

Exploring the Role of Artificial Intelligence in English Teaching

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Abstract

This study explores the role of Artificial Intelligence (AI), specifically ChatGPT, in English language teaching by employing a library research method. The purpose of the research is to examine how ChatGPT supports English as a Second or Foreign Language (ESL/EFL) learners in developing skills such as reading, writing, and autonomous learning. Data were collected from academic journals and research articles published between 2020 and 2025. The findings indicate that ChatGPT contributes significantly to personalized learning, enhances student motivation, and fosters learner autonomy. Moreover, ChatGPT facilitates dynamic and interactive learning experiences in ESL/EFL contexts. However, several challenges were also identified, including ethical concerns, over-reliance on AI tools, and potential misuse in academic tasks. Despite its limitations, ChatGPT shows strong potential as a supplementary tool in modern English classrooms. This research provides valuable insights into the pedagogical implications of AI integration and encourages educators to adopt adaptive strategies that balance technological support with critical human guidance.

Keywords: artificial intelligence, ChatGPT, English language teaching, learner autonomy, library research

Introduction

In recent years, rapid technological advancements have significantly transformed higher education systems worldwide. According to Kingchang et al. (2024), many higher education institutions have begun to provide more flexible forms of information access and learning opportunities, leading to the increasing adoption of digital innovations and technologies. Over the past decade, artificial intelligence (AI) technology has experienced exponential growth, presenting both opportunities and challenges for the development of higher education. At the same time, research on autonomous learning in both formal and informal learning contexts has continued to expand (Wang & Li, 2024). In short, technological advancement has become a key driver in reshaping modern higher education and learning practices.

Artificial intelligence (AI) has increasingly played an important role in transforming learning processes in educational contexts. In learning, AI enables the creation of personalized lessons based on students' prior knowledge and recommends learning content that matches their cognitive levels,

thereby improving learning effectiveness. AI can also provide structured explanations, learning support, and virtual practice tools that allow students to experiment without the need for physical materials or equipment (Lan & Giam, 2024). Fundamentally, AI operates on the principles of autonomy and adaptability, where adaptability refers to the ability to improve performance through experience-based learning, and autonomy refers to completing tasks independently in complex environments. In education, AI-powered technologies can collect and analyze large amounts of data on students' academic performance, enabling the adaptation of learning content, learning paths, and the provision of immediate feedback to support learning development (Alshumaimeri & Alshememry, 2023). In short, AI enhances learning by offering personalized, efficient, and adaptive educational support.

In the era of globalization and rapid technological advancement, education systems are increasingly challenged to move beyond traditional instructional approaches. According to Mageira et al. (2022), conventional teacher-centered learning, which requires students to continuously keep pace with fast-moving curricula, is no longer sufficient to meet the demands of the digital age, where both students and educators must effectively utilize Information and Communication Technologies (ICT). At the same time, global competition requires learners to master foreign languages to access better opportunities in education and employment (Kurniawati & Muthoifin, 2024). In response to these challenges, technological innovations such as AI chatbots have emerged as valuable tools in higher education, particularly in CODEL institutions, by providing continuous, 24-hour access to academic and administrative support services (Mashilo & Shekgola, 2024). In short, integrating digital technologies and AI into education is essential to equip students with the skills needed to compete and succeed in a globalized world.

Based on previous studies, numerous researchers have explored the use of AI tools in teaching English. This growing body of research motivates the present study to further investigate the role of artificial intelligence in English teaching and learning.

Method

This study employed a Systematic Literature Review (SLR) to explore the role of Artificial Intelligence (AI), particularly ChatGPT, in English language teaching and learning. The SLR approach was selected because it enables researchers to systematically identify, evaluate, and synthesize relevant studies in a transparent and replicable manner. As Kitchenham and Charters (2007) explain, a systematic literature review aims to “identify, analyze, and interpret all available evidence related to a specific research question.” This method is particularly appropriate for examining emerging topics such as AI in education, where research findings are rapidly expanding and need structured synthesis (Snyder, 2019).

The data for this study were obtained from secondary sources, including peer-reviewed journal articles and scholarly publications indexed in reputable academic databases such as Scopus, ScienceDirect, ERIC, and Google Scholar. The literature search focused on studies published between 2024 and 2025 to ensure the relevance and currency of the findings. Keywords used in the search

process included *Artificial Intelligence, ChatGPT, English Language Teaching, EFL, ESL, language skills, learner autonomy, and motivation*. Boolean operators were applied to refine the search results. According to Xiao and Watson (2019), a well-planned search strategy is essential to ensure comprehensive coverage and minimize bias in systematic reviews. The data is presented in Table 1.

Table1
Data Source Research

Title	Writers
A Systematic Literature Review: The Trends and Challenges of AI (Chat GPT) for Reading Skills in ELT/L using the HHH Framework	Syafruddin et al. (2025)
The Role of Chat-GPT in Learners' Autonomy: Challenges and Prospects for ESL Learners	Ullah et al. (2025)
Enhancing Writing Skills through Chat GPT: A Literature Review	Susanti et al. (2025)
Innovating education: The impact of artificial intelligence and technology on teaching.	Haq (2025)
Teaching tools based on artificial intelligence to strengthen English language skills.	Núñez-Naranjo et al. (2024)
Navigating the transformative impact of artificial intelligence on English language teaching: exploring challenges and opportunities.	Idham et al. (2024)
Usage of Chat GPT in English as a Foreign Language (EFL) Classrooms: Faculty Member's perspective for its Challenges and Opportunities	Elsaadany (2024)

To ensure the quality and relevance of the reviewed studies, clear inclusion and exclusion criteria were applied. Studies were included if they focused on the use of AI in English language teaching and learning, reported empirical findings or systematic reviews, were published in peer-reviewed journals, and were written in English. Studies that were opinion-based, non-scholarly, or unrelated to educational contexts were excluded. Applying explicit selection criteria is crucial in systematic reviews to enhance validity and reduce subjectivity (Petticrew & Roberts, 2006).

The selected studies were analyzed using qualitative content analysis. This technique was chosen because it allows researchers to systematically examine textual data and identify recurring themes and patterns. As Krippendorff (2018) states, content analysis is a method for making "replicable and valid inferences from texts to the contexts of their use." The analysis process involved data reduction, data display, and conclusion drawing. Relevant information related to AI tools, language skills development, learner autonomy, motivation, teaching effectiveness, opportunities, and challenges was identified and coded. The coded data were then grouped into thematic categories

to facilitate interpretation. This thematic organization enabled the researcher to draw comprehensive conclusions based on consistent patterns across the reviewed studies (Braun & Clarke, 2006).

To enhance the trustworthiness of the findings, the researcher applied consistent analytical procedures and conducted repeated readings of the selected articles. Detailed documentation of the search process, selection criteria, and analytical steps was maintained to ensure transparency and replicability. As emphasized by Lincoln and Guba (1985), systematic procedures and clear methodological descriptions contribute to the credibility and dependability of qualitative research.

Results and Discussion

Based on the qualitative content analysis of studies published between 2024 and 2025, the findings indicate that Artificial Intelligence (AI), particularly ChatGPT, plays a significant role in enhancing English language teaching and learning across various skills and contexts. The reviewed studies consistently report positive impacts of AI on reading, writing, learner autonomy, motivation, engagement, and instructional efficiency in both EFL and ESL settings.

Syafruddin et al. (2025) investigated trends and challenges in using ChatGPT for reading skills in ELT/L through a Systematic Literature Review employing the HHH Framework. The findings revealed that ChatGPT supports reading instruction by offering personalized learning experiences, instant feedback, and interactive reading activities tailored to individual learners' needs. These features help students improve reading comprehension and actively engage with texts.

Ullah et al. (2025) examined the role of ChatGPT in fostering learner autonomy among ESL learners using a mixed-method approach involving 33 students. The study found that ChatGPT enables students to learn independently by providing explanations, practice opportunities, and immediate responses, which contribute to the development of self-directed learning habits and increased learner autonomy.

In the area of writing skills, Susanti et al. (2025) conducted a literature review and reported that ChatGPT positively influences students' motivation to write. AI-assisted writing activities were found to create more engaging and varied learning experiences, reducing classroom monotony and encouraging students to participate more actively in writing tasks.

From a broader educational perspective, Haq (2025) explored teachers' awareness, adoption, and attitudes toward AI in education in Pakistan through a quantitative survey of 189 educators. The findings showed that most teachers perceived AI as beneficial in enhancing student engagement and reducing administrative workload. However, challenges such as limited understanding of AI-supported personalization, insufficient training, high costs, and concerns about creativity were also identified.

Núñez-Naranjo et al. (2024) focused on the use of an AI-based tool repository to strengthen students' four English language skills. The results demonstrated a significant improvement in students' language proficiency, as evidenced by an increase in average scores from the pretest to the posttest, indicating that AI-supported learning activities effectively enhance English learning outcomes.

From the teachers' perspective, Elsaadany (2024) explored the use of ChatGPT in EFL classrooms using an exploratory research design. The findings indicated that ChatGPT can improve teaching effectiveness and learning quality; however, concerns were raised regarding academic integrity, as students may misuse AI tools to complete assignments without sufficient critical engagement.

Similarly, Idham et al. (2024) examined the impact of AI on English language teaching in higher education and found that lecturers widely use AI tools for grammar checking, plagiarism detection, paraphrasing, and literature review. While these tools increase efficiency and accuracy, the study highlighted challenges related to digital literacy and concerns about the future role of English lecturers.

The findings of this systematic review, analyzed through qualitative content analysis, demonstrate that AI has become an influential tool in modern English language teaching. Across the reviewed studies, AI—particularly ChatGPT—was consistently associated with improvements in language skills, learner engagement, and instructional efficiency. These results align with constructivist and learner-centered learning theories, which emphasize personalized learning, active participation, and learner autonomy.

The positive impact of AI on reading and writing skills suggests that AI tools can effectively support both receptive and productive language competencies. Personalized feedback and adaptive learning features allow learners to progress at their own pace, which is especially beneficial in diverse EFL and ESL classrooms. Moreover, the promotion of learner autonomy through AI use reflects a shift from teacher-centered to student-centered learning environments.

From the teachers' perspective, AI offers practical advantages by reducing administrative workload and supporting language accuracy. However, the findings also highlight critical challenges, including ethical concerns, digital literacy gaps, and the potential misuse of AI for academic dishonesty. These challenges suggest that AI integration must be accompanied by clear pedagogical guidelines, ethical frameworks, and continuous professional development for educators.

Overall, the discussion indicates that AI should be viewed as a complementary tool rather than a replacement for teachers. Effective integration depends on balancing technological innovation with human guidance, critical thinking, and responsible use.

Conclusion

Based on the qualitative content analysis of recent studies, it can be concluded that Artificial Intelligence, particularly ChatGPT, has a substantial and positive impact on English language teaching and learning in EFL and ESL contexts. AI supports the development of language skills, enhances learner autonomy and motivation, and improves instructional efficiency for both students and teachers. Despite these benefits, challenges related to digital literacy, academic integrity, cost, and ethical use remain significant concerns. Therefore, AI should be integrated thoughtfully and responsibly as a supportive pedagogical tool. With adequate training, clear ethical guidelines, and

strategic implementation, AI holds strong potential to become a sustainable and transformative component of English language education.

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