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AI in English Language Teaching: A Systematic Review of Tools, Opportunities, and Challenges

الذكاء الاصطناعي في تدريس اللغة الإنجليزية: مراجعة منهجية للأدوات والفرص والتحديات

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Abstract

Artificial Intelligence (AI) is rapidly transforming various sectors, with English Language Teaching (ELT) experiencing significant shifts. This paper presents a systematic review, employing a qualitative methodology and thematic analysis of secondary sources including 11 peer-reviewed journal articles and case studies, to explore the integration of AI-powered tools in English language classrooms. The review investigates their capabilities, benefits, challenges, and the resulting pedagogical transformations within ELT. Findings indicate that tools such as Grammarly, ChatGPT, ELSA Speak, and Duolingo substantially enhance English language learning by improving writing accuracy, pronunciation, vocabulary acquisition, and overall language skills. These tools foster personalized, engaging, and flexible learning experiences, promoting learner autonomy, and supporting educators in providing feedback and assisting with lesson planning. However, their integration also presents considerable challenges, including concerns over accuracy and complex linguistic nuances, the risk of over-reliance leading to reduced self-editing and academic integrity issues, the absence of direct human interaction and potential cultural bias, and technical requirements like stable internet access. The paper concludes that while AI tools offer significant potential to complement traditional ELT, their implementation requires careful consideration to mitigate risks such as digital inequalities and potential teacher displacement. Practical recommendations emphasize comprehensive teacher training, seamless curriculum integration, ensuring equitable access, establishing ethical guidelines for data use, and conducting essential longitudinal and experimental research to understand long-term impacts on teacher-student dynamics and learning outcomes.

Keywords: Artificial Intelligence, English Language Teaching, Personalized Learning, Pedagogical Shifts, AI-powered Tools

الملخص

يحدث الذكاء الاصطناعي (AI) تحولاتٍ جذريةٍ وسريعةٍ في قطاعات مختلفة، ولا سيما في مجال التعليم، وخاصة في تعليم اللغة الإنجليزية. حيث تقدم هذه الورقة البحثية مراجعةً منهجيةً، باستخدام منهجية نوعية وتحليلٍ موضوعيٍ للمصادر الثانوية، بما في ذلك احد عشرة مقالة علميةً مُحكمةً ودراسةً حالةً، لاستكشاف دمج الأدوات المُدعمة بالذكاء الاصطناعي في فصول تدريس اللغة الإنجليزية. وتبحث المراجعة في إمكانياتها وفوائدها وتحدياتها، بالإضافة إلى التحولات التربوية الناتجة عنها في تعليم اللغة الإنجليزية. وتشير النتائج إلى أن أدوات مثل ChatGPT وGrammarly وDuolingo وELSA Speak تحسّن بشكلٍ كبير تعلم اللغة الإنجليزية من خلال تحسين دقة الكتابة والنطق واكتساب المفردات والمهارات اللغوية العامة. وتعزز هذه الأدوات تجارب تعليمية شخصية وتفاعلية مرنّة، مما يُعزّز استقلالية المتعلم، وكذلك تدعم المعلمين في تقديم الملاحظات والمساعدة في تخطيط الدروس. ومع ذلك، يطرح دمجها تحديات كبيرة، تشمل مخاوف بشأن الدقة والفارق اللغوي المعقّد، وخطر الاعتماد المفرط الذي يؤدي إلى انخفاض في التحرير الذاتي ومشاكل تتعلق بالنزاهة الأكاديمية، وغياب التفاعل البشري المباشر واحتمالية التحيز النفافي، وكذلك المتطلبات التقنية كالوصول إلى إنترنت مستقر. وتخلص الورقة إلى أنه على الرغم من أن أدوات الذكاء الاصطناعي تقدم إمكانات كبيرة لتكمّلة أساليب تعليم اللغة الإنجليزية التقليدية، إلا أن تطبيقها يتطلب دراسة متأنيّة للحد من مخاطر مثل النقاوتات الرقمية واحتمالية نزوح المعلمين. وتشدد التوصيات العملية على التدريب الشامل للمعلمين، والتكامل السلس للمناهج الدراسية، وضمان الوصول العادل، ووضع مبادئ توجيهية أخلاقية لاستخدام البيانات، وإجراء بحوث طولية وتجريبية أساسية لفهم الآثار طويلة المدى على ديناميكيات العلاقة بين المعلم والطالب ونتائج التعلم.

الكلمات المفتاحية: الذكاء الاصطناعي، تدريس اللغة الإنجليزية، التعلم الشخصي، التحولات التربوية، الأدوات التي تعمل بالذكاء الاصطناعي.

1. Introduction

The global spread of English as the primary language of international communication, business, and technology has increased the demand for efficient English language instruction worldwide. English language learners (ELLs) are seeking tools that facilitate language acquisition and learning in meaningful ways. In this context, AI represents a significant advancement, offering innovative solutions to traditional challenges faced by language educators. Abolkasim, E., & Hasan, M. (2024) and Ouyang, F., et al. (2024) stated that AI can provide personalized learning experiences, automated real-time feedback, and foster learner autonomy, thus reshaping instructional methodologies and creating opportunities for dynamic, learner-centered teaching practices (Dornburg, A., & Davin, K. 2024).

Despite the increasing incorporation of AI in ELT, a significant gap persists in empirical research evaluating the long-term pedagogical effectiveness and impact on student outcomes. While many studies investigate individual tools and their immediate benefits, broader implications for teaching practices, curriculum design, and student-teacher relationships require comprehensive analysis. Teachers often face challenges in effectively integrating AI into their classrooms while maintaining essential human elements.

Thus, this paper aims to identify and categorize commonly used AI tools in the English language classroom, assessing their advantages and limitations from the perspectives of both teachers and learners. The research seeks to investigate how their adoption is shifting traditional teaching practices and pedagogical approaches. To address these aims and the identified research gaps, this paper employs a systematic review, utilizing a qualitative methodology and thematic analysis of 11 secondary sources, including peer-reviewed journal articles and case studies. This comprehensive synthesis uniquely contributes by offering a balanced perspective on AI's transformative potential in ELT, and outlining

critical implications for instructional design and educator training, specifically addressing the need for understanding long-term impacts and teacher-student dynamics.

To achieve these aims, the paper seeks to answer the following research questions:

- 1-What are the major AI-powered tools used in English Language Teaching?
- 2-How do these tools benefit both English language learners and teachers?
- 3-What limitations do teachers and learners encounter when integrating AI tools in ELT environments?
- 4- How is the adoption of AI tools changing traditional teaching practices, and what challenges does this present?

This paper is structured to comprehensively address these questions and aims. Following this introduction, Section 2 provides a literature review, offering definitions of AI and its application in education (AIED). Section 3 details the systematic review methodology employed, including the selection of secondary sources and thematic analysis approach. Section 4 presents a systematic review of specific AI tools in ELT, examining the capabilities, benefits, and challenges of Grammarly, ChatGPT, Duolingo, and ELSA Speak. Section 5 discusses the results, analyzing the key AI tools and their benefits, associated challenges and limitations, and their transformative impact on ELT. Finally, Section 6 concludes the paper with a summary of findings, highlighting existing research gaps and offering practical recommendations for the effective and ethical integration of AI in language education.

2. Literature Review

2.1 Defining AI

Artificial Intelligence (AI) is broadly defined as the ability of technology, especially computer systems, to replicate human intelligence processes (Verma et al., 2024). This includes a variety of abilities like learning, reasoning, problem-solving, perception, and self-correction (Degni, 2024; Chatterjee, 2024). According to Copeland (2025), AI is characterized by the capacity of computers or computer-controlled robots to perform cognitive tasks typically associated with intelligent humans. These machines can be further enhanced to develop superior traits such as reasoning, analytical capabilities, and generalization.

AI is a comprehensive concept that encompasses a number of subfields, including natural language processing (NLP), machine learning, and deep learning. (Coursera, 2024). Moreover, UNICEF (2021) describes AI as “machine-based systems that can, given a set of human-defined objectives, make predictions, recommendations, or decisions that influence real or virtual environments. AI systems interact with us and act on our environment, either directly or indirectly. Often, they appear to operate autonomously, and can adapt their behaviour by learning about the context.” (p. 16).

These definitions provide a nuanced understanding of AI, capturing its essence as a dynamic and evolving field that aims to replicate human intelligence while also emphasizing its potential for autonomous operation and contextual learning.

2.2 AI in Education (AIED)

Artificial Intelligence in education (AIED) represents a transformative integration of AI technologies into educational settings, with the aim of enhancing learning experiences, tailoring teaching to individual needs, and optimizing the management of educational institutions (Degni, 2024). This integration includes a number of technologies, such as natural language processing (NLP) and machine learning, and data analytics. These tools enable personalized instruction, automate routine tasks such as grading, and provide targeted feedback to learners (Holmes et al., 2019).

In the context of English Language Teaching (ELT), AI tools support language production (writing and speaking), comprehension (listening and reading), as well as grammar and pronunciation correction (Patel, 2024). Essentially, AI seeks to replicate human cognitive functions in machines, and when applied to education, it aims to revolutionize traditional teaching methods. By offering tailored, efficient, and inclusive learning experiences, AIEd not only enhances student engagement but also streamlines administrative tasks and provides valuable data-driven insights to educators (Degni, 2024; Patel, 2024).

3. Method

This research employs a systematic review, synthesizing data from 11 secondary sources, including peer-reviewed journal articles, and case studies. A thematic analysis was performed to identify key trends, benefits, challenges, and pedagogical shifts associated with AI integration in ELT. These articles include: “Analyzing Grammarly software for corrective feedback: Teacher’s perspective on affordances, limitations and implementation” by Bulatović, Mirović, and Kaurin (2024), “Investigating the effect of Grammarly on enhancing writing skills” by Wenxun, Yunus, and Ismail, (2025), “Integrating ChatGPT in education and learning” by Abolkasim & Hasan, (2024), “ChatGPT for Language Teaching and Learning” by Kohnke, Moorhouse, and Zou, (2023), “ChatGPT-Assisted Language Learning and Teaching: A Scoping Review of Research on ChatGPT Use in L2 Pedagogy and Education.” by Azadnia, (2024), “Contemporary language teaching and learning with ChatGPT” by Kartal, (2023), “Duolingo as an Educational Language Tool” by Habibie, (2020), “The effects of Duolingo on EFL learners’ willingness to communicate and engagement in online classes” by Ouyang, Jiang, and Liu (2024), “Using Duolingo in teaching and learning vocabulary: A systematic review” by Rouabchia and Kheder (2024), “The use of ELSA Speak as the pronunciation learning tool for students” by Indriyani, Faizah, Khasanah, and Rahmatika, (2024), and “The use of ELSA Speak as a Mobile-Assisted Language Learning (MALL) tool” by Sholekhah and Fakhrurriana (2023)

4. Systematic review of AI Tools in ELT

The integration of AI in ELT has garnered significant attention, reflecting its transformative potential in educational practices. This systematic review synthesizes a number of published papers include, recent studies and systematic literature reviews on various AI-powered tools such as Grammarly, ChatGPT, ELSA Speak, and Duolingo, examining their capabilities, benefits, challenges, and pedagogical implications.

Grammarly is one of the most discussed AI applications in ELT. It is a grammar checker and proofreading software that utilizes cutting-edge technologies like artificial intelligence (AI), machine learning, deep learning, and natural language processing to analyze written content (Bulatović et al., 2024). It identifies and provides real-time feedback on errors related to spelling, punctuation, grammar, sentence structure, clarity, cohesiveness, fluency, and vocabulary (Bulatović et al., 2024).

Bulatović, Mirović, and Kaurin (2024) examined Grammarly's effectiveness for ESL writing from a teacher's viewpoint, focusing on its strengths, weaknesses, and practical use in teaching engineering students at the University of Novi Sad. They analyze 35 essays corrected by both a teacher and Grammarly, categorizing correction discrepancies into five groups, highlighting Grammarly's limitations in error identification and correction. The study found that none students used Grammarly, despite its easy availability. Five key discrepancies were identified between Grammarly's suggestions and teacher corrections: teacher oversight (missed punctuation and spelling), unnecessary corrections suggested by Grammarly, incorrect corrections (false identifying subject-verb agreement), failure to identify errors (misused idioms and structural issues), and instances where Grammarly identified errors but did not

provide correct suggestions. Overall, the study concluded that while Grammarly effectively detects basic writing issues like spelling and punctuation, its limitations are evident with complex sentence structures, making teacher feedback essential for more nuanced writing challenges. (Bulatović et al., 2024).

A systematic literature review by **Wenxun, Yunus, and Ismail, published in (2025)**, investigated the effects of Grammarly on improving writing skills in English Language Teaching (ELT) contexts from 2020 to 2024. The review aims to discuss Grammarly's integration into ELT approaches, its impact on student writing, teachers' and students' attitudes toward the tool, and identified challenges. The methodology strictly followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. This involved a systematic process of identification, screening, and assessing the eligibility of articles sourced from Scopus and Web of Science databases, ultimately including 27 relevant articles for the final review. The findings indicated a generally positive impact of Grammarly on students' writing skills. For RQ1, it was integrated as a supplement, independent learning tool, and part of blended learning, providing continuous feedback across various contexts. For RQ2, Grammarly significantly improved writing accuracy, lexical richness, and coherence, enhancing overall writing quality. RQ3 revealed that both teachers and students had positive attitudes towards Grammarly, valuing its fast and comprehensive feedback, though concerns about overdependence were noted. RQ4 identified challenges such as reduced self-editing skills, limitations in addressing complex writing issues, and variability in feedback quality. The review recommended balancing Grammarly's use with traditional instruction to promote independent writing skills (Wenxun et al., 2025).

ChatGPT (Generative Pre-trained Transformer) is an AI-powered conversational model developed by OpenAI and released in November 2022, leveraging advanced AI techniques like natural language processing, machine learning, and deep learning (Abolkasima & Hasan, 2024; Alsayd et al., 2025; Azadnia, 2024; Kartal, 2023; Kohnke et al., 2023). It is designed to simulate human-like conversations, generate diverse text, and offer personalized, interactive learning experiences (Abolkasima & Hasan, 2024; Azadnia, 2024; Kartal, 2023; Kohnke et al., 2023).

Abolkasim and Hasan (2024) assessed the integration of ChatGPT into Libyan universities, identifying benefits and challenges of adopting this AI technology in education. Utilizing an online questionnaire with over 1,000 participants, the study analyzes readiness and proposes guidelines for effective integration. The study found no statistically significant differences in views based on age, gender, or status, indicating widespread acceptance for ChatGPT integration. However, the excessive dependence on AI technologies was cited as a major worry, which could potentially lead to laziness and compromise academic integrity and creativity, especially among students. The study concluded by emphasizing the critical need for establishing rules and regulations for the ethical utilization and integration of AI tools like ChatGPT in educational settings.

Kohnke, Moorhouse, and Zou (2023) explored ChatGPT's application in lesson planning, and published an article entitled "ChatGPT for Language Teaching and Learning" This review explored the capabilities and challenges of ChatGPT in language education. The review highlighted ChatGPT's strengths in supporting language acquisition by generating diverse text types, creating vocabulary notes, and facilitating grammar and writing practice. However, it also raised concerns about academic integrity, accuracy, and cultural bias, particularly its potential to mislead younger learners. Additionally, issues of over-reliance on AI tools and the need for critical digital competencies among teachers and students were emphasized to ensure ethical and effective use in educational contexts.

Azadnia (2024) conducted a scoping review on ChatGPT entitled "ChatGPT-Assisted Language Learning and Teaching: A Scoping Review of Research on ChatGPT Use in L2 Pedagogy and Education"

This scoping review analyzed existing literature on ChatGPT's complementary use in second/foreign language (L2/FL) education, mapping the research scope and chief outcomes into "favorable consequences" and "repercussions". Results revealed that ChatGPT has positively impacted writing skills, including topic planning, coherence, and language evaluation, while also enhancing reading, comprehension, vocabulary, and pronunciation. It supports innovative teaching methods like flipped instruction and aids teachers in lesson planning. Moreover, ChatGPT fosters engagement, critical thinking, and digital literacy, promoting motivation and autonomy in learners. However, ethical concerns arise regarding academic integrity and potential job displacement for language teachers. Additionally, technical challenges include generating contextually unreliable data and lacking human-like understanding, which can inhibit independent language production.

A comprehensive review carried out by **Kartal (2023)** explored both the potential and challenges of ChatGPT in the context of language learning. The paper synthesized existing literature to highlight ChatGPT's capabilities, benefits for language acquisition, and limitations, including issues of accuracy and over-reliance in educational contexts. The review identified several advantages of ChatGPT in language acquisition, including its ability to generate diverse text genres, enhance vocabulary understanding, and provide interactive dialogue simulations tailored to different proficiency levels. It offers 24/7 availability for personalized learning experiences, aiding in pronunciation practice and study planning. However, significant limitations were also noted, such as concerns over academic integrity, plagiarism, and answer accuracy. Cultural bias and a lack of genuine interactivity were highlighted, along with the risk of over-reliance on AI, potentially diminishing essential human interaction in language learning. The authors emphasized that educators and students must possess critical digital competency to ensure that AI tools complement rather than replace human-centered instruction.

Duolingo is another prominent, widely popular, AI-integrated mobile application designed to make language learning free, enjoyable, and accessible through its game-based interface (Habibie, 2020; Ouyang et al., 2024; Rouabchia & Kheder, 2024; Smith et al., 2024). It offers various language courses, providing interactive exercises for vocabulary, grammar, and speaking practice (Habibie, 2020; Rouabchia & Kheder, 2024).

Habibie (2020) conducted a study entitled "Duolingo as an Educational Language Tool". This qualitative study investigated the effect of the Duolingo application on 40 English department students' motivation to learn English. The findings showed that Duolingo effectively enhanced students' motivation to learn English. Prior to its use, motivation levels were already high, with enthusiasm at 86%, desire to learn at 89%, and attitudes at 82%. After just three days of using the app, enthusiasm increased by 12%, desire by 15%, and attitudes by 11%. Students appreciated Duolingo's interesting, flexible, and practical approach, especially its vocabulary and grammar content. While some still favored traditional instruction, 70% of interviewed students found Duolingo more effective than direct teacher-led learning. The study concluded that Duolingo fosters independent learning, boosting comfort and motivation in daily language activities.

A quasi-experimental study by **Ouyang, Jiang, and Liu (2024)** investigated how Duolingo affects the communication and participation of EFL students in online courses at Hunan International Economics University. Using a pretest/posttest design with quantitative and qualitative data from 80 students, the study fills a literature gap regarding Duolingo's specific effects on student interaction and participation. The pre-test results indicated no significant differences in engagement between the control and experimental groups, showing initial homogeneity. However, post-test results revealed that the experimental group using Duolingo had significantly higher levels of engagement across all dimensions: affective, cognitive, behavioral, and total engagement. Additionally, there were marked increases in

willingness to communicate in speaking, reading, writing, comprehension, and overall WTC. The study concluded that Duolingo effectively enhances learners' engagement and communication willingness, supporting its integration into language learning.

Rouabchia and Kheder (2024) presented a systematic review analyzing Duolingo's effectiveness for vocabulary development in L2 contexts. The review synthesized findings from empirical studies published between 2018 and 2020, comparing Duolingo with traditional methods and exploring its effects on learner motivation and classroom integration. The review highlighted that Duolingo facilitates significant gains in receptive vocabulary knowledge, often outperforming traditional methods. Students using Duolingo consistently achieved higher vocabulary scores, particularly those with below-average English proficiency. The app's motivational appeal, gamified interface, and interactive elements enhanced learner engagement, leading to increased comfort and enjoyment. However, challenges such as maintaining motivation over time and discrepancies between perceptions and actual usage were noted. The review recommended using Duolingo as a supplementary tool, emphasizing the need for instructor guidance to optimize learning outcomes. Limitations included short durations of intervention, limited sample sizes, and a reliance on stable internet access.

ELSA Speak, ELSA Speak, an acronym for "English Language Speech Assistant," is a mobile application that utilizes Artificial Intelligence (AI) and automatic speech recognition (ASR) technology to aid non-native speakers of English in enhancing their pronunciation and speaking abilities by providing instant feedback (Indriyani et al., 2024; Sholekhah & Fakhrurriana, 2023). This digital tool enables users to practice various aspects of English pronunciation, from individual words to intonation patterns.

A qualitative study entitled "The use of ELSA Speak as the pronunciation learning tool for students" by **Indriyani, Faizah, Khasanah, and Rahmatika (2024)** evaluated ELSA Speak's effectiveness in improving English pronunciation skills among students at UIN Prof. K. H. Saiffuddin Zuhri Purwokerto, Indonesia. Through interviews and pronunciation tests, the qualitative study assesses students' perceptions and skill enhancement after using the application (Indriyani et al., 2024). The findings revealed that 70% of students found Elsa Speak helpful for improving pronunciation and considered it interesting. The app offers feedback through grades or stars, enhancing students' preparedness for academic challenges. Regarded as a comprehensive English learning tool, Elsa Speak provides fast feedback and various exercises, making it ideal for beginners and tailored learning styles. Advantages include its accessibility anytime and anywhere, time-saving features, personalized exercises, and immediate feedback for quick corrections. However, disadvantages were noted, such as limited feedback variety, the need for a good internet connection, lack of direct human interaction, and limitations in correcting intonation and accent. Overall, it presents a mixed but promising tool for language learners.

A library research study by **Sholekhah and Fakhrurriana (2023)** explored the use of ELSA Speak as a Mobile-Assisted Language Learning (MALL) tool for improving EFL students' pronunciation. This qualitative study employed library research to explore its features and effectiveness, discussing best practices and limitations in pronunciation acquisition contexts. The findings indicated that ELSA Speak is an effective tool for improving pronunciation skills, thanks to its engaging features like automatic speech recognition (ASR) for instant feedback and a gamified design. Key benefits include interactive tasks that motivate students with rewards and leaderboards, and a pedagogical approach that addresses pronunciation challenges through contrasting sounds and phonetic guidance. The gamified learning environment fosters competition and enjoyment, while ASR offers immediate, customizable feedback on pronunciation issues. The app provides a safe, non-judgmental space for users to practice confidently and receive personalized advice targeting specific difficulties. Its flexibility with bite-sized courses and a user-

friendly interface supports self-paced learning. The study concluded that ELSA Speak holds significant potential for helping non-native English speakers enhance their pronunciation skills.

5. Results and Discussion

The integration of Artificial Intelligence (AI) tools in English Language Teaching (ELT) encompasses applications such as Grammarly, ChatGPT, Duolingo, and ELSA Speak, which offer significant benefits for both learners and educators while also introducing notable challenges.

5.1 Key AI Tools and Their Benefits

These AI tools have demonstrated a positive impact on diverse language skills and pedagogical approaches. Grammarly improves writing accuracy, lexical richness, and coherence, effectively detecting basic errors like spelling and punctuation (Bulatović et al., 2024; Wenzun et al., 2025). Similarly, ChatGPT enhances writing skills, including topic planning, coherence, and language evaluation (Azadnia, 2024).

ELSA Speak, leveraging AI and automatic speech recognition (ASR), provides instant feedback on various aspects of English pronunciation, from individual words to intonation patterns, thereby enhancing students' skills and preparedness (Indriyani et al., 2024; Sholekhah & Fakhrurriana, 2023). ChatGPT also supports pronunciation practice (Azadnia, 2024; Kartal, 2023). Duolingo has been shown to increase learners' willingness to communicate in speaking, alongside reading, writing, and comprehension (Ouyang et al., 2024).

Duolingo facilitates substantial gains in receptive vocabulary knowledge, sometimes surpassing traditional methods, especially for students with below-average English proficiency, and its vocabulary content is appreciated by students (Habibie, 2020; Rouabchia & Kheder, 2024). ChatGPT aids in enhancing vocabulary understanding and creating vocabulary notes (Azadnia, 2024; Kartal, 2023; Kohnke et al., 2023).

AI tools boost learners' motivation and engagement, particularly through gamified designs and interactive elements found in Duolingo and ELSA Speak (Habibie, 2020; Ouyang et al., 2024; Rouabchia & Kheder, 2024; Sholekhah & Fakhrurriana, 2023). ChatGPT also fosters engagement, critical thinking, digital literacy, and promotes motivation and learner autonomy (Azadnia, 2024). These tools offer personalized, flexible, and self-paced learning experiences available 24/7, often with bite-sized courses and user-friendly interfaces (Kartal, 2023; Indriyani et al., 2024; Sholekhah & Fakhrurriana, 2023).

For educators, these tools provide fast and comprehensive feedback, which can supplement traditional instruction (Wenzun et al., 2025). ChatGPT, in particular, supports innovative teaching methods such as flipped instruction and assists in lesson planning (Azadnia, 2024; Kohnke et al., 2023).

5.2 Challenges and Limitations

Despite their numerous benefits, the integration of AI tools presents several challenges that both teachers and learners encounter. A primary concern revolves around accuracy and the ability to address complex linguistic nuances. Grammarly, while effective for basic errors, struggles with complex sentence structures, often providing unnecessary or incorrect corrections and failing to identify sophisticated errors like misused idioms or structural issues (Bulatović et al., 2024; Wenzun et al., 2025). ChatGPT raises concerns about answer accuracy, its potential to generate contextually unreliable data, and a lack of genuine human-like understanding (Azadnia, 2024; Kartal, 2023; Kohnke et al., 2023). ELSA Speak, despite its strengths, has limitations in correcting intonation and accent and offers a limited variety of feedback (Indriyani et al., 2024).

Another significant issue is the risk of over-reliance and its implications for academic integrity and skill development. Concerns have been repeatedly raised that excessive dependence on AI technologies could lead to student laziness, reduce self-editing skills, and compromise academic integrity and creativity (Abolkasim & Hasan, 2024; Azadnia, 2024; Kartal, 2023; Kohnke et al., 2023; Wenzun et al., 2025). Plagiarism is also a recognized risk associated with tools like ChatGPT (Kartal, 2023).

The absence of human interaction and potential for cultural bias are also noted. ELSA Speak's lack of direct human interaction is seen as a disadvantage (Indriyani et al., 2024). ChatGPT has been highlighted for exhibiting cultural bias and a lack of genuine interactivity, which could diminish the essential human interaction crucial for language learning (Kartal, 2023; Kohnke et al., 2023).

Furthermore, technical challenges such as the need for a stable internet connection are a practical limitation for tools like ELSA Speak and Duolingo (Indriyani et al., 2024; Rouabchia & Kheder, 2024). Other limitations include the difficulty in maintaining student motivation over extended periods when using Duolingo, potential job displacement for language teachers due to ChatGPT, and methodological limitations in some studies, such as small sample sizes and short intervention periods (Azadnia, 2024; Rouabchia & Kheder, 2024).

5.3 Transformative Impact on ELT and Recommendations

The adoption of AI tools is transforming traditional teaching practices, integrating them as supplements, independent learning tools, or components of blended learning approaches, thereby offering continuous feedback across various contexts (Wenzun et al., 2025). This shift promotes personalized and self-paced learning, moving away from uniform instruction (Kartal, 2023; Indriyani et al., 2024; Sholekhah & Fakhrurriana, 2023). Teachers' roles are evolving to focus on guiding students in effective tool usage and addressing complex linguistic issues that AI cannot resolve (Azadnia, 2024; Kohnke et al., 2023).

5.4 To address the challenges, several recommendations are highlighted:

To address the challenges associated with integrating AI tools in education, several key recommendations emerge. First, it is essential to balance AI usage with human interaction to prevent students from becoming overly dependent on these technologies, which can erode self-editing and critical thinking skills. AI tools should complement, rather than replace, essential human-centered instruction and teacher feedback, particularly for complex language challenges (Abolkasim & Hasan, 2024; Azadnia, 2024; Bulatović et al., 2024; Kartal, 2023; Kohnke et al., 2023; Rouabchia & Kheder, 2024; Wenzun et al., 2025). Second, maintaining academic integrity is critical. Establishing clear rules and regulations for the ethical utilization of AI tools, such as ChatGPT, is necessary to prevent issues like plagiarism (Abolkasim & Hasan, 2024; Kartal, 2023). Lastly, developing digital competencies among both educators and learners is vital for effective and ethical AI use (Kartal, 2023; Kohnke et al., 2023). This ensures that AI tools enhance learning without compromising core educational values. The findings underscore the importance of integrating tools like Grammarly and Duolingo as supplements to traditional instruction, promoting independent writing skills while ensuring that teacher feedback remains central to addressing nuanced writing challenges (Bulatović et al., 2024; Wenzun et al., 2025; Rouabchia & Kheder, 2024).

6. Conclusion and Recommendations

The incorporation of AI-powered tools into English Language Teaching (ELT) is bringing about significant pedagogical changes, transforming traditional classroom dynamics and the essence of language acquisition. This shift has the potential to greatly improve both the learning experience and the effectiveness of teaching practices. Tools like Grammarly, ChatGPT, ELSA Speak, and Duolingo offer

students personalized feedback, real-time language practice, and engaging learning environments, thereby promoting learner autonomy, providing more tailored feedback than traditional methods, and reshaping the teacher's role into that of a facilitator.

However, their implementation needs to be handled carefully, as these powerful resources for enhancing language skills also come with notable challenges. Such challenges include concerns over accuracy and the handling of complex linguistic nuances (e.g., Grammarly's limitations with complex sentence structures and ChatGPT's potential for contextually unreliable data), the critical risk of over-reliance leading to reduced self-editing and academic integrity issues (as noted with ChatGPT), the imperative to address digital equity concerns, and the absence of nuanced human interaction (highlighted as a disadvantage for ELSA Speak and ChatGPT).

Therefore, the integration of AI in language education should not replace the indispensable role of human teachers, but rather complement their work, allowing for a more dynamic, student-centered classroom environment while preserving the critical human element in providing contextualized feedback, fostering genuine interaction, addressing complex linguistic and cultural nuances, and nurturing critical thinking skills.

This systematic review, while synthesizing current knowledge, underscores that a significant gap persists in empirical research. Most existing studies on AI tools in ELT focus on isolated tools and short-term effects. There is a lack of longitudinal research that evaluates the long-term impact of AI tools on students' language skills, academic performance, and social engagement. Furthermore, studies often neglect the complex dynamics of teacher-student interactions in AI-enhanced environments, an area that warrants further exploration. This highlights the necessity for a foundational shift in future research methodologies to fully grasp AI's enduring effects.

Based on the findings of this research, the following recommendations can be made:

Firstly, one of the most pressing needs is for comprehensive teacher training programs focused on AI tools. Teachers should be equipped with the skills necessary to use AI tools effectively in the classroom and guide students in utilizing them responsibly. Continuous professional development can also help educators stay updated on the latest technological advancements and AI applications in ELT.

Secondly, AI tools should be seamlessly integrated into existing curricula, complementing traditional teaching methods rather than replacing them. This could involve the use of blended learning models where AI tools are used alongside face-to-face instruction to provide more personalized learning experiences.

Thirdly, to avoid exacerbating digital inequalities, governments and educational institutions should invest in ensuring equitable access to technology. This could include providing low-cost or free access to AI tools, internet infrastructure, and devices for students in underserved regions.

Fourthly, as AI tools collect vast amounts of data on learners, institutions must establish ethical guidelines to ensure the responsible use of AI. These guidelines should address issues such as data privacy, the risk of AI biases, and the potential misuse of learner data.

Fifthly, longitudinal and experimental studies are essential to understanding the long-term effects of AI tools on language learning outcomes. Research should focus on assessing the cumulative impact of AI on learners' language acquisition, cognitive skills, and motivation over extended periods. Additionally,

more research should examine the social and psychological implications of AI use in ELT, including how these tools affect teacher-student dynamics and classroom interaction.

By addressing these challenges and thoughtfully leveraging AI's strengths, the ELT community can cultivate a dynamic, effective, and ethically sound learning environment that not only equips students for success in a world that is growing increasingly digital but also ensures the sustainable and equitable development of human linguistic and communicative capabilities.

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