Quest Journals Journal of Research in Humanities and Social Science Volume 13 ~ Issue 11 (November 2025) pp: 10-15 ISSN(Online):2321-9467

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Research Paper

The Role of AI in English Language Teaching: An Overview

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ABSTRACT: This paper examines the evolving role of Artificial Intelligence (AI) in English Language Teaching (ELT), highlighting its effectiveness and the barriers to implementing it in classroom settings. With the widespread availability of AI tools, language teachers are revising their roles and adopting new approaches that support customized learning, formative assessment, and student engagement. In fact, this work provides an overview of both the pedagogical potentials and the challenges associated with AI-powered tools integration in English as a foreign language classroom. This overview suggests that employing AI tools yields significant advantages, ranging from enhancing learner-centeredness to offering immediate feedback and improving motivation and engagement. On the other hand, the overview still reveals concerns about teacher preparedness, ethical considerations, and the possible over-reliance on technology. This work concludes by providing recommendations for future research that would provide a deeper understanding of AI integration in ELT which may help shape a more effective and ethical AI-supported English language learning experience.

KEYWORDS: AI tools, integration, implementation, ELT (English language teaching), potentials, and barriers.

Received 21 Oct., 2025; Revised 02 Nov., 2025; Accepted 04 Nov., 2025 © The author(s) 2025. Published with open access at www.questjournas.org

I. INTRODUCTION

Artificial Intelligence (AI) is no longer an innovative concept; it has become an essential component of our everyday lives and has emerged as one of the most transformative technologies of the 21st century, affecting almost every single sector of our society, including healthcare, economics, communication, and, more importantly, education. In this particular sphere, AI is said to reshape how teaching and learning are applied and delivered. In fact, the transformational development of intelligent systems that can analyze large amounts of learner data, tailor instructions according to individual needs, and provide real-time feedback has helped promote customized and more efficient learning experiences [30].

In more particular terms, the incorporation of AI into English Language Teaching (ELT) presents a major shift in teaching methodologies, paving the way for a multitude of opportunities for personalized and efficient teaching and learning. This article delves into the applications of AI in Language teaching, featuring its benefits and challenges and examines how it can enhance a learner-centered approach. Additionally, AI-powered applications have become increasingly popular, offering adaptive and immersive learning experiences, contributing to a more dynamic educational environment.

ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE TEACHING

The basis for the development of AI language learning has been provided by Intelligent Computer Assisted Language Learning (ICALL), which is mainly built on employing AI-powered tools to enhance learner-centric approach. Over the years, Artificial Intelligence technologies have been incorporated in teaching to motivate learners, improve accessibility and enhance the efficiency of teaching and learning. As a result of AI, Natural Language Processing (NLP) has emerged which combines computer science and linguistics to generate human language in a manner that resembles human communication in both spoken and written language. This advanced language learning software develops adaptive learning system with the usage of personalized learning programs such as chatbots, virtual tutors and language learning games.

A myriad of AI-powered tools have been incorporated in English Language Teaching (ELT) which serve as adaptive learning platforms such as Duolingo, Rosetta Stone, Grammarly, Coursera, Linguist, ChatGPT, Quill

DOI: 10.35629/9467-13111015 www.questjournals.org 10 | Page

Bot or Google Assistant. Many such tools provide instant feedback on learners' vocabulary, grammar and pronunciation and helps them develop their language at their own pace independently and efficiently. They offer customized learning to make it more interactive, which contributes to the development of English language proficiency and helps learners in achieving better results. The evolution of AI-driven language tools in education has eliminated traditional methods and introduced modern aspects for future education. This contribution is widely acknowledged in the English Language Teaching field to impart the knowledge to the current generation efficiently. Among AI-based applications that have been used widely in the ELT field are AI-based writing tools, generative AI, Google Translate, Grammarly and ChatGPT.

BENEFITS OF USING ARTIFICIAL INTELLIGENCE IN ELT

AI technologies contribute various teaching and learning materials for both EFL (English as a Foreign Language) and ESL (English as a Second Language). The inclusion of AI Tools in ELT involves various kinds of educational aids which address long-standing challenges of English language.

Adaptive Learning

One of the major contributions of AI is its capability to deliver individualized learning experience. Traditional in-person classes consistently struggle to meet the different needs of learners with varying expertise and cognitive skills. AI bridges this gap through algorithms which examines learners' efficiency, identifies pros and cons, and adjusts the content pace, complexity and teaching techniques to ensure the progress. Therefore, it can be said that 'AI has revolutionized autonomous English Learning' [8].

Effectiveness and Instant Feedback

AI greatly enhances the content pace and effectiveness of English language learning by facilitating instant guidance on extensive language skills, including grammar, vocabulary, writing, pronunciation and fluency [15]. Tools like Grammarly, ELSA Speak and ChatGPT provide instant feedback helping learners to recognize their errors and improve their language skills. Unlike conventional classroom instruction which often delays feedback due to teacher availability. Such tools hasten the learning process and support the development of cognitive skills. This results in a more effective learning, with faster retention and language skills development.

Accessibility

Accessibility is another important advantage of AI in English language learning and teaching. AI-powered tools are often accessible online or as mobile applications to a wider range of learners beyond the restrictions of the classroom environment. This enables learners' flexibility to study at their own convenience in different settings such as at home, while traveling, or in blended learning environments. Moreover, traditional language learning entails a higher financial burden than learning through AI tools which offer free or low-cost services. This accessibility is beneficial for learners in underprivileged communities and developing countries, where education is limited or inaccessible.

Furthermore, AI tools such as Speech recognition and Text-to-speech applications support learners with disabilities by offering multimodal input and output options [4].

Active learning and Motivation

AI-powered tools provide excited and insightful learning experience which is not always possible in conventional classroom environment as the learners' study in large groups. Many interesting educational activities are offered to keep the students engaged and motivated. AI application include gamification, communicative and adaptive challenges, which contribute to enhanced learner engagement. Platform like Conversely, Tutor AI, Duolingo, Lingostar, Talkio AI, Hello Talk, ELSA Speak and Speechling, among others engage gaming applications, monitor progress and reward systems that enhances learner engagement and motivation over the years. These tools educate through personalized instruction, targeted exercises, and real scenarios with the help of virtual assistants, and evaluate learners' speech by comparing their language to those of native speakers. Tools provide instant constructive feedback and ideas for progress in language learning. Moreover, AI-driven systems recognize listening challenges such as speech rates or accent varieties and modify tasks accordingly to ensure listening skill development. To experience real-time communicative scenarios, tools like Job Interview AI and Talk Berry are designed to simulate job interviews or social conversations, with the help of interactive avatars and virtual assistants. These simulations provide low-anxiety environments for practice, specifically effective for learners suffering from glossophobia or anxiety in speaking.

Many AI-powered tools assist learners in their writing tasks such as Grammarly, Language Tool, and ChatGPT, which examines the texts and offer suggestions for improvement in spelling, punctuation, grammar, vocabulary and style. This helps learners produce more polished and academic writing. Writing, a skill that requires mastery of both linguistic accuracy and textual coherence, has greatly benefited from AI-assisted technologies. In reading comprehension practice, many AI tools are adapted like Readlang, ReadWorks or

Newsela, among others to provide reading exercises like gap-fill exercises, flashcards creation, interactive reading games, and quizzes. All these tools enable learners to develop their reading skills and expand their vocabulary in an interactive learning environment. This heightened participation and responsiveness transform inactive learning into active and experiential learning.

Cultural Competence

According to [24], many AI-driven platforms expose learners to a variety of accents, cultural norms, and traditions from several English-speaking countries around the world. Therefore, this exposure helps learners to develop cultural competence in a globalized world.

Support for Teachers

Artificial Intelligence has emerged as a driving force in supporting educators by simplifying various instructional and administrative tasks, thereby enhancing the overall teaching and learning experience. AI language tools offer plenty of opportunities for teachers to boost their competence, productivity, and support in curriculum development and assessment. Tools like Curipod, Eduaide.AI, Open AI, Quizizz, Slidesgo, Canva Magic Write, and many others, facilitate teachers to generate customized lesson plans, high-quality academic materials, and captivating presentations adapted to specific students' needs. This ability greatly improves instructional design efficiency while promoting creativity and innovation in lesson delivery. AI-driven applications also help teachers simplify specific, tedious tasks such as evaluating assessments, creating worksheets, and giving a review. These tools reduce the burden of teachers and allow them to focus more on learner engagement and inventive teaching. This integration of AI into teaching practice thus represents a pivotal step toward more receptive, productive, and learner-centred education.

II. CHALLENGES OF USING ARTIFICIAL INTELLIGENCE IN ELT

However, despite the promising rewards of AI tools' employment in ELT classrooms, a relatively wide range of issues, concerns, and challenges are prominent in academic discourse [4].

Reliability and accuracy

According to [16], AI chatbots have the potential to deliver biased responses or inaccurate information. Similarly, [25] and [27]. emphasized that chatbots may offer engaging and "thought-provoking" responses and disseminate erroneous information or advice, which can mislead learners and thus impede their educational achievement. [2] claimed that in the field of education, it is essential to ensure the reliability and precision of the information provided by chatbots and stipulated that if the training data utilized for developing an AI chatbot contains inherent biases, the chatbot may unintentionally reflect those biases in its outputs, which could manifest as distorted viewpoints, stereotypes, discriminatory language, or biased recommendations. This issue is especially critical within an educational framework.

Fair assessment

A significant challenge that educators encounter when employing AI tools in educational settings is the difficulty in evaluating students' work, especially regarding written assignments or responses. Although AI-generated text detection technology is continuously advancing, it still lacks perfection and can lead to inaccurate evaluations. This situation creates confusion and may question the reliability of the assessment process altogether, which may lead to potential biases. In other words, educators might find it challenging to determine whether the responses originate from the learners themselves or are generated by an AI tool, which can impact the precision of grading and feedback. Such circumstances raise important concerns about academic integrity and equitable assessment practices [1].

Ethical considerations

Many scholars mentioned ethics as one of the challenging issues presented when integrating AI tools in educational settings. More specifically, these ethical concerns are with data privacy, security, and the responsible and serious deployment of artificial intelligence. In fact, such AI tools as chatbots engage with students and collect data during their interactions. This necessitates the establishment of explicit guidelines and protective measures, as called for by scholars such as [19], [25], and [29]. The same idea was articulated by [6] when investigating the pros and cons of AI integration in education.

Reliance on AI and loss of human interaction

As described by [6], the blind dependence on artificial intelligence in education raises apprehensions regarding the potential loss of human interaction. Personalized learning experiences facilitated by algorithms may undermine the vital teacher-student and peer relationships that are essential for comprehensive learning. As such,

social skills, which are depicted as crucial among learners, could be negatively impacted. Furthermore, the growing reliance on technology could exacerbate existing educational inequalities, potentially leaving students unprepared to thrive in a world that necessitates a balance between digital proficiency and interpersonal skills. These issues highlight the necessity of adopting a careful and ethical approach to the integration of AI in education, ensuring that technology serves to enhance rather than supplant the fundamental human elements of the educational experience.

Academic Dishonesty

According to [9], educators, especially at the tertiary level, should embrace the principle of academic integrity to effectively accomplish the task of teaching, learning, and research. However, [5] argued that one of the primary threats to academic integrity arises from the rapid advancement of artificial intelligence systems, capable of generating text and understanding natural language. In recent years, the efficiency and practicality of these AI technologies have improved significantly, enabling them to effectively perform intricate tasks. A notable instance of such AI systems is ChatGPT, which attracted considerable media coverage in November 2022 following the release of its initial research version to the public by its developer, OpenAI. The same authors asserted the existence of a strong correlation between the use of technology and academic dishonesty. In fact, the emergence of AI tools that utilize various language processing models poses a significant threat to academic integrity, potentially resulting in instances of academic misconduct through their text-writing capabilities. In the same respect, [13] explained why many graduates, despite possessing a college degree, struggle to execute essential skills that they were expected to acquire during their education. These skills include effective communication, logical problem-solving, persuasive argumentation, and critical data analysis. Concerns have been raised regarding the potential for fraudulent activities or misuse of AI-driven platforms. Numerous respondents expressed that the extensive functionalities of AI could encourage students to depend excessively on its tools, potentially allowing them to complete nearly all their academic tasks with its help, which could adversely affect their learning outcomes. Additionally, it was pointed out that reproducing ChatGPT's output may result in plagiarism, undermining both the originality and quality of students' work. These issues could collectively lead to diminished creativity, self-sufficiency, and academic skills. Respondents emphasized that the use of ChatGPT might result in a decline in the overall quality of academic work, a decline in innovation and creativity, and widen the disparity between high-achieving and low-achieving students.

III. CASE STUDIES: INTEGRATING AI INTO LANGUAGE CLASSROOMS

According to [26], AI systems provide significant support in the realm of online education, facilitating personalized learning experiences for students, streamlining routine tasks for instructors, and enabling adaptive assessments. Despite the promising prospects of AI, the effects of these systems on the culture, norms, and expectations surrounding interactions between students and instructors remain unclear. In the context of online learning, the interaction between learners and instructors—encompassing communication, support, and presence plays a crucial role in influencing student satisfaction and educational outcomes. Therefore, it is essential to explore how both students and instructors perceive the influence of AI systems in their interactions, as this understanding can help identify any existing gaps, challenges, or barriers that may hinder the effective implementation of AI and compromise the integrity of these interactions. These authors examined the effects of AI on learner-instructor interaction when studying online and utilized Speed Dating with storyboards to analyze the authentic voices of their participants, who were 11 to 12 teachers, regarding various applications of potential AI systems in online education. Their findings indicated that the participants' anticipation of AI systems integration in online education will facilitate personalized interactions between learners and instructors on a large scale, notwithstanding potential threats to social boundaries. They posited that while AI systems have been acknowledged for enhancing both the volume and quality of communication, thus offering timely and tailored support in extensive environments, and fostering a sense of connection, there emerge some concerns and apprehensions regarding issues of responsibility, agency, and surveillance.

In 2022, Akgun and Greenhow conducted a study titled "Artificial Intelligence in Education: Addressing Ethical Challenges in K-12 Settings," which primarily investigated the ethical dilemmas associated with the use of AI applications among K-12 students within educational environments. This study outlined these ethical concerns by introducing concepts related to machine learning and algorithms, while also discussing the advantages of AI systems in enhancing the learning process. Furthermore, it identified the ethical challenges and dilemmas that arise in educational contexts and suggested instructional resources to facilitate AI understanding and integration in education. The authors also investigated the benefits of AI applications in education. In addition, the study delved into the ethical issues and potential risks linked to AI applications, which include privacy violations, surveillance systems that collect data on the behaviours and preferences of students and teachers, predictive systems that might threaten both educators' and learners' autonomy, and significant concerns regarding the reinforcement of bias and social discrimination.

Recently, [28] assumed that AI technology has become a cutting-edge option in academic writing that can improve students' work's productivity and competence. They also believed that students are becoming more interested in and dependent on AI technology to improve the calibre of their academic writing. They researched to elicit ten Indonesian lecturers' views on the employment of AI tools in academic writing and the effects of AI technologies on learning. This study, which was based on the Technology Acceptance Model (TAM), examined attitudes toward usage, intention to use behaviour, perceived usefulness, perceived ease of use, and actual usage. The research findings revealed that the use of artificial intelligence tools offers numerous benefits for lecturers, such as grammar checks, plagiarism detection, suggestions for sentence enhancement, and evaluations of content relevance and structural integrity. Furthermore, while educators welcome the integration of AI technology as an auxiliary resource to enhance the learning and research experience, worries about the possibility that excessive reliance on these tools could hinder college students' capacity for creative and critical thinking.

IV. RECOMMENDATIONS AND INSIGHTS FOR FURTHER RESEARCH

While the integration of artificial intelligence in education has been trendy in recent years, the application of specific AI tools in precise language constructs remains deeply unexplored. This paves the way for more research to be conducted and thus contributes to clearing the image in the language teaching sector. In fact, much of the existing research focuses on general educational technology or on isolated AI tools, such as automated writing assessment or speech recognition, without examining how these tools function as part of a consistent pedagogical approach. Furthermore, studies often prioritize technical performance over pedagogical effectiveness, which leaves long-term language acquisition results, learner engagement, and teacher intervention largely questioned. Empirical studies that examine classroom-based implementations, particularly from the perspectives of language teachers and learners, are highly needed in this respect to address the issues. Furthermore, interdisciplinary research that examines the effectiveness of AI technologies and critically assesses their impact on teaching practices, learner autonomy, and equitable access to high-quality language education is still very limited. Accordingly, more classroom-based research is needed in this respect. Still, the Language teacher's readiness to integrate AI tools into their classrooms is a complex and unevenly addressed challenge in current educational practice. While many teachers recognize the potential of AI to enhance language instruction, some others approach it with too much suspicion and doubt. This may be attributed to a lack of sufficient training, resources, and institutional support to implement these technologies effectively. Authors such as [23] and [10] claimed that teachers frequently feel underprepared to evaluate or use AI tools pedagogically, with concerns ranging from data privacy and ethical implications to fear of being replaced or losing control over the learning process. Moreover, professional development programs rarely include targeted training on AI literacy or critical digital pedagogy, resulting in a knowledge gap that limits meaningful integration. Given the continuous but rapid evolution of AI, nurturing teacher self-confidence and competence via planned training, collaboration with technology experts, and ongoing support will be paramount for successful adoption in language education spheres.

V. CONCLUSION

The advent of Artificial Intelligence into English Language Teaching has become unavoidable; it offers promising rewards on the one hand, but poses complex challenges for educators, learners, and institutions on the other. The considerable benefits AI offers include personalized learning pathways, immediate feedback, increased assessment practices, and, more importantly, enhanced learner engagement. These tools also have the potential to support differentiated instruction, foster learner autonomy, and ease some of the administrative tasks traditionally performed by teachers. Nevertheless, these benefits must be weighed against pressing issues such as data privacy, algorithmic bias, ethical implications, and the possible dehumanization of the learning experience. Furthermore, the lack of appropriate teacher-structured training could hamper and slow down the effective and equitable adoption of these tools in ELT classrooms. Given the progressive evolution of AI, its role in ELT should be guided by sound pedagogical principles, with a focus on supporting—not replacing—the human aspects of language teaching and learning. Overall, the successful implementation of AI in ELT will depend on collaborative efforts among all education stakeholders, including educators, technologists, and policymakers, to ensure that innovation enhances the quality of the educational experience while promoting inclusivity, ethical concerns, and professional development.

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