, and helps improve their language structure. Unlike older tools that only gave practice exercises, ChatGPT interacts with students in real time, making the learning process feel more natural and engaging.

This historical development shows a clear movement: from simple computer systems that supported repetitive practice to intelligent tools that simulate human conversation and guidance. In short, AI has brought language learning into a more dynamic and personalized stage, giving learners not just access to information but also the chance to communicate and think critically with the help of technology.

AI in English Language Teaching (ELT)

Artificial Intelligence is now becoming an important part of English Language Teaching (ELT). Many researchers have shown that AI can make learning English more efficient and personalized. According to Tang (2025), AI helps students improve vocabulary, grammar, and writing accuracy by providing instant corrections and suggestions. For example, tools such as Grammarly or ChatGPT can identify mistakes and explain how to fix them immediately, something that teachers often cannot do for every student in a crowded classroom.

In Indonesia, Fauzi et al., (2023) found that ChatGPT increases productivity among university students. It helps them plan, organize, and edit their writing. This shows that AI can act as a virtual assistant in the writing process. ChatGPT helps students by recommending articles and books related to their research topics. ChatGPT gives quick explanations when students have trouble understanding the teacher's material. These examples show that AI tools are not only for information searching but also for developing academic skills. ChatGPT, for instance, helps students practice how to write introductions, paraphrase information, or structure their essays properly. By using AI, students can work more independently and gain confidence in using English.

However, AI cannot completely replace teachers. Even though ChatGPT can provide explanations and corrections, it lacks emotional understanding and human judgment. Students may become too dependent and stop thinking critically if they use ChatGPT without reflection. Therefore, teachers must still guide students and help them use AI wisely. The teacher's role changes from being the main source of information to being a mentor who helps students think critically, check accuracy, and apply ethics in AI use. In other words, AI has opened new opportunities in English education, but it also requires a new way of teaching. Teachers need to combine human instruction with technology to create balanced learning where students use AI to explore ideas but still believe on their own thinking to build knowledge.

Opportunities and Risks of AI Use

The rise of Artificial Intelligence in education gives many opportunities, but it also brings serious challenges. On the positive side, AI tools such as ChatGPT make learning faster, easier, and more interactive. Students can ask questions anytime, get explanations in simple language, and even translate difficult texts. For Indonesian learners who may have limited English exposure or fewer resources, AI helps close the learning gap and provides equal access to quality education (Fauzi et al., 2023). Luo (2024) also mention that ChatGPT's translation feature helps students understand research from other countries, supporting global learning.

Another opportunity is that AI encourages self-directed learning. Students can practice writing or speaking independently without always waiting for a teacher. AI can also provide examples and feedback that help students improve their academic writing. As Huang & Tan, (2023) note, AI helps writers organize their ideas and produce clearer, more structured texts. These benefits show that AI can support both motivation and learning outcomes. However, along with these benefits come several risks. (Jarrah et al., 2023) warn that students might misuse ChatGPT for cheating or plagiarism. Instead of learning, some students copy AI-generated answers and claim them as their own work. Many students use ChatGPT for quick answers without understanding the content, which leads to academic dishonesty. Similarly, relying too much on ChatGPT can make students lose creativity, critical thinking, and problem-solving skills.

To avoid these risks, teachers and schools must establish clear guidelines and supervision. As Yavich, (2025) suggest, educators teach students how to use AI ethically, including how to cite AI-generated information and how to use it for learning, not cheating. Teachers should also check students' work regularly and encourage open discussions about AI use. A classroom that combines human instruction and AI assistance can help students develop digital literacy, critical thinking, and academic honesty.

METHODS

This study used a qualitative historical research design. A historical approach was chosen because the study not only examines current opportunities and challenges of AI in English language teaching (ELT) but also traces how these have developed over time. This method allowed the researcher to look at changes in the use of technology in ELT in Indonesia, starting from early computer-assisted language learning (CALL) tools to modern AI-driven platforms such as ChatGPT.

Data Sources

The data in this study came from three main sources:

1. Academic literature, journal articles, books, and conference papers published between 2021 and 2025 that discuss AI in education and ELT, both in Indonesia and globally. These works provided theoretical insights and evidence of AI's benefits and risks in language learning.
2. Policy documents, regulations, and reports from the Indonesian Ministry of Education, schools, and universities. These helped to understand how AI has been introduced, accepted, or restricted in Indonesian education.
3. Interviews with key informants, semi-structured interviews were conducted with English teachers, lecturers, and students in Indonesia. These interviews gave first-hand perspectives on the opportunities and challenges of AI use in ELT.

Data Collection

- Academic literature was collected through online databases such as Google Scholar, ResearchGate, and Scopus, using keywords like “AI in ELT,” “ChatGPT in Indonesia,” and “AI language learning.”
- Policy documents were gathered from official education websites and institutional archives.
- Interviews were done offline with 2 informants (2 English Lecturer) Interviews lasted about 30–45 minutes and followed open-ended questions to allow detailed answers.

Data Analysis

The data were analyzed using qualitative content analysis. All sources (literature, policy documents, and interview transcripts) were read carefully and coded into themes. The coding focused on two main categories that follow the research questions:

1. Opportunities of using AI in ELT (access to information, writing support, personalized learning).
2. Challenges of AI in ELT (plagiarism, overdependence, accuracy issues, and lack of policies).

The findings from different sources were then compared (triangulation) to ensure validity and to show a clear historical picture of how AI in ELT has developed in Indonesia.

RESULTS AND DISCUSSION

The results are presented based on the two research questions: (1) the opportunities of using AI in English language teaching (ELT) in Indonesia, and (2) the challenges faced in its implementation. Data were taken from literature, policy documents, and interviews with teachers and lecturers.

1. Opportunities of AI in ELT in Indonesia

1.1 Easier access to learning resources

Teachers agreed that AI provides quick and accessible resources. One lecturer mentioned:

“When I prepare materials, I often use Grammarly, ChatGPT, or paraphrasing tools to help me draft case studies or lesson plans. It makes the process faster, but I still check everything manually to make sure it’s correct.”

“I usually use ChatGPT to help me create activities and presentations, especially for speaking classes. Students sometimes use Canva and ChatGPT together to make their slides or to practice conversations”

These comments show how AI helps teachers and students save time and easily access resources that were previously harder to find. This finding supports studies showing that AI expands access to learning and reduces dependency on limited teacher resources (Fauzi et al., 2023)

1.2 Writing assistance

AI tools were especially useful in writing classes. One lecturer explained:

“In writing classes, I ask my students to write manually first. After that, they can use Grammarly Pro or ChatGPT to check and improve their grammar. I always tell them that AI is just a helper, not the brain”

Students were also encouraged to use AI for paraphrasing and checking structure but not for generating full essays. This practice shows how teachers try to guide students toward responsible AI use. It reflects studies that show AI improves writing quality and productivity when applied carefully (Huang & Tan, 2023)

1.3 Personalized and interactive learning

For speaking and listening, lecturers found AI very helpful in giving students practice outside class. One of the lecturers shared:

“Some of my students are shy to talk in class, so I tell them to use Gemini, an AI chatbot, to practice conversations. It helps them gain confidence because they can talk anytime without fear of mistakes.”

Another said:

“I also combine peer feedback and AI feedback. After writing, students exchange papers and check with Grammarly or ChatGPT. It makes the activity more interactive”

These findings align with previous studies showing that AI encourages adaptive, personalized, and interactive learning experiences (BaïDoo-Anu & Owusu Ansah, 2023)

2. Challenges of AI in ELT in Indonesia

2.1 Plagiarism and academic dishonesty

Teachers raised concerns that students often submit AI-generated work without proper understanding. One lecturer said:

“Some students just copy and paste from AI. They don’t even read it. That’s why I now ask them to sign a declaration of ownership before submitting assignments”

This shows how teachers are aware of and actively responding to ethical issues. It also matches global findings that AI increases risks of plagiarism and cheating (Spennemann, 2023)

2.2 Overdependence and decline in critical thinking

Lecturers noticed that students often rely too much on AI instead of developing their own ideas. Lecturer A explained:

“I tell my students to make summaries manually first, then check with AI later. If they use AI too early, they stop thinking critically

Meanwhile, another lecturer shared:

“In debate and linguistics classes, I don’t allow students to use AI. I want to see their originality and how they build arguments themselves

These concerns previous studies, which have warned that overreliance on AI may reduce creativity and critical thinking (Benlidayi, 2024).

2.3 Accuracy and reliability issues

Respondents also discussed the issue of accuracy. One lecturer commented:

“Sometimes the answers from AI are repetitive or wrong. It feels like doing double work because I still have to fix and verify the content, but at least it saves some time compared to starting from scratch”

This shows that although AI speeds up work, it still requires human supervision. This problem is also widely documented in studies about AI *hallucinations* and factual errors (Koo, 2025)

2.4 Lack of readiness and ethical concerns

Both lecturers said that teachers and students in Indonesia are still not fully ready to use AI effectively. Lecturer A shared:

“Technology develops faster than human readiness. Students like to find instant answers. They don’t always want to learn the process”

Lecturer B agreed and added:

“AI is effective for basic speaking and listening practice, but for higher-level tasks like debate or linguistics, I prefer my students to use their own thinking. It depends on the subject and their level”

These comments show that both teachers and students are still learning how to use AI wisely. Many of them need more understanding, time, and training to use AI tools responsibly in the classroom.

This issue is also discussed in the Indonesian government’s new official guide, *Panduan Penggunaan Generative Artificial Intelligence pada Pembelajaran di Perguruan Tinggi* (Direktorat Pembelajaran dan Kemahasiswaan, 2024). The guide explains that AI can make learning more effective, inclusive, and creative, but it also brings risks such as plagiarism, overdependence, and a loss of creativity and critical thinking. It reminds lecturers and students to follow important ethical values such as integrity, honesty, data privacy, transparency, and inclusivity when using AI. Another related government guide, *Panduan Penggunaan Generative Artificial Intelligence (GenAI) pada Pembelajaran di Perguruan Tinggi* (Direktorat Jenderal Pendidikan Tinggi, Riset, dan Teknologi, 2024), also highlights that teachers need training and clear policies before using AI in learning activities.

These findings confirm that while the government has started to provide general guidance, there are still challenges in applying these policies in real classroom situations especially in English language teaching. Similar concerns are found in other studies that call for more teacher training, better ethical awareness, and clear rules for using AI in education.

1. Opportunities: Supporting and Enhancing English Learning

The results show that AI brings several positive impacts to English learning. First, AI helps teachers and students access learning resources more easily. Teachers use tools like ChatGPT, Grammarly, and Canva to prepare materials and design activities faster. This supports earlier studies showing that AI reduces dependence on limited teacher resources and increases access to learning materials (Fauzi et al., 2023; Lund & Wang, 2023).

Second, AI provides writing support that helps students improve grammar, vocabulary, and sentence structure. Teachers in the interviews explained that using Grammarly or ChatGPT after manual writing helps students refine their work and learn from feedback. This agrees with previous research that shows AI can improve writing quality when used as a support tool (Huang & Tan, 2023; Jarrah et al., 2023).

Third, AI encourages more interactive and personalized learning. Students use AI chatbots or tools like Gemini to practice speaking when they have no partners. This helps build their confidence and fluency, supporting findings that AI can adapt to learners' needs and make learning more engaging (BaiDoo-Anu & Owusu Ansah, 2023).

2. Challenges: Ethical, Technical, and Readiness Issues

Even though AI offers many benefits, it also creates new problems. One major issue is plagiarism and academic dishonesty. Many students use AI to write essays or complete assignments without a real understanding. This makes teachers worried about honesty and originality in learning (Spennemann, 2023). Teachers in the interviews have already started to address this problem by asking students to sign honesty statements or combine manual and AI work.

Another challenge is overdependence on AI. Some students rely too much on AI tools and stop thinking critically. Teachers observed that students sometimes prefer AI's instant answers rather than learning the process themselves. This supports other research warning that overusing AI may reduce creativity and analytical thinking.

The accuracy of AI tools is another problem. Teachers shared that AI sometimes produces wrong or repetitive answers, so they still have to check and revise the content. This confirms what other studies call "AI hallucination," where AI gives false or incomplete information (Koo, 2025).

Finally, there is a lack of readiness and clear ethical guidelines. Many teachers and students are still learning how to use AI effectively. Interviewed teachers said that "technology develops faster than human readiness," and that students often use AI only for instant results. These issues are also mentioned in recent government documents such as the *Panduan Penggunaan Generative Artificial Intelligence (GenAI) pada Pembelajaran di Perguruan Tinggi* (Direktorat Jenderal Pendidikan Tinggi, Riset, dan Teknologi, 2024) and the *Panduan Penggunaan Generative Artificial Intelligence pada Pembelajaran di Perguruan Tinggi* (Direktorat Pembelajaran dan Kemahasiswaan, 2024). Both guides recognize AI's benefits but warn about plagiarism, dependence, and the need for ethical awareness.

3. The Need for Balance and Guidance

The findings suggest that AI can be a powerful learning tool, but it must be used wisely. Teachers play a key role in guiding students to use AI responsibly as a helper, not a replacement for human thinking. Students also need to learn how to check AI's accuracy and understand its limits (Yavich, 2025).

At the same time, institutions and policymakers must create clearer rules and training programs to support teachers and students. The government's recent AI guidelines are a good first step, but more detailed and practical instructions are still needed, especially for ELT contexts (Eragamreddy, 2025). As previous research and this study both show, successful AI integration depends on balancing technology with human creativity, ethics, and critical thinking.

CONCLUSION

This study examined the opportunities and challenges of using artificial intelligence (AI) in English language teaching (ELT) in Indonesia through a historical perspective. The findings reveal that AI has developed from early CALL-based systems to advanced generative platforms such as ChatGPT and Grammarly, showing its growing role in reshaping language learning. In terms of opportunities, AI provides easier access to resources, support for writing, and more personalized and interactive learning experiences. These benefits are particularly important in Indonesia, where access to qualified English teachers is still limited. However, the study also found several challenges: plagiarism, overdependence, declining critical thinking, unreliable outputs, and limited teacher readiness. Without proper guidance and policy, these risks may overshadow AI's potential. Overall, the study concludes that AI can be a powerful tool in ELT if used responsibly. It should complement, not replace, human teaching and learning. To maximize benefits, educators need training in AI integration, and students should develop AI literacy to use the technology critically and ethically. Future research could focus on student perspectives and the effectiveness of AI in improving specific English skills, such as writing or

speaking. Studies comparing AI use across different education levels or institutions in Indonesia would also provide valuable insights.

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