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Artificial Intelligence in EFL Reading Instruction: A Systematic Literature Review

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ABSTRACT

The integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) teaching represents a significant shift in the evolution of contemporary literacy education. While AI has been extensively researched in speaking and writing, its pedagogical application in reading instruction remains relatively under-researched. This systematic literature review was conducted by synthesizing empirical research published in 2025, 2024 and 2023 that investigated the use of AI-based tools and platforms in EFL reading contexts. Based on a collection of journal articles that have been reviewed, the results of the review include pedagogical implementation of artificial intelligence in EFL reading instruction, current developments in the use of artificial intelligence in EFL reading instruction, empirical findings from previous studies, research gaps, practical and theoretical directions for the use of artificial intelligence in EFL reading instruction and recommendations for future research. The findings are that AI helps to improve students' reading motivation, learner engagement, reading performance, learner autonomy, cognitive and emotional engagement, task performance, inferencing skills and self-regulated learning. Undoubtedly, there are many things that need to be considered in the use of AI, such as technological accessibility, individual learner differences, ethical concerns and teacher preparedness. Then, the results of the analysis of previous research recommend the need for teacher training, important implications for learning design, and future research directions that view AI as a transformational catalyst in EFL reading education.

Keywords: Artificial Intelligence; EFL; Reading Instruction

INTRODUCTION

The educational landscape of the 21st century is undergoing a profound reconfiguration, driven in large part by the increasingly pervasive influence of new technologies (Muhammad Arsyad et al., 2024). Of these technologies, Artificial Intelligence (AI) is particularly potent as not only a tool, but also a fundamentally transformative influence capable of reimagining pedagogical approaches across disciplines (Sumartono et al., 2025). In the realm of English as a Foreign Language (EFL), the use of AI systems in instructional frameworks has attracted growing scholarly interest and attention, particularly in intelligent speaking tutoring and automated writing evaluation (Hockly, 2023). However, while there is a wealth of research on productive language skills, the application of AI to reading instruction

has received relatively little attention and is fragmented, leaving a conceptual and empirical void that needs to be explored in depth (Li, 2025).

Reading is a receptive skill in which the process is not passive but there is a complex interaction between the processes of decryption, comprehension, critical interpretation, and synthesis of meaning (Shihab, 2011). In the context of learning English as a Foreign Language (EFL), these processes become increasingly complex due to linguistic distance, cultural unfamiliarity, and vocabulary limitations (Jaekel et al., 2023). Emerging AI technologies such as neural network-powered reading companions and machine learning-based recommendation systems facilitate students in the process of providing adaptive feedback, real-time comprehension analytics and meaning processing (Murgai et al., 2024). The features in AI can be used effectively to foster deeper cognitive engagement with the text, adapt to diverse learner profiles and can personalize learning on a large scale (Gupta, 2024). However, these technologies can be utilized effectively depending on the technological literacy of educators and educational institutions, ethical oversight and pedagogical alignment (Duque et al., 2024).

This systematic literature review was conducted by synthesizing empirical studies published in reputable international journals in 2025, 2024 and 2023 that examine the integration of artificial intelligence (AI) and reading instruction in the context of EFL (English as a Foreign Language). With a comprehensive methodological examination of the reviewed sources, the results of the review are pedagogical implementation of artificial intelligence in EFL reading instruction, current developments in the use of artificial intelligence in EFL reading instruction, empirical findings from previous studies, research gaps, practical and theoretical directions for the use of artificial intelligence in EFL reading instruction and recommendations for future research. The studies analyzed show that AI has real potential to enhance reading motivation, learner engagement, reading performance, learner autonomy, cognitive and emotional engagement, task performance, inferencing skills and self-regulated learning. However, this potential is sometimes faced with various problems such as gaps in teacher readiness, algorithmic opacity and structural inequalities, which raise important questions regarding access, transparency, and pedagogical roles.

By explaining the pedagogical opportunities and limitations of AI integration in EFL reading instruction, this research review provides a critical framework for future research and teaching practice. The results of this study recommend the need for teacher training, important implications for learning design, and future research directions. This study emphasizes AI not as a substitute for teachers in the classroom but as a complementary catalyst for innovation, this study has an impact on the evolving discourse on how digital intelligence can facilitate literacy development in the global EFL context.

LITERATURE REVIEW

The integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) reading instruction has emerged as a transformative force in language education. While AI applications in speaking and writing have been extensively studied, its role in reading instruction remains relatively underexplored. Recent studies have highlighted AI's potential in enhancing reading motivation, engagement, comprehension, and learner autonomy. The reviewed literature from 2023 to 2025 indicates that AI, through adaptive learning systems, real-time feedback, and personalized content delivery, offers unique affordances to address learners' diverse needs in reading instruction.

Several empirical studies affirm AI's capacity to support reading motivation and performance. For instance, Yılmaz and Aydın (2025) found that AI-generated materials significantly boosted EFL learners' motivation, particularly in the context of test preparation. Similarly, Wiyaka et al. (2024) demonstrated that AI chatbot-assisted assessments helped reduce reading anxiety and improved reading outcomes among Indonesian learners. These studies suggest that AI-driven tools can serve as motivational catalysts and facilitate more supportive and engaging learning environments compared to traditional approaches.

AI integration is also shown to support autonomous and self-regulated learning. Research by Hsiao and Chang (2024) highlights the success of an AI-powered online reading and writing course that improved learners' engagement and allowed for a more personalized learning experience. Wei (2023) further supports this by showing how AI-enhanced learning environments promote L2 motivation and learner autonomy, aligning with constructivist theories of education. These insights illustrate how AI facilitates a shift from teacher-centered instruction to learner-driven engagement.

Despite its potential, several limitations and research gaps remain. One of the primary concerns is the lack of long-term studies and large-scale empirical data. For example, studies such as that by Çelik et al. (2024) provided promising findings on comprehension and inferencing, but failed to show a statistically significant effect on reading anxiety in short-term settings. Additionally, most studies focus on surface-level outcomes like vocabulary acquisition, neglecting higher-order cognitive skills such as critical thinking, inference, and evaluative reasoning.

Another significant gap in the literature pertains to teacher involvement and pedagogical mediation. While much attention is paid to learner outcomes, there is insufficient research on teachers' roles, digital competencies, and instructional strategies in integrating AI tools. Furthermore, ethical considerations and issues of accessibility especially in under-resourced regions have yet to be thoroughly examined. Concerns about algorithmic bias, data privacy, and the digital divide suggest that more inclusive, equitable research is needed to ensure fair implementation of AI technologies in EFL contexts. the literature underscores the

transformative promise of AI in EFL reading instruction while simultaneously calling for more rigorous, inclusive, and longitudinal research. Future studies should focus on the synergy between AI and innovative pedagogical frameworks, teacher readiness, ethical safeguards, and scalability in diverse educational environments. Through a holistic approach that bridges technology, pedagogy, and policy, AI can be more effectively integrated to support sustainable, personalized, and engaging reading instruction for EFL learners worldwide.

METHOD

Design and Sample

This study employs a qualitative approach using a literature review method, as outlined by Duque et al. (2024). The main aim is to investigate and describe the application of Artificial Intelligence (AI) in English as a Foreign Language (EFL) reading instruction. The research design involves reviewing and synthesizing existing scholarly works relevant to the integration of AI in EFL reading contexts. The sample for this study consists of peer-reviewed journal articles and academic publications obtained from reputable databases such as Google Scholar, Copernicus, and Scopus. Articles were selected based on their relevance, quality, and publication year, specifically focusing on recent literature from 2023 to 2025. Keywords such as “AI Applications in English Reading Instruction,” “AI-Assisted Reading in English as a Foreign Language,” and “AI Tools and EFL Reading Comprehension” were used to identify suitable sources.

Instrument and Procedures

The main instrument in this study is a document analysis framework used to extract relevant information from selected literature. The research procedure involved several stages. First, studies closely related to AI in EFL reading instruction were identified and selected based on the established criteria. Second, data from these articles were thoroughly read, and essential points were recorded. These points were categorized into thematic areas: (1) pedagogical implementation of AI in EFL reading instruction, including how AI is used in instructional activities and teaching strategies; (2) current developments, which involved mapping recent trends in AI applications in EFL contexts; (3) empirical findings, highlighting the effectiveness of AI in improving EFL learners’ reading skills; (4) research gaps, such as limited exploration of long-term impacts and lack of instructional design frameworks; (5) theoretical and practical implications of AI use in EFL reading instruction; and (6) recommendations for future research, including the development of classroom-based experimental studies and instructional frameworks.

Data Analysis

The collected data were systematically organized, categorized, and analyzed to identify major patterns and recurring themes. The analysis focused on synthesizing

findings related to the implementation of AI in EFL reading instruction, with particular attention to recent trends, instructional practices, and outcomes. Emphasis was also placed on empirical evidence supporting AI's effectiveness, identified research gaps, and theoretical implications. The themes were refined and structured to provide a comprehensive narrative that reflects the current state of research in this area. In the final stage, the manuscript underwent careful revision to ensure accuracy, clarity, and completeness. This process aimed to deliver an in-depth and holistic understanding of how AI is being integrated into EFL reading instruction and its implications for language education.

RESULT AND DISCUSSION

The application of Artificial Intelligence in EFL Reading Instruction in the EFL context has proven to be effective in enhancing reading motivation, learner engagement, reading performance, learner autonomy, cognitive and emotional engagement, task performance, inferencing skills and self-regulated learning. Drawing from prior research, key findings and relevant discussions are outlined below.

Table 1. Research Results

Article Title (Author)	Research Focus
The Impact of the Use of Artificial Intelligence–Generated Materials on Reading Motivation Among EFL Learners (Yılmaz & Aydın, 2025)	This study focuses on examining the impact of AI-generated reading materials on EFL learners' reading motivation in Türkiye, comparing their effectiveness with traditional materials to explore the potential of AI in enhancing reading motivation.
From Nervous to Fluent: The Impact of AI Chatbot-Assisted Assessment on English Reading Anxiety and Performance in Indonesia (Wiyaka et al., 2024)	This study investigates the impact of AI chatbot-assisted assessment on reading anxiety and performance among Indonesian secondary EFL learners, revealing that students interacting with AI significantly reduced anxiety and improved reading outcomes compared to those receiving traditional instruction, thereby highlighting the effectiveness of AI in fostering a more supportive and engaging language learning environment.
Enhancing EFL reading and writing through AI-powered tools: design, implementation, and evaluation of an online course (Hsiao & Chang, 2024)	This case study highlights the design and outcomes of an 18-week AI-supported online English course in Taiwan, demonstrating how integrating AI tools like Linggle Write, Read, and Search—grounded in

	learning theories—fostered autonomous EFL learning, enhanced student engagement, and linked online instruction with offline practice in the post-pandemic educational landscape.
Does AI Simplification of Authentic Blog Texts Improve Reading Comprehension, Inferencing, and Anxiety? A One-Shot Intervention in Turkish EFL Context (Çelik et al., 2024)	This experimental study by Athabasca University (2024) demonstrates that ChatGPT-simplified authentic texts significantly enhance university EFL students' reading comprehension and inferencing, though its effect on reading anxiety remains inconclusive, offering valuable insights into AI's role in higher education language learning.
Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning (Wei, 2023)	This mixed methods study demonstrates that AI-mediated language instruction significantly enhances EFL learners' English achievement, L2 motivation, and self-regulated learning, offering personalized and engaging experiences that promote learner autonomy and support the transformative potential of AI in language education.

The article titled "The Impact of the Use of Artificial Intelligence–Generated Materials on Reading Motivation Among EFL Learners" by Yılmaz and Aydın (2025) investigated the impact of AI-generated reading materials on EFL learners' reading motivation in Türkiye, comparing their effectiveness with traditional materials to explore the potential of AI in enhancing reading motivation. In the research, This study comprehensively examines the impact of AI-generated reading materials on reading motivation in the context of English as a Foreign Language (EFL) learning and reveals that, although the experimental group began with a lower level of reading motivation compared to the control group, the five-week intervention using AI-generated texts led to a statistically significant increase, particularly in the dimension of extrinsic test compliance. This improvement suggests that AI-based materials are not only better aligned with learners' needs in terms of exam preparation but also foster deeper engagement through authentic and cognitively challenging content, especially regarding vocabulary. While other dimensions such as intrinsic motivation and extrinsic social sharing showed increases that did not reach statistical significance, the upward trend indicates promising potential for long-term development. In contrast, the observed decrease in reading motivation among the control group using traditional materials highlights that conventional textbooks tend to fail in sustaining, let alone enhancing, learners'

motivation driven by enjoyment and functional value. Thus, this study not only reinforces pedagogical arguments in favor of AI-based instruction but also emphasizes the importance of instructional design that incorporates affective elements, content authenticity, and cognitive challenge to foster sustainable learning motivation in language education.

The study entitled "From Nervous to Fluent: The Impact of AI Chatbot-Assisted Assessment on English Reading Anxiety and Performance in Indonesia" by Wiyaka et al. (2024) scrutinized the impact of AI chatbot-assisted assessment on reading anxiety and performance among Indonesian secondary EFL learners. This study investigates the significant impact of implementing AI chatbot-assisted assessments on reading anxiety and reading performance among secondary school students in Indonesia. By comparing an experimental group that utilized AI chatbots with a control group that did not receive such intervention, the findings reveal that students supported by chatbots experienced a substantial reduction in anxiety and notable improvements in reading proficiency. The chatbot not only provided adaptive reading materials and instant feedback but also fostered a low-pressure, interactive learning environment. In contrast, the control group remained subjected to the pressures of conventional assessment methods that failed to address individual learning needs. These results underscore the urgency of integrating AI technology into language learning as a means to address diverse learner needs and elevate literacy outcomes. Moreover, this research paves the way for further exploration into the long-term effects of AI chatbot integration in language acquisition and its broader implications for educational policy.

Research conducted by Hsiao and Chang (2024) discuses "Enhancing EFL reading and writing through AI-powered tools: design, implementation, and evaluation of an online course". This study meticulously examined the design, execution, and evaluation of a synchronous online English course aimed at fostering learner autonomy through the integration of AI-powered reading and writing tools. Grounded in established learning theories, the course bridged online and offline modalities by employing goal-oriented, socially relevant assignments, thereby enhancing engagement and facilitating optimal learning experiences. The findings underscored that student-centered activities—especially those involving interpersonal interaction and immediate feedback—significantly outperformed teacher-centered lectures in cultivating cognitive and emotional flow. Moreover, language proficiency emerged as a robust predictor of academic performance and task completion, highlighting the need for differentiated instruction. The research emphasizes the necessity of balancing pedagogical approaches and adapting course design to accommodate learners' diverse needs while addressing common challenges in synchronous environments. Though limited by its sample size and lack of a control group, this study provides a compelling foundation for future inquiry into personalized, AI-enhanced online EFL instruction.

Research conducted by Çelik, et al. (2024) discussed "Does AI Simplification of Authentic Blog Texts Improve Reading Comprehension, Inferencing, and Anxiety?

A One-Shot Intervention in Turkish EFL Context". This study underscores the pedagogical potential of ChatGPT as an AI-powered scaffolding tool that facilitates EFL university students' engagement with authentic texts by enhancing reading comprehension and inferencing abilities. The significant improvement in learners' posttest scores following exposure to ChatGPT-simplified texts highlights the tool's capacity to reduce linguistic complexity and provide accessible entry points for textual interpretation. However, the study found no statistically significant reduction in reading anxiety, suggesting that short-term exposure to simplified content may be insufficient to alleviate deeper psychological barriers. These findings point to the need for more sustained, longitudinal research to fully assess the emotional and cognitive impacts of AI-driven text simplification. The study advances the dialogue on integrating AI into educational settings, encouraging educators and curriculum designers to adopt adaptive technologies while maintaining pedagogical balance to meet the needs of diverse learners in evolving language learning environments.

Research conducted by Wei (2023) explored "Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning". This study demonstrated the significant positive impact of AI-assisted language learning instruction on Chinese EFL learners' English learning achievement, L2 motivation, and self-regulated learning, confirming both quantitative and qualitative evidence aligned with Vygotsky's social constructivist theory. Learners exposed to AI-powered tools showed marked improvements in grammar, vocabulary, reading comprehension, and writing, supported by the tool's personalized feedback and adaptive learning environment. The AI system not only facilitated collaborative learning but also accelerated learners' transition from other-regulation to self-regulation, empowering them to set goals, monitor progress, and independently adjust strategies. Furthermore, the interactive and user-friendly AI platform enhanced L2 motivation by providing a stress-reduced, engaging environment that encouraged autonomy and sustained learning. The qualitative findings deepened the understanding of learners' experiences, highlighting the AI tool's role in fostering motivation, confidence, and consistent practice beyond classroom boundaries. The integration of AI also offered valuable insights to teachers for differentiated instruction based on learners' progress data. Ultimately, this study underscores the transformative potential of AI in language pedagogy, advocating for its broader adoption and further exploration in diverse EFL contexts to foster more personalized, efficient, and motivating learning experiences.

The reviewed studies collectively affirm the pedagogical efficacy of Artificial Intelligence (AI) in enhancing EFL reading instruction across diverse dimensions, including reading motivation, anxiety reduction, comprehension, and learner autonomy. For instance, Yılmaz and Aydın (2025) demonstrated that AI-generated reading materials significantly elevated students' extrinsic motivation related to test performance, while Wiyaka et al. (2024) reported a marked decrease in reading anxiety and improved reading outcomes through chatbot-assisted assessments. These findings underscore the transformative potential of AI in cultivating more

responsive, engaging, and learner-centered reading environments, especially when compared with conventional instructional modalities.

Despite the promising outcomes, several methodological limitations persist across the reviewed literature. Studies such as that by Hsiao and Chang (2024), although rich in qualitative insights, lack control groups and rely on relatively small, context-specific samples, limiting the generalizability of their findings. Similarly, Çelik et al. (2024) conducted a single-session intervention, which—while revealing positive gains in comprehension and inferencing—failed to establish conclusive evidence regarding its effect on reading-related anxiety. These constraints highlight the need for more rigorous, large-scale, and longitudinal research that captures both short- and long-term impacts of AI integration across varied EFL contexts.

Notably absent from the current body of research is a comprehensive exploration of teacher perspectives and pedagogical mediation in AI-supported reading instruction. While existing studies prioritize learner outcomes, they overlook the pivotal role of teachers in facilitating AI integration, including their digital competence, instructional design choices, and attitudes toward AI tools. The lack of empirical attention to educators' experiences creates a substantial gap in understanding the institutional and human factors that shape the effectiveness and sustainability of AI adoption in language classrooms. A further limitation lies in the predominant focus on surface-level reading outcomes—such as vocabulary acquisition and literal comprehension—while higher-order cognitive skills remain underexplored. Critical reading competencies, including inference-making, evaluative judgment, and synthesis of information, are seldom addressed in depth. Given the increasing emphasis on 21st-century skills, future studies should interrogate the extent to which AI-mediated reading instruction can foster critical thinking and metacognitive engagement, particularly through adaptive content, intelligent feedback, and interactive learning environments.

Issues related to equitable access, ethical implementation, and digital readiness remain largely unexamined. The reviewed studies predominantly stem from urban or technologically advanced educational settings, raising concerns about the replicability of these interventions in under-resourced or rural contexts. Moreover, the ethical implications of AI—ranging from data privacy to algorithmic bias—have yet to be systematically addressed within EFL reading instruction. These overlooked dimensions necessitate a more holistic research agenda that considers infrastructural disparities, policy support, and ethical safeguards to ensure inclusive, fair, and context-sensitive integration of AI technologies in language education.

The integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) reading instruction represents a significant pedagogical evolution, offering both practical enhancements and theoretical enrichment. AI-driven tools and platforms have begun to redefine how reading skills are cultivated, assessed, and sustained in diverse educational contexts. From personalized text recommendations

to adaptive feedback mechanisms, AI applications have introduced new modalities for learner engagement, autonomy, and differentiated instruction. These developments are particularly relevant in multilingual and multicultural EFL classrooms, where learner diversity demands instructional flexibility and innovation.

Empirical studies have demonstrated the tangible benefits of AI in fostering reading motivation and performance among EFL learners. For instance, Yılmaz and Aydın (2025) found that AI-generated reading materials significantly increased learners' extrinsic motivation related to test performance. This practical enhancement points to the alignment of AI-based content with learner expectations and academic demands, enabling more effective preparation for standardized assessments. Similarly, Wiyaka et al. (2024) reported that chatbot-assisted reading assessments reduced learners' anxiety while simultaneously improving reading outcomes, thereby demonstrating the psychological and academic value of integrating AI into classroom practice. These findings collectively suggest that AI can serve as both a pedagogical tool and a motivational catalyst in EFL contexts.

In addition to addressing practical instructional concerns, AI technologies also contribute to broader theoretical discussions about learning processes, particularly those rooted in socio-cognitive and constructivist frameworks. Wei (2023) underscores how AI-facilitated instruction promotes self-regulated learning and enhances learner autonomy by supporting goal-setting, progress monitoring, and strategic adaptation. This aligns with Vygotsky's social constructivism, which emphasizes the role of scaffolding and social interaction in cognitive development. Moreover, the adaptive nature of AI systems complements the principles of differentiated instruction by catering to learners' varying linguistic abilities and emotional needs, thus enriching both theoretical and practical understandings of learner-centered pedagogy.

However, while short-term interventions have yielded promising results, the long-term pedagogical implications of AI in EFL reading instruction remain underexplored. Çelik et al. (2024) reveal that although AI-simplified texts significantly improve reading comprehension and inferencing, they fail to significantly reduce reading anxiety in the short term. This calls for longitudinal studies that investigate the sustained emotional and cognitive impact of AI interventions in language education. Furthermore, as Hsiao and Chang (2024) highlight in their online course design, the success of AI integration depends heavily on thoughtful instructional design that promotes interaction, engagement, and alignment with learning outcomes. Thus, a more holistic approach is necessary—one that fuses technological innovation with robust pedagogical frameworks.

Theoretically, the rise of AI in EFL education challenges traditional paradigms of reading instruction that prioritize linear progression and static materials. AI tools enable dynamic content delivery, real-time assessment, and continuous adaptation to learner behavior—features that are increasingly aligned with ecological and

complexity theories of language learning. These approaches emphasize the interconnectedness of linguistic, cognitive, and affective variables in the learning environment, encouraging educators to reconceptualize reading as a multimodal, interactive, and context-sensitive process. The integration of AI, therefore, not only augments instructional efficiency but also necessitates a rethinking of how reading literacy is understood and cultivated in global EFL contexts.

The application of AI in EFL reading instruction presents a dual trajectory: practically, it addresses urgent instructional needs through personalized, adaptive, and emotionally supportive environments; theoretically, it redefines foundational assumptions about language acquisition, learner agency, and instructional design. As the field continues to evolve, researchers and educators must work collaboratively to develop evidence-based frameworks that ensure equitable, ethical, and pedagogically sound applications of AI. This entails not only harnessing AI's capabilities but also critically examining its limitations, ensuring that its integration enriches rather than overshadows the human-centered nature of education.

In light of the empirical insights and methodological limitations delineated across the reviewed studies, future research must endeavor to adopt more nuanced and multifaceted approaches to investigating AI integration in EFL reading instruction. While existing findings offer compelling evidence of AI's capacity to enhance learner motivation, mitigate reading anxiety, and promote autonomy, the scope and generalizability of these outcomes remain constrained by context-specific implementations, short intervention durations, and limited participant diversity. Therefore, forthcoming inquiries should prioritize longitudinal, cross-institutional designs that examine the sustained cognitive, affective, and behavioral impacts of AI-facilitated reading practices across varied sociolinguistic landscapes.

Equally critical is the incorporation of mixed-methods paradigms that interweave quantitative rigor with qualitative depth to capture the complexity of learner experiences, instructional dynamics, and contextual mediators. This would allow researchers to move beyond surface-level metrics such as vocabulary gains or anxiety indices and instead interrogate deeper pedagogical phenomena—such as the cultivation of inferential reasoning, textual synthesis, and evaluative literacy—within AI-mediated environments. Moreover, future studies should foreground the interplay between technological affordances and instructional design, examining how specific AI features (e.g., real-time feedback, adaptive scaffolding, and predictive analytics) interact with pedagogical strategies to shape reading engagement and efficacy.

A particularly underexplored yet indispensable dimension of future research concerns the perspectives and professional agency of teachers. The efficacy of AI tools in reading instruction cannot be fully understood without accounting for how educators perceive, interpret, and operationalize these technologies within their curricular and cultural contexts. Studies that interrogate teachers' digital

competencies, pedagogical adaptations, and epistemological orientations toward AI will not only illuminate critical factors influencing implementation fidelity but also inform the development of targeted professional development initiatives and institutional support systems.

Furthermore, future research must interrogate the epistemic and ethical implications of AI integration in language education. As AI systems increasingly mediate the selection, modification, and delivery of textual content, questions arise regarding transparency, bias, and epistemological neutrality. Scholars should thus critically examine how algorithmic design influences the complexity, authenticity, and ideological positioning of reading materials, particularly in relation to learners' critical consciousness and intercultural competence. Investigations into learners' data privacy, algorithmic fairness, and informed consent are equally imperative, especially in contexts with uneven digital infrastructures and regulatory safeguards.

In addition, the digital divide warrants sustained scholarly attention. While the current corpus of research tends to originate from technologically advanced or resource-rich educational settings, future studies must address the feasibility, scalability, and contextual adaptability of AI applications in under-resourced, rural, or multilingual learning environments. This includes examining how infrastructural limitations, linguistic diversity, and socio-economic disparities affect the accessibility and pedagogical efficacy of AI-enhanced reading instruction. Participatory action research and community-engaged methodologies may offer viable avenues for generating context-sensitive insights and promoting educational equity.

Lastly, future research should explore the synergy between AI technologies and emergent pedagogical paradigms, such as translanguaging, culturally responsive teaching, and human-AI collaborative learning. Investigating how AI can be aligned with, rather than imposed upon, learners' linguistic repertoires and cultural identities may pave the way for more inclusive, empowering, and contextually resonant models of reading instruction. Such interdisciplinary explorations will be instrumental in ensuring that AI serves not merely as a technological solution but as a catalyst for pedagogical transformation in EFL education.

CONCLUSION

In conclusion, the integration of Artificial Intelligence into EFL reading instruction holds transformative potential, offering not only enhanced learner engagement, motivation, and reading performance but also prompting a re-evaluation of pedagogical practices through adaptive, personalized, and interactive learning environments. The reviewed studies collectively affirm that AI, when thoughtfully implemented, can address diverse learner needs and mitigate affective barriers such as anxiety. However, to fully harness its educational value, future efforts must transcend short-term, context-bound interventions and engage with broader theoretical, ethical, and equity-oriented concerns. Sustained, interdisciplinary

research that involves both learners and educators is essential to ensure that AI-supported instruction evolves in pedagogically sound, culturally responsive, and ethically responsible directions.

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