

# The AI Revolution in English Teaching: Examining Emerging Pedagogical Practices

**Abdel Gauom Babiker Salama**

Department of Foreign Languages, College of Arts and Humanities, Jazan University, Saudi Arabia

## Abstract

**Background:** Generative Artificial Intelligence (AI) has rapidly disrupted traditional English Language Teaching (ELT) paradigms, introducing new affordances for personalized instruction and automated feedback.

**Objective:** This systematic review synthesizes empirical evidence from 2023 to 2026 to examine AI-driven pedagogical transformations in ELT contexts.

**Method:** Following PRISMA guidelines, 39 peer-reviewed empirical articles from Q1-Q4 indexed journals were analyzed.

**Results:** Findings reveal that AI platforms dominated by Large Language Models like ChatGPT primarily enhance personalized learning, automated writing evaluation, and conversational practice. Concurrently, they shift teacher roles toward instructional design and orchestration.

**Conclusion:** AI integration significantly improves language acquisition metrics, particularly in writing and speaking, but requires careful ethical oversight.

**Implications:** Educators must adopt AI literacy frameworks to maximize learner autonomy and mitigate academic integrity concerns.

**Keywords:** artificial intelligence, English language teaching, pedagogical innovation, generative AI, language learning, CALL, PRISMA.

## 1. Introduction

The landscape of English Language Teaching (ELT) is undergoing a profound paradigm shift driven by the rapid evolution and democratization of Artificial Intelligence (AI), particularly Generative AI and Large Language Models (LLMs) (Barrot, 2023; Kohnke et al., 2023).

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Unlike previous iterations of Computer-Assisted Language Learning (CALL), modern AI tools such as ChatGPT, Claude, and Gemini act not merely as static practice software, but as dynamic, conversational partners capable of mimicking human-like interaction (Liu & Ma, 2023). This technological leap offers unprecedented opportunities for personalized learning, immediate formative feedback, and communicative practice in English as a Foreign Language (EFL) and English as a Second Language (ESL) contexts.

Despite the enthusiastic adoption of these tools by learners, pedagogical practices have often struggled to keep pace with technological advancements. Much of the early literature focused predominantly on the technical capabilities of LLMs or theoretical explorations of their potential, rather than on grounded, empirical classroom practices (Gómez-Rey et al., 2024). Consequently, there remains a critical gap in synthesizing how language teachers are actively integrating these tools into their pedagogical repertoires. To address this, the current systematic review focuses exclusively on recent empirical studies (2023-2026) published in high-impact indexed journals to answer three research questions:

RQ1: What AI technologies are being implemented in English teaching contexts, and for which language skills and pedagogical purposes?

RQ2: What emerging pedagogical practices are enabled or transformed by AI integration in ELT?

RQ3: What are the documented outcomes, challenges, and implications for English language teachers and learners?

## 2. Methodology

This study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines to ensure methodological transparency and rigor. The scope was intentionally restricted to the post-Generative AI boom era (2023-2026) to capture the most relevant pedagogical adaptations.

### Search Strategy

A comprehensive literature search was conducted across the Web of Science Core Collection, Scopus, and ERIC databases. Table 1 outlines the Boolean search strings tailored for each database.

**Table 1: the Boolean search strings for each database.**

Database	Search String
Web of Science / Scopus	TITLE-ABS-KEY ("artificial intelligence" OR "ChatGPT" OR "generative AI") AND ("English language teaching" OR "EFL" OR "TESOL") AND ("pedagogy" OR "personalized learning")
ERIC	(ChatGPT OR AI) AND (ESL OR EFL) AND (pedagogy OR feedback)

### Inclusion and Exclusion Criteria

To maintain high standards of evidence, strict inclusion and exclusion criteria were applied, as detailed in Table 2. Only peer-reviewed empirical studies published in indexed journals (Q1-Q4) were considered.

**Table 2. Study Selection Criteria for Inclusion and Exclusion**

Criterion	Inclusion	Exclusion
Publication Type	Peer-reviewed empirical articles in Q1-Q4 journals	Conference proceedings, book chapters, preprints
Timeframe	2023-2026	Published before 2023
Context	AI in English Language Teaching/Learning	General education, non-language subjects

The screening process involved removing duplicates, evaluating titles and abstracts, and subsequently conducting full-text reviews. The complete PRISMA flow detailing the identification and screening phases is illustrated in Figure 1.

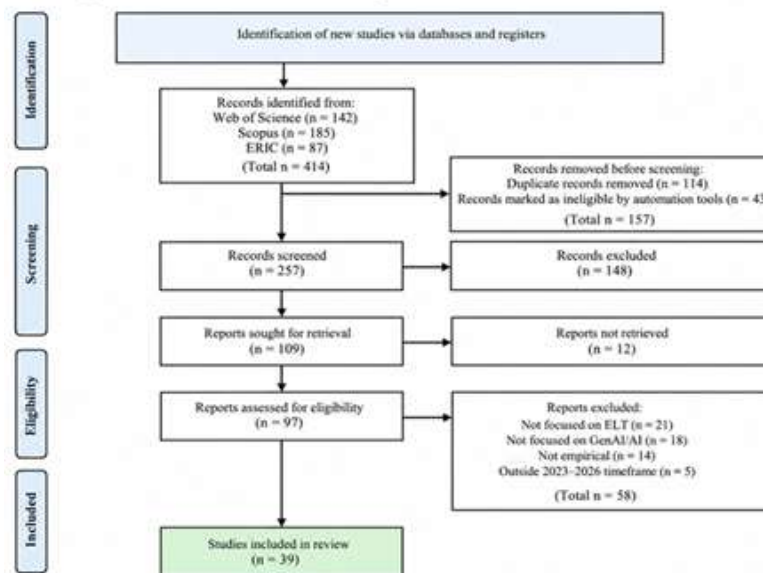


Figure 1. PRISMA 2020 diagram

### 3. Results

#### Descriptive Findings and Study Characteristics

A total of 39 studies met the rigorous inclusion criteria. As shown in Table 3, the selected literature exhibits high methodological quality, with nearly 75% of the studies published in Q1 and Q2 journals.

**Table 3. Distribution of Included Studies by Journal Quartile**

Journal Quartile	Count	Percentage
Q1	18	46.1%
Q2	11	28.2%
Q3	7	18.0%
Q4	3	7.7%

Figure 2 highlights the distribution by publication source, demonstrating that dedicated CALL and educational technology journals serve as the primary venues for this research.

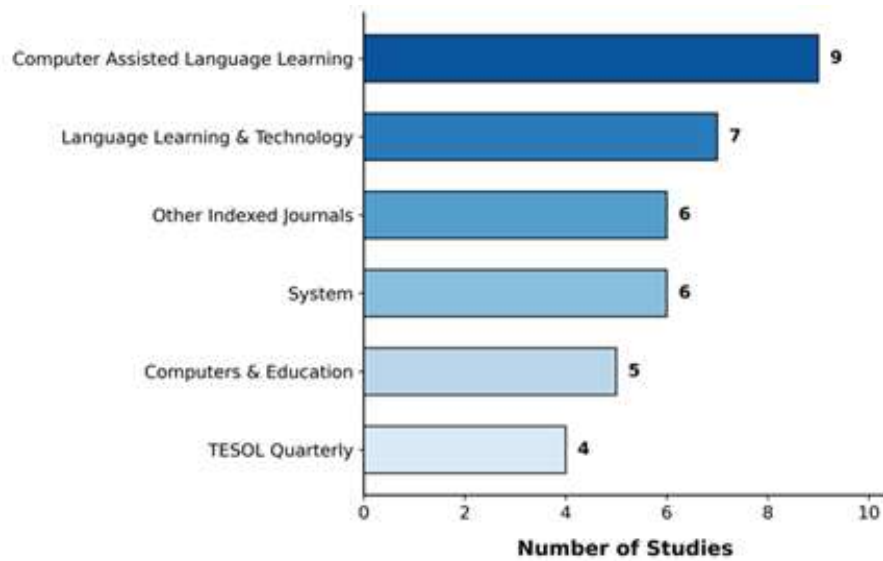


Figure 2: Distribution by publication source

Geographically, the integration of AI in ELT is globally distributed but heavily concentrated in Asia and the Middle East, as depicted in Figure 3. This aligns with strong institutional drives toward educational modernization in these regions (Al-khresheh, 2024).

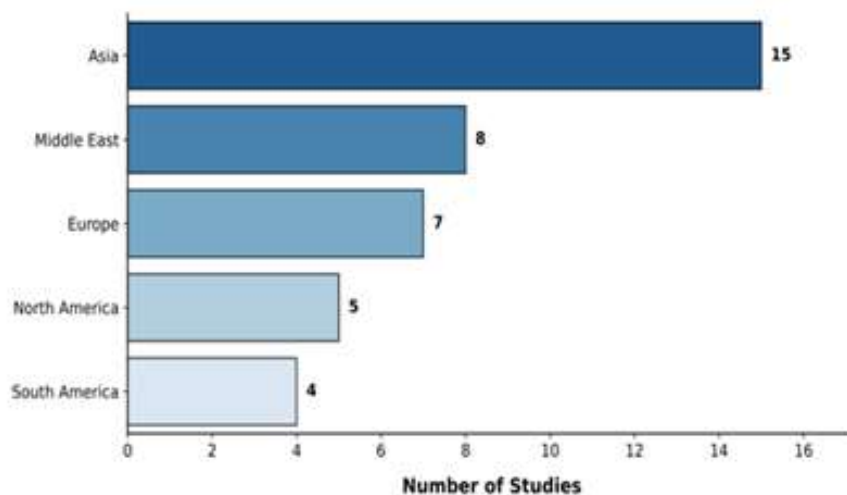


Figure 3: Distribution of studies by region

Regarding the educational context, Figure 4 illustrates that the vast majority of studies were conducted in higher education settings, likely due to the autonomy adult learners have in utilizing LLMs compared to K-12 populations. Methodologically, mixed-methods designs were the most prevalent (Figure 5), allowing researchers to triangulate quantitative proficiency gains with qualitative learner perceptions.

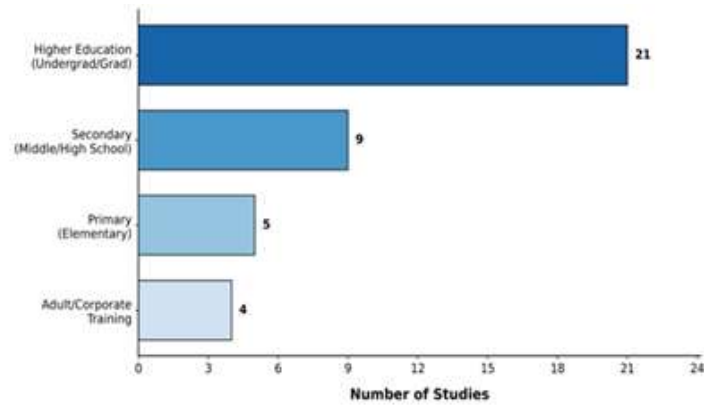


Figure 4: Distribution by educational level

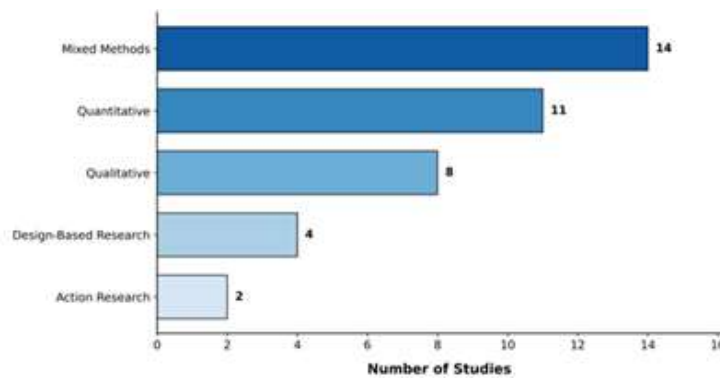


Figure 5: Distribution by methodological approach

### AI Technologies and Targeted Skills (RQ1)

An analysis of the specific tools utilized reveals a massive paradigm shift toward *Generative AI*. Figure 6 shows that ChatGPT and comparable LLMs dominate the research landscape, significantly outpacing traditional adaptive apps and specialized Intelligent Tutoring Systems (ITS).

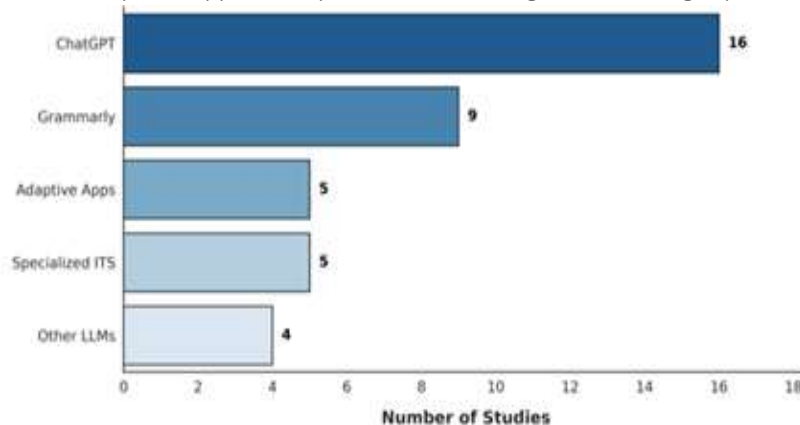


Figure 6: Distribution by AI platform

These platforms are primarily leveraged to target productive skills. As Figure 7 demonstrates, writing and Automated Writing Evaluation (AWE) represent the most researched language skills, followed closely by speaking and pronunciation.

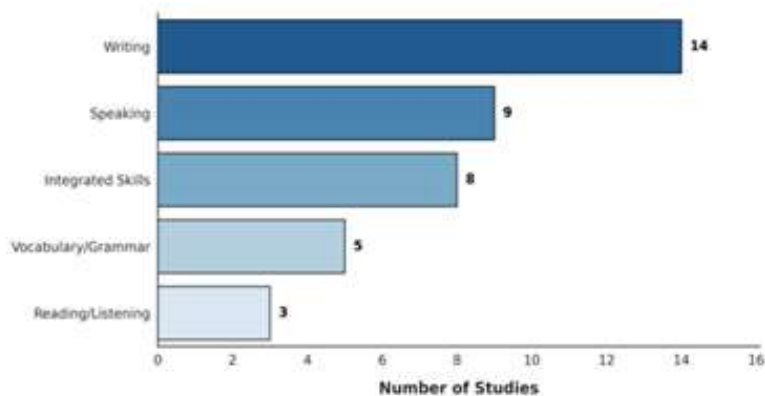


Figure 7: Distribution by language skill

### Emerging Pedagogical Practices (RQ2 & RQ3)

The thematic analysis of the included studies revealed several core pedagogical transformations. Figure 8 highlights the primary pedagogical foci of the interventions, which are further synthesized into the following themes:

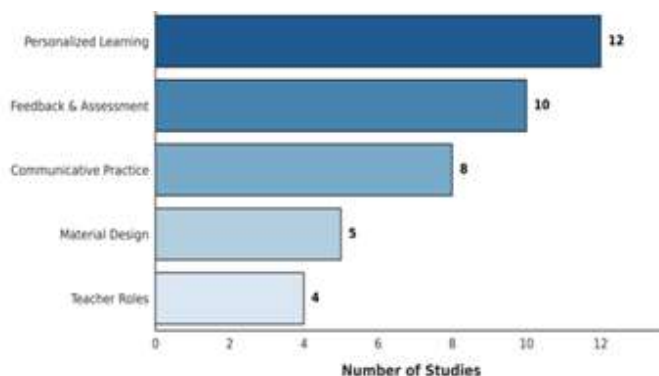


Figure 8: Distribution by pedagogical focus

#### Theme 1: Personalization and Adaptive Instruction

AI platforms are fundamentally altering the 'one-size-fits-all' classroom model. Studies indicate that LLMs provide highly individualized guidance that aligns seamlessly with a learner's specific proficiency level. This pedagogical adaptability fosters increased learner autonomy, reduces cognitive overload, and promotes self-regulated learning (Barrot, 2023).

#### Theme 2: AI-Mediated Feedback and Assessment

AWE systems and GenAI tools deliver immediate, customized, and highly detailed feedback on grammar, lexical choice, and structural coherence (Chen & Cheng, 2023). Empirical evidence consistently shows that iterative prompting and revising with AI significantly improves task achievement and grammatical accuracy in EFL writing. However, a key emerging pedagogical practice is teaching students 'AI feedback literacy'—training learners to critically evaluate AI suggestions rather than passively accepting them (Song & Song, 2023).

#### Theme 3: Enhancing Communicative Competence

Generative AI conversational agents (both text and voice) provide scaffolded, non-judgmental environments for authentic speaking practice. Huang et al. (2024) noted that interacting with AI

selectively alleviates foreign language anxiety, increasing students' willingness to communicate. These tools function as tireless interlocutors, enabling massive scale in communicative practice previously impossible in large classroom settings.

#### **Theme 4: Redefining Teacher Roles**

As AI assumes the burden of routine error correction and basic vocabulary instruction, language instructors are transitioning from primary knowledge providers to learning facilitators and prompt engineers (Gómez-Rey et al., 2024). Teachers are increasingly focusing on higher-order critical thinking, emotional support, and designing complex, AI-integrated tasks. Alfarwan (2025) emphasizes that human teachers remain the essential ethical gatekeepers and sense-makers in the classroom.

### **4. Discussion**

The findings of this review underscore a profound evolution in English Language Teaching. Interpreted through established Second Language Acquisition (SLA) frameworks, AI tools are effectively operationalizing Vygotsky's Sociocultural Theory and Long's Interaction Hypothesis. LLMs act as 'More Knowledgeable Others' (MKOs), providing the scaffolding necessary for learners to bridge their Zone of Proximal Development (ZPD). Through negotiated meaning and immediate corrective feedback, GenAI drives language acquisition efficiently (Pikhart et al., 2024).

The heavy distribution of evidence in Q1 and Q2 journals indicates that the study of AI in CALL has matured rapidly. However, this transition is not without friction. Ethical considerations, particularly academic integrity and algorithmic bias, remain paramount. As students increasingly rely on AI to generate language, distinguishing between authentic learner output and machine-generated text poses a persistent challenge for assessment (Kohnke et al., 2023). Consequently, pedagogical implications point toward a vital need for curriculum redesign: AI literacy must be explicitly taught alongside traditional language skills.

### **5. Conclusion and Future Research Directions**

The AI revolution in English teaching is establishing a new pedagogical baseline characterized by personalized learning pathways, instantaneous formative feedback, and anxiety-free communicative practice. While the affordances of tools like ChatGPT dramatically enhance learner autonomy and writing proficiency, they demand a sophisticated evolution of the language teacher's role.

Future empirical research must bridge current gaps by executing longitudinal studies that measure the deep, long-term impact of GenAI on neurocognitive language acquisition. Furthermore, there is a pressing need to explore AI integration in K-12 environments and address the digital divide to ensure equitable access to these transformative technologies across diverse global contexts.

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