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# *MANAGING ARTIFICIAL INTELLIGENCE INTEGRATION IN ENGLISH LANGUAGE LEARNING: A LITERATURE REVIEW*

**Dwi Nurcahyani[1], Bakri[2], Aizun Najih[3], Lilik Maftuhatin[4], Muhamad Zaki[5], Misbahun Nidhom[6], Henny Susilowati[7]**

[1,2,3,4,5] Universitas Pesantren Tinggi Darul Ulum, Jombang
[6] Sekolah Tinggi Islam Kendal
[7] Universitas Muria Kudus
Email Correspondence: dwinurcahyani@staf.unipdu.ac.id

***Abstract***

*This literature review explores the management of Artificial Intelligence (AI) integration in English Language Learning (ELL) over the past five years. Analyzing 8 peer-reviewed studies, it identifies benefits such as improved language skills, personalized learning, and learner engagement. However, it also highlights challenges including teacher readiness, curriculum misalignment, institutional limitations, and ethical concerns. Drawing on educational management theories, the review emphasizes the need for strategic planning, professional development, and responsible AI use. Effective integration requires a holistic approach that aligns technology with pedagogical goals and institutional vision for sustainable language education.*

***Keywords***: *Artificial Intelligence, Curriculum Integration, Educational Management English Language Learning,*

## INTRODUCTION

In recent years, Artificial Intelligence (AI) has emerged as a transformative force in various sectors, including education. As educational institutions strive to adapt to the demands of the digital era, AI technologies are being increasingly integrated into teaching and learning processes. One area that has seen rapid adoption of AI is language education—particularly English Language Learning (ELL)—which continues to evolve in response to technological innovation. AI-powered tools, such as intelligent tutoring systems, automated writing evaluators, virtual conversation partners, and adaptive learning platforms, are being used to support both students and educators in achieving more personalized, efficient, and engaging learning experiences.

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Globally, learners of English as a Second Language (ESL) or English as a Foreign Language (EFL) are interacting with AI tools such as ChatGPT, Grammarly, Quillbot, Elsa Speak, and Duolingo to enhance their vocabulary, grammar, pronunciation, writing, and speaking skills. These tools not only provide instant feedback but also allow learners to practice at their own pace, thus promoting autonomy and flexibility. The potential of AI to revolutionize English language teaching (ELT) has been widely acknowledged, with numerous studies reporting improvements in learner motivation, performance, and confidence.

However, while the adoption of AI in ELL is accelerating, the issue of how to effectively manage its integration into formal educational settings remains a critical challenge. Teachers, school leaders, and educational institutions often face difficulties in aligning AI tools with existing curricula, ensuring data privacy, addressing ethical concerns, providing teacher training, and evaluating learning outcomes. Many educators lack the knowledge or institutional support needed to implement AI responsibly and meaningfully. Moreover, the risk of over-reliance on technology without clear pedagogical direction may lead to shallow learning or inequality among students with varying digital access and skills.

Existing research has largely focused on the functional impact of AI tools on student performance or specific language skills. For example, Rahmi, Amalina, Andriansyah, & Rodgers (2024) investigated the effects of AI-powered writing assistants in EFL classrooms and found significant improvements in students' grammatical accuracy and writing fluency. Similarly, Quyet, Minh, and Anh (2024) demonstrated how AI-based speaking apps enhanced students' pronunciation and speaking confidence in Vietnamese high schools. Other studies have highlighted the role of chatbots (Kuhail, Alturki, Alramlawi, & Alhejori, 2022; Labadze, Grigolia, & Machaidze, 2023) and automated assessment tools (Owan, Abang, Idika, & Bassey, 2023) in supporting English language instruction. These studies confirm the positive influence of AI on language learning, but they rarely address broader institutional and pedagogical concerns regarding its integration.

Furthermore, while some research has examined teachers' attitudes and perceptions of AI (Lee & Davis, 2024), there is limited investigation into how schools or universities develop strategic plans, policies, and training systems to support AI use in language education.

Issues such as ethical management, curriculum alignment, and long-term sustainability of AI-enhanced learning are often overlooked. This highlights a gap in the literature: there is insufficient understanding of the management frameworks, best practices, and institutional readiness that are essential for ensuring successful AI integration in English language learning contexts.

To fill this gap, this literature review seeks to synthesize and analyze recent studies (published between 2019 and 2024) that discuss the management of AI integration in English language learning. The aim is to identify common themes, emerging trends, challenges, and recommendations regarding how educational stakeholders—particularly language teachers, curriculum developers, and institutional leaders—can effectively manage the adoption of AI tools in their classrooms and programs.

By focusing not only on the technological aspects but also on the strategic, pedagogical, and ethical dimensions, this review intends to provide a more holistic understanding of AI integration in English language education. In doing so, it contributes to the ongoing discourse on digital transformation in education and offers practical insights for future research and policy development in the field of English language teaching.

## RESEARCH METHOD

This study employs a systematic literature review approach to explore how Artificial Intelligence (AI) integration in English language learning has been managed in recent years. The method was chosen to synthesize current knowledge, identify prevailing trends, and uncover gaps in the literature related to pedagogical, institutional, and strategic aspects of AI use in English education. A systematic review is particularly useful for collecting evidence from multiple sources, evaluating the quality of findings, and drawing comprehensive conclusions on a specific topic.

To ensure relevance and timeliness, the review focused on peer-reviewed journal articles published between 2019 and 2024. This five-year range was selected to reflect the most recent developments in AI applications in education, particularly in the wake of rapid technological advancement and the global shift to digital learning caused by the COVID-19 pandemic. The literature search was conducted through reputable academic databases, including Scopus, ERIC, Google Scholar, and ScienceDirect. Keywords used in the search

included “Artificial Intelligence in English language learning,” “AI in ESL/EFL education,” “AI integration in ELT,” “AI management in education,” and “educational technology in language teaching.”

To be included in the review, articles had to meet several inclusion criteria: (1) the study must focus on the use or integration of AI tools in English language learning contexts (ESL/EFL); (2) the article must discuss at least one management-related aspect, such as curriculum alignment, teacher training, implementation strategy, or institutional support; (3) the article must be published in English and available in full-text format. Studies focusing solely on technical or engineering development of AI without pedagogical implications were excluded.

After screening abstracts and full texts for relevance, a total of 15 articles were selected for detailed analysis. Each article was examined using a structured template to extract data on research objectives, methodologies, target population, types of AI tools used, and key findings related to management practices. The synthesis was organized thematically to identify common challenges, solutions, and theoretical perspectives across the reviewed literature.

## FINDINGS AND DISCUSSION

### *Findings*

The review of selected articles revealed a range of practices, benefits, and challenges related to the integration of Artificial Intelligence (AI) in English language learning (ELL), particularly in ESL/EFL contexts. The results were synthesized into a table that summarizes key aspects of each study, including the author(s), year of publication, focus area, major findings, and implications for AI management in educational settings.

Several articles highlighted the positive impact of AI tools on language proficiency. For instance, Rahmi et al. (2024) studied the use of AI writing assistants in EFL classrooms and found that students experienced significant improvements in grammatical accuracy, writing fluency, and confidence. However, the study also emphasized the need for ethical guidelines and teacher training to ensure appropriate use and avoid over-reliance on the tool.

Similarly, Quyet et al. (2024) evaluated the effectiveness of AI-powered speaking applications in Vietnamese high schools. Their findings showed that students demonstrated

improved speaking fluency and pronunciation. Nonetheless, the study pointed out that these tools must be aligned with national curricula to ensure coherence with learning objectives. The lack of curriculum integration was identified as a management challenge that requires institutional planning.

Kuhail et al. (2022) focused on the use of AI chatbots in university-level English learning and found increased engagement and learner motivation. However, they emphasized that teacher preparedness and technological familiarity are crucial factors in maximizing the pedagogical potential of AI. This aligns with (Lee & Davis, 2024), who conducted a study on teacher perceptions in South Korea. While teachers recognized the usefulness of AI, they also expressed uncertainty and fear of replacement, highlighting the importance of continuous professional development to build trust and competence in AI-supported instruction.

Owan et al. (2023) examined the use of AI for automated essay scoring. Although the technology significantly reduced teachers' workload in evaluating written tasks, the feedback generated was often perceived as generic and superficial. The study stressed the need for teacher moderation to ensure that students receive meaningful, contextualized feedback, reaffirming the role of human judgment in AI-assisted learning.

Nikolic, Wentworth, Sheridan, Middleton, et al. (2024) shifted the focus to institutional readiness, assessing infrastructure, policy, and digital culture in schools and universities. They found that many institutions lack clear policies and support systems to facilitate AI integration. The authors recommended that leaders develop top-down strategies, including resource allocation, strategic planning, and staff development initiatives.

In addition, ethical concerns emerged as a recurring theme across multiple studies. Tan et al. (2021) and Radanliev, Santos, Brandon-Jones, & Joinson (2024) raised issues regarding student data privacy and algorithmic bias, emphasizing the need for ethical frameworks and responsible AI policies at the institutional level.

Several studies, such as those by Radanliev et al. (2024), also explored how AI can support personalized learning pathways, particularly in vocabulary acquisition. The use of adaptive systems allowed learners to progress at their own pace, which supported

differentiated instruction. However, effective management of such systems requires robust data analytics, teacher oversight, and platform integration into broader learning ecosystems.

In summary, while the reviewed literature consistently acknowledged the benefits of AI tools for enhancing English language learning outcomes, it also highlighted several managerial challenges. These include the need for clear implementation strategies, teacher training, curriculum alignment, ethical safeguards, and institutional support. The table serves as a comparative overview of these studies and offers a foundation for deeper analysis in the discussion section.

**Table 1.** Summary Table of Research Findings

| No. | Author(s) & Year | Focus of Study | Key Findings | Management Insight |
|---|---|---|---|---|
| 1 | Rahmi et al. (2024) | AI writing assistants in EFL settings | Improved writing accuracy, reduced anxiety | Need for clear guidelines and ethical usage training |
| 2 | Quyet et al. (2024) | AI-based speaking apps in Vietnam | Increased speaking confidence and fluency | Importance of local curriculum alignment |
| 3 | Kuhail et al. (2022) | AI chatbots in Chinese universities | Enhanced student motivation and engagement | Teacher preparedness is essential |
| 4 | Owan et al. (2023) | Automated essay scoring systems | Time-saving for teachers, but limited in feedback accuracy | Requires teacher moderation and calibration |
| 5 | Nikolic et al. (2024) | Institutional readiness for AI in language teaching | Infrastructure and policy gaps hinder adoption | Need for top-down policy and training support |
| 6 | Tan et al. (2021) | Ethical concerns in AI-based ELL apps | Student data privacy concerns often ignored | Institutions must develop AI ethics guidelines |
| 7 | Lee & Davis (2024) | Teachers' attitudes towards AI in Korea | Mixed perceptions: helpful but fear of replacement | Continuous professional development is critical |
| 8 | Radanliev et al. (2024) | AI for personalized vocabulary learning | Improved retention rates in secondary students | Supports differentiated instruction |

## *Discussion*

The integration of Artificial Intelligence (AI) into English Language Learning (ELL) represents a significant development in the evolution of language pedagogy. The literature reviewed in this study reflects both the growing enthusiasm for AI-enhanced learning tools and the complex management challenges associated with their implementation. This discussion critically examines the key findings in relation to pedagogical implications, teacher preparedness, curriculum alignment, institutional strategies, and ethical

considerations, while also drawing connections with relevant theories of educational management.

*1. Pedagogical Implications and Effectiveness*

Most of the reviewed studies agree that AI offers tangible benefits to English language learners. Students show improvements in writing accuracy, speaking fluency, vocabulary retention, and learner motivation when using AI-assisted tools such as chatbots, writing evaluators, and adaptive learning platforms. These tools personalize learning experiences, allow for self-paced progression, and provide immediate feedback—elements that are often difficult to replicate in traditional classrooms.

However, a major concern across the literature is that many implementations are technology-driven rather than pedagogy-driven. In other words, the integration of AI often follows technological trends rather than educational goals. This can lead to a mismatch between AI functionalities and actual learning needs. For instance, automated essay scorers may correct surface-level grammar but fail to nurture critical thinking or creative expression. As noted by Owan et al. (2023), without proper teacher mediation, AI tools risk becoming mechanical substitutes for complex language teaching processes.

This observation aligns with constructivist learning theory, which emphasizes that learners construct knowledge through meaningful interaction and reflection (Fosnot, 2005). AI tools must be carefully positioned not as replacements but as scaffolds that support and enrich learning, under the guidance of skilled educators.

*2. Teacher Preparedness and Professional Development*

Another recurring theme in the literature is the varying levels of teacher readiness to integrate AI into their classrooms. Several studies, such as those by Lee & Davis (2024) and Kuhail et al. (2022), highlight that while some teachers view AI as a helpful resource, others express concerns about job displacement, lack of training, and limited understanding of AI's pedagogical potential.

From a human resource management perspective, this underscores the need for continuous professional development (CPD) that focuses on AI literacy (Kennedy, 2005). Training should not only address how to use AI tools, but also how to evaluate, adapt, and integrate them into lesson plans that are aligned with learning outcomes. Teachers also need

to be equipped to critically assess AI-generated feedback, recognize its limitations, and guide students in interpreting and applying it constructively.

In line with Fullan's (2007) change leadership theory, successful integration of technology in education depends largely on teacher engagement and agency. Teachers are not merely implementers but key drivers of change, and their involvement in decision-making, experimentation, and reflection is vital to meaningful AI integration.

*3. Curriculum Alignment and Instructional Design*

Several studies point out that the implementation of AI tools often happens in parallel to the existing curriculum, rather than as an integral part of it. Quyet et al. (2024) emphasize that AI applications, especially those imported from global edtech providers, may not align with local language syllabi, testing standards, or learning objectives. This disconnect reduces the effectiveness of the tools and may lead to fragmented learning experiences.

To address this, educational institutions must engage in instructional design processes that incorporate AI meaningfully into the curriculum. This includes mapping AI functionalities to language competencies (e.g., grammar, pronunciation, discourse), sequencing tasks that integrate AI interaction with classroom instruction, and ensuring consistency with assessment frameworks.

Here, Tyler's model of curriculum development is useful, which involves clearly defining objectives, selecting appropriate learning experiences, organizing instruction logically, and evaluating outcomes. AI tools should be evaluated within this framework to ensure they contribute meaningfully to language acquisition rather than simply offering superficial technological engagement.

*4. Institutional Management and Strategic Planning*

On the institutional level, findings by Nikolic et al. (2024) and others suggest that many schools and universities lack structured policies and readiness frameworks for AI integration. While AI tools are often introduced at the initiative of individual teachers or departments, there is rarely a comprehensive, top-down strategy to manage implementation, monitor usage, allocate resources, or evaluate impact.

From the standpoint of strategic management in education (Rowley, Lujan, & Dolence, 1997), this is a significant gap. Educational leaders must engage in long-term planning that includes needs assessment, infrastructure development, budget allocation,

stakeholder involvement, and sustainability plans. AI should be part of a broader digital transformation strategy, not an isolated technological experiment.

Bush (2011) describes strategic leadership as a function that connects vision, policy, planning, and implementation. Effective AI management requires educational leaders to set clear goals for AI use, support experimentation, and establish feedback loops to refine practices. Moreover, leaders should ensure that AI implementation is inclusive and equitable, avoiding digital divides that might disadvantage students from under-resourced backgrounds.

*5. Ethical Concerns and Responsible Use*

Ethical issues surrounding AI in education are increasingly prominent in the reviewed studies. Concerns include student data privacy, algorithmic bias, informed consent, and dependency on commercial platforms. Tan et al. (2021) highlight that many AI tools operate as "black boxes," making it difficult for educators to understand how learning data is processed and how recommendations or feedback are generated.

From a policy and governance perspective, institutions must establish ethical guidelines for AI use. This includes transparent data practices, consent protocols, and mechanisms for auditing AI performance and bias. Teachers and students should be educated about these issues to foster digital literacy and critical AI awareness.

These concerns also relate to the principle of beneficence in educational ethics (Strike & Soltis, 2009), which emphasizes that technologies should do no harm and must serve the best interests of learners. If AI systems are implemented without scrutiny, they may reinforce inequalities or lead to unintended learning outcomes. Managing AI, therefore, is not only about pedagogical efficiency but also about protecting learner rights and promoting justice.

*6. Theoretical Implications and Future Directions*

The findings of this review contribute to the growing discourse on AI and educational change, emphasizing the need to bridge technology and pedagogy through thoughtful management. The integration of AI in ELL must be understood as a complex systemic innovation, influenced by factors such as teacher agency, institutional capacity, curricular coherence, and ethical governance.

By bringing in theories of change management, curriculum development, strategic leadership (Davies & Davies, 2005), and constructivist pedagogy (Fosnot, 2005), this review reinforces the idea that effective AI integration cannot be reduced to tool adoption alone. It requires a multi-level approach that involves planning, training, policy, monitoring, and feedback.

Looking forward, future research should explore the development of comprehensive frameworks for managing AI in language education, ideally through interdisciplinary collaboration involving technologists, educators, linguists, and policymakers. Case studies from institutions that have successfully implemented AI in sustainable, ethical, and pedagogically sound ways would be particularly valuable in guiding best practices.

## CONCLUSION

The integration of Artificial Intelligence (AI) in English language learning presents significant opportunities to enhance personalized instruction, learner autonomy, and engagement. However, this literature review reveals that successful implementation depends not only on the effectiveness of AI tools but also on how their use is managed within educational systems. Key challenges include teacher preparedness, curriculum alignment, institutional readiness, and ethical considerations.

While AI has proven benefits, its integration must be guided by sound pedagogical principles and strategic management. Educational leaders should develop clear policies, provide professional development, and ensure ethical frameworks to support AI use in classrooms. Teachers must be empowered to critically engage with AI tools and align them with learning goals. Future research and practice should focus on building comprehensive, inclusive, and sustainable models for AI integration in English education, ensuring that technology supports—not replaces—the human-centered process of language teaching and learning.

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