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Human-AI Collaboration in EFL Learning: Rethinking Language Teaching and Learner Agency

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ABSTRACT

The rapid development of generative artificial intelligence is transforming the organization of English as a Foreign Language learning by introducing new possibilities for interaction between learners, teachers, and intelligent technological systems. Unlike earlier educational technologies that primarily functioned as repositories of information or tools for practicing predetermined language activities, generative AI can engage learners in dynamic dialogue, generate instructional materials, provide individualized explanations, offer feedback, simulate communicative situations, and support various stages of language production. These developments have given 38iset o an increasingly collaborative learning environment in which human and artificial intelligence contribute to the learning process in different ways. However, the expansion of AI participation also raises fundamental questions concerning the roles of teachers and learners, the distribution of responsibility, and the preservation of learner agency. This library research critically examines human-AI collaboration in EFL learning by synthesizing scholarly literature concerning generative AI, language teaching, learner agency, learner autonomy, AI-assisted language learning, feedback, personalization, and teacher roles. The thematic synthesis indicates that effective human-AI collaboration depends not on replacing human pedagogical and cognitive functions but on establishing complementary relationships in which AI provides technological affordances while learners and teachers retain meaningful control over educational decisions. Generative AI can expand opportunities for personalized practice, feedback, interaction, and resource creation, but uncritical dependence may reduce learners' cognitive engagement and teachers' pedagogical authority. The study argues that human-AI collaboration should therefore be conceptualized as a negotiated and pedagogically mediated relationship rather than a simple transfer of educational tasks to technology. Sustainable EFL learning in the age of generative AI requires learners to exercise agency in directing and evaluating AI assistance and teachers to design learning environments that integrate technological affordances with human judgment, contextual understanding, and pedagogical responsibility.

***Keywords**: Human-AI Collaboration, Generative AI, Language Teaching*

INTRODUCTION

English as a Foreign Language education has traditionally been organized around relationships among teachers, learners, instructional materials, and learning environments (Penuel et al., 2020). Within this configuration, teachers have generally occupied a central pedagogical position by selecting learning objectives, explaining language concepts, providing feedback, designing activities, assessing performance, and supporting learners' development. Learners, meanwhile, have been expected to engage with instructional materials, participate in classroom interaction, practice language skills, complete learning tasks, and gradually develop greater independence. Digital technologies have progressively modified this arrangement by expanding access to information and communication resources. However, the emergence of generative artificial intelligence represents a more substantial transformation because AI systems can now perform activities that were previously associated with human instructional support, including generating explanations, creating language exercises, providing feedback, engaging in conversation, and producing or transforming texts (de Carvalho-Filho et al., 2020; Goodwin, 2020; Svendsen, 2020).

The increasing capabilities of generative AI have created new possibilities for EFL learning. Learners can interact with AI systems at almost any time, request explanations of grammatical concepts, practice conversations, obtain vocabulary examples, ask for feedback on writing, and generate individualized learning materials. Teachers can also use generative AI to prepare lesson plans, develop exercises, differentiate materials, construct assessment prompts, and obtain alternative explanations of difficult concepts. These affordances suggest that AI can function as an additional participant within the learning environment rather than merely as a passive technological tool. The resulting educational configuration is increasingly characterized by interaction among human participants and intelligent systems. This development creates significant opportunities, but it also requires a reconsideration of how educational responsibilities and decision-making should be distributed (Hamsiah et al., 2022; Hays & Reinders, 2020; Kawuryan et al., 2021).

The concept of collaboration is particularly important in this context because the educational value of AI cannot be understood solely in terms of what the technology is capable of doing. A technologically sophisticated system may generate grammatically accurate explanations or highly polished texts, but educational learning involves purposes and processes that extend beyond the production of correct outputs (Ökmen et al., 2020; Prokopiv & Stynska, 2023; Syukkur & Fauzan, 2021). Human learners bring intentions, experiences, emotions, identities, values, contextual knowledge, and personal goals to learning activities. Teachers contribute pedagogical expertise, professional judgment, knowledge of learners, classroom experience, and an understanding of institutional and cultural contexts. Generative AI contributes computational capabilities, rapid information processing, linguistic generation, personalization, and continuous availability. Human-AI collaboration becomes meaningful when these different capabilities complement rather than simply replace one another (Dörnyei & Ushioda, 2021).

This distinction is particularly significant for learner agency. Learner agency refers to the capacity of learners to act intentionally, make decisions, exercise control, and take responsibility within the conditions that shape their learning. In conventional

EFL settings, learner agency may be expressed through decisions about learning strategies, participation, goal setting, resource selection, and responses to teacher feedback. The introduction of generative AI expands the range of decisions that learners must make. Students now need to determine whether AI should be used for a particular task, what type of assistance should be requested, how AI-generated responses should be evaluated, which recommendations should be accepted or rejected, and how technological assistance should be incorporated into their own learning (Tatto, 2021). Consequently, AI does not eliminate the need for learner agency. Instead, it creates new circumstances in which agency becomes increasingly important.

The relationship between AI and learner agency is nevertheless complex (Arifin et al., 2022). Generative AI can potentially strengthen agency by giving learners greater access to resources and allowing them to seek assistance according to individual needs. Students who are hesitant to ask questions in class may feel more comfortable experimenting with language through private AI interaction. Learners can also request repeated explanations without the time constraints of classroom instruction. Such possibilities can increase learners' opportunities to make choices and regulate their learning. However, the same technology may reduce agency when learners become dependent on AI to make decisions that they could otherwise make independently. If students routinely ask AI to formulate ideas, determine the appropriate vocabulary, revise their writing, solve language problems, and evaluate their own performance, technological convenience may gradually replace rather than support learner decision-making.

The transformation also raises important questions concerning the role of teachers (Adhikari & Shrestha, 2023; Budiharso & Tarman, 2020). The availability of generative AI has sometimes been interpreted as reducing the need for teachers because learners can obtain information and feedback directly from technological systems. Such an interpretation, however, overlooks the distinction between information provision and education. Teaching involves understanding learners' needs, interpreting classroom dynamics, developing meaningful pedagogical experiences, providing contextualized guidance, supporting motivation, evaluating learning, and making professional judgments about appropriate instructional interventions. AI can assist with some of these activities but cannot automatically assume responsibility for their educational purpose. The increasing presence of AI may therefore change the teacher's role without making that role less important. Teachers may increasingly become designers, facilitators, evaluators, and mediators of human-AI learning environments.

Another important issue concerns the quality and reliability of AI-generated language support. Generative AI systems can produce highly fluent responses, but fluency does not guarantee accuracy or contextual appropriateness. An AI system may provide an explanation that is technically plausible but pedagogically unsuitable for a learner's proficiency level. It may suggest a grammatically correct expression that does not fit the communicative context or generate information that requires verification. EFL learners may be particularly vulnerable to such problems when they lack sufficient linguistic knowledge to identify inaccuracies. Human-AI collaboration therefore requires critical evaluation rather than passive acceptance. Both teachers and

learners need the ability to assess whether AI-generated content is appropriate, accurate, and aligned with learning objectives.

The collaborative dimension is also relevant to feedback and revision. Generative AI can provide immediate responses to learner writing and offer alternative expressions, explanations, and organizational suggestions. This can expand opportunities for formative learning because students do not have to wait for teacher feedback before identifying potential problems. Yet feedback becomes educationally meaningful only when learners interpret and act upon it. A student who accepts every AI suggestion without understanding the underlying issue may produce a more polished text without necessarily developing stronger writing competence. Human-AI collaboration should therefore involve active learner participation in evaluating feedback, making revision decisions, and reflecting on changes. Teachers can contribute by helping students understand why some AI suggestions are useful while others may be inappropriate.

Existing scholarship on artificial intelligence in education and language learning has grown rapidly, particularly since the emergence of widely accessible generative AI systems. Research has examined ChatGPT and related technologies in relation to writing, speaking practice, feedback, motivation, personalization, academic integrity, teacher perceptions, and student engagement. Other research has explored AI literacy, learner autonomy, self-regulated learning, and ethical challenges. Despite this expansion, an important conceptual gap remains. Much of the discussion still treats AI primarily as a tool that either improves or threatens learning outcomes. Comparatively less attention has been given to the relational dimension of human-AI collaboration and to how agency is negotiated when technological systems participate actively in learning and teaching processes. Understanding this relationship is necessary because the educational consequences of AI depend not only on technological capability but also on how responsibility, control, and decision-making are distributed among teachers, learners, and AI systems.

This study addresses that gap by critically examining human-AI collaboration in EFL learning with particular attention to language teaching and learner agency. The study does not assume that collaboration with AI is inherently beneficial or harmful. Instead, it examines the conditions under which AI can complement human teaching and learner decision-making while identifying circumstances in which technological participation may weaken human control. The novelty of the study lies in conceptualizing generative AI as part of a collaborative learning ecology in which technological assistance must remain pedagogically mediated and human agency must remain central. The analysis therefore focuses on how AI can support EFL learning without displacing the learner's responsibility for learning or the teacher's responsibility for pedagogical judgment.

METHOD

This study employed library research using a qualitative and interpretive approach to examine the emerging relationship between human-AI collaboration, EFL learning, language teaching, and learner agency. Library research was selected because the purpose of the study was to critically synthesize existing scholarly knowledge rather than evaluate a single AI application through primary empirical data (Creswell & Creswell, 2017). Published academic literature was treated as the

main source of evidence, enabling the study to integrate theoretical discussions and empirical findings from different EFL contexts. The analysis concentrated on scholarship addressing generative AI, artificial intelligence in language education, AI-assisted language learning, learner agency, learner autonomy, teacher roles, human-AI interaction, feedback, personalized learning, self-regulated learning, and AI literacy.

Relevant literature was identified through scholarly databases and academic search platforms using combinations of keywords associated with the central concepts of the study. Search terms included "generative AI," "ChatGPT," "human-AI collaboration," "EFL learning," "language teaching," "learner agency," "learner autonomy," "AI-assisted language learning," "AI-mediated feedback," "AI literacy," "teacher role," "personalized language learning," and "self-regulated learning." Recent scholarship was prioritized because generative AI represents a rapidly developing area of educational research. At the same time, foundational literature on learner autonomy, agency, sociocultural learning, teacher mediation, and technology-enhanced language learning was retained when necessary to establish the conceptual foundations for interpreting contemporary developments.

The literature was selected based on relevance, scholarly quality, conceptual contribution, and contextual suitability. Publications were included when they provided meaningful discussion of AI-supported language learning, generative AI in education, human-AI interaction, learner decision-making, teacher mediation, or related dimensions of EFL pedagogy. Studies that focused exclusively on technical aspects of artificial intelligence without educational implications were given limited attention. Particular consideration was also given to differences between studies focusing on technological performance and those examining actual learner or teacher experiences. This distinction was necessary because technological capability alone does not demonstrate educational value. The analysis therefore prioritized evidence that could illuminate how AI changes learning activities, decision-making, teaching roles, interaction, feedback, and responsibility.

The selected literature was analyzed thematically. The analysis initially identified the principal educational functions attributed to generative AI, including language explanation, content generation, feedback, conversational interaction, personalization, resource development, and learning support. The literature was then examined for evidence concerning learner agency, teacher agency, responsibility, decision-making, cognitive engagement, dependence, and critical evaluation. Relationships among these themes were interpreted to identify complementary and potentially conflicting dimensions of human-AI collaboration. Particular attention was given to how AI participation may redistribute educational tasks while preserving or challenging human control. The final synthesis was used to develop a conceptual interpretation of human-AI collaboration as a pedagogically mediated relationship in which technological capabilities are integrated with human judgment rather than treated as substitutes for it.

RESULT AND DISCUSSION

RESULT

The literature indicates that generative AI is expanding the range of learning activities available to EFL students. AI systems can function as conversational partners, writing assistants, feedback providers, language tutors, vocabulary resources, and generators of individualized practice materials. This flexibility allows learners to engage in language activities beyond the temporal and spatial boundaries of formal classroom instruction. Students can practice English repeatedly, request alternative explanations, experiment with expressions, and receive immediate responses to questions. The availability of these resources can be particularly valuable in EFL environments where opportunities for authentic English interaction are limited. The literature therefore suggests that generative AI can expand the learning environment by providing additional opportunities for practice and interaction that complement rather than necessarily replace classroom experiences.

A major finding concerns the personalization of EFL learning. Generative AI can respond to individual questions and modify explanations according to learners' requests. Students can ask for simpler explanations, more difficult examples, additional practice, contextualized vocabulary, or simulated conversations. This capacity potentially allows learners to pursue differentiated learning pathways within environments that may otherwise be constrained by standardized curricula and limited instructional time. Personalization can also encourage learners to identify their own weaknesses and seek targeted assistance. However, the literature indicates that personalization should not be equated automatically with learner-centeredness. An AI system can personalize content while still directing the learning process according to its own generated recommendations. Meaningful personalization requires learners to participate actively in identifying goals and determining whether AI-generated activities correspond to their actual needs.

The literature also identifies significant potential for generative AI to support language practice and interaction. AI-based conversational systems can provide learners with opportunities to practice English without the social anxiety that some students experience during face-to-face communication. Learners can experiment with vocabulary, sentence structures, and communicative strategies and request feedback on their performance. This creates possibilities for increased frequency of language use, particularly for learners who have limited access to English-speaking environments. Nevertheless, simulated interaction does not completely reproduce human communication. Human conversation includes emotional, cultural, contextual, and interpersonal dimensions that cannot always be represented adequately through AI-generated responses. Human-AI collaboration should therefore supplement rather than eliminate opportunities for authentic human communication.

Another major finding concerns feedback. Generative AI can provide immediate and potentially individualized feedback on grammar, vocabulary, sentence construction, organization, and style. This can reduce the waiting time associated with teacher feedback and allow learners to engage in repeated cycles of revision. AI feedback can also be requested at different levels of detail, allowing students to focus on particular aspects of their language development. However, the literature consistently suggests that feedback quality depends on learner

interpretation. AI-generated feedback can be inaccurate, overly prescriptive, or inconsistent with the learner's communicative intention. Consequently, the educational value of AI feedback depends on learners' ability to evaluate suggestions and on teachers' ability to help learners understand the limitations of automated feedback.

The findings further demonstrate that learner agency becomes more complex in AI-mediated environments. Generative AI expands the range of choices available to learners, but more choices do not automatically produce greater agency. Agency depends on the learner's ability to make meaningful and informed decisions. Learners demonstrate agency when they determine what assistance they need, formulate appropriate requests, evaluate AI responses, make decisions about implementation, and reflect on the consequences of those decisions. By contrast, agency may be weakened when learners simply follow AI recommendations without questioning them. The literature therefore suggests that AI-supported learning should be evaluated not merely by how effectively students use technological tools but by how effectively they maintain responsibility for learning decisions.

The literature also identifies the risk of cognitive outsourcing. Generative AI can perform many activities that require considerable effort from learners, including brainstorming, translation, sentence construction, summarization, revision, and response generation. While technological assistance can reduce unnecessary difficulty, excessive outsourcing may reduce learners' opportunities to develop language knowledge through active engagement. If AI consistently generates the ideas and linguistic forms that learners would otherwise need to construct themselves, students may become increasingly dependent on the technology. The resulting products may appear successful while providing limited evidence of independent language development. Human-AI collaboration therefore requires careful attention to which cognitive activities should remain with learners and which activities can appropriately be supported by AI.

Another important finding concerns teacher agency and professional responsibility. Generative AI can assist teachers in creating instructional materials, generating examples, adapting texts, developing exercises, and providing preliminary feedback. Such assistance may reduce routine workload and allow teachers to allocate more time to higher-level pedagogical activities. Nevertheless, teachers remain responsible for determining whether AI-generated materials are accurate, culturally appropriate, instructionally relevant, and suitable for particular learners. The literature therefore points toward a transformation of the teacher's role rather than its disappearance. Teachers increasingly need to become critical evaluators and pedagogical mediators of AI-generated resources.

The findings also indicate that AI literacy is becoming an essential component of both learner and teacher competence. Effective collaboration requires users to understand what generative AI can and cannot reliably do. Learners need to recognize potential inaccuracies, evaluate responses against credible sources, protect their own academic responsibility, and understand when AI assistance may interfere with learning. Teachers require additional competence in evaluating AI-generated educational materials, designing appropriate AI-supported activities, establishing responsible-use expectations, and guiding students toward critical engagement. AI

literacy consequently functions as an enabling condition for meaningful collaboration rather than simply a technical skill.

The literature further emphasizes the importance of maintaining human interaction in EFL learning. Language is fundamentally communicative and social, and effective language development involves interaction with teachers, peers, and communities. Generative AI can provide additional opportunities for practice but cannot fully reproduce the relational dimensions of human communication. Teachers and peers provide perspectives, emotional support, contextual interpretation, and authentic communicative negotiation that remain important for language development. Human-AI collaboration should therefore be understood as an expansion of the learning ecology rather than a replacement of human relationships within that ecology.

DISCUSSION

The findings indicate that human-AI collaboration represents a substantial shift in the organization of EFL learning because the technological system is no longer merely a medium through which learners access predetermined content. Generative AI can actively participate in the construction of learning experiences by generating explanations, responding to questions, producing language examples, and adapting interactions according to learner requests. This changes the traditional distribution of instructional resources and creates a more complex learning environment. The central pedagogical issue is therefore not whether AI should be incorporated into EFL learning, but how its participation should be structured so that technological capabilities complement human learning rather than displace the cognitive and pedagogical functions that make education meaningful (Palomino et al., 2019).

A collaborative perspective challenges the assumption that the value of AI can be determined simply by measuring improvements in performance. If students produce more accurate English after using AI, this may indicate technological effectiveness, but it does not necessarily demonstrate that learners have developed stronger language competence or greater independence. The distinction between assisted performance and developed capability becomes particularly important. A learner may produce an excellent paragraph with AI assistance while still being unable to construct a comparable paragraph independently. Human-AI collaboration should therefore be evaluated according to whether interaction with technology contributes to learners' developing capacity rather than merely improving immediate task outcomes (Azizah et al., 2026; Dvir et al., 2024; Susanti & Baroroh, 2025).

Learner agency is central to this distinction because it determines how technological assistance is incorporated into learning. Agency is not preserved simply because students are allowed to choose whether to use AI. Meaningful agency requires students to understand the implications of their choices and to exercise informed control over technological interaction (Kulkov et al., 2024). This includes deciding the purpose of AI use, determining the appropriate level of assistance, evaluating generated responses, and taking responsibility for the final learning outcome. From this perspective, the most important educational question is not how much AI learners use but how deliberately they use it. A student who uses AI extensively but critically may demonstrate greater agency than a student who uses it minimally but uncritically (Al Ayyubi, Prayetno, et al., 2025).

The concept of collaboration also requires reconsideration of the teacher's role. If AI is treated as a substitute for teacher explanation, feedback, or material development, the educational relationship may become increasingly technology-centered. A more productive model positions teachers as mediators who determine how technological capabilities should be integrated into pedagogical goals. Teachers can design activities in which students critique AI-generated explanations, compare AI feedback with teacher feedback, identify inaccuracies, and justify their own decisions. These practices transform AI from an authority into an object of critical engagement. Such an approach also allows teachers to observe how students reason about technological output rather than evaluating only the final language product (Aisida, 2021; Al Ayyubi et al., 2024; Al Ayyubi, Rahmawati, et al., 2025; Birgin & Acar, 2022; Farias-Gaytan et al., 2022).

The findings have particular significance for feedback and writing development. Generative AI makes it possible for learners to receive feedback repeatedly and immediately, potentially transforming feedback from a delayed teacher response into an interactive process. However, the effectiveness of feedback depends on what learners do with it. If students simply implement AI suggestions, feedback may improve the surface quality of a text without developing the learner's ability to diagnose and correct problems independently. If students compare their original text with AI suggestions, question the rationale behind the recommendations, and determine which changes are appropriate, feedback can become a site of deeper learning. Human-AI collaboration is therefore strongest when AI provides possibilities while learners remain responsible for evaluating those possibilities.

Another important issue is the distribution of cognitive effort. Learning requires effort, but not all effort is equally productive. Generative AI can appropriately reduce unnecessary cognitive burdens, such as searching for examples or generating preliminary practice materials. However, it may become counterproductive when it performs cognitive activities that learners need to develop themselves. In EFL education, learners need opportunities to formulate sentences, retrieve vocabulary, construct arguments, interpret meaning, and negotiate communication. If AI consistently performs these activities, learners may lose opportunities for productive practice. Teachers therefore need to distinguish between AI use that supports cognitive development and AI use that replaces it.

The findings also suggest that human-AI collaboration should be understood as an ethical relationship involving responsibility and accountability. When an AI system provides inaccurate information, learners and teachers need to determine who is responsible for recognizing and correcting the problem. In educational contexts, responsibility cannot simply be transferred to the technological system. Learners remain responsible for the work they submit, while teachers remain responsible for the pedagogical decisions they make. This principle is particularly important because generative AI can produce highly convincing responses that may obscure uncertainty. Responsible collaboration therefore requires verification, transparency, and an understanding that technological output is a resource for decision-making rather than an unquestionable authority.

The relationship between AI and learner autonomy is also worth emphasizing. Human-AI collaboration can potentially strengthen autonomy by expanding access to resources and allowing learners to pursue individualized learning pathways. Yet

autonomy requires more than access. Learners must develop the capacity to determine their own goals, regulate AI use, monitor progress, and evaluate whether technological assistance is actually contributing to learning. This suggests that autonomous AI use should include the ability to disengage from AI when independent practice is pedagogically necessary. The ability to work without technological support remains an important component of autonomy precisely because learners need to know what they can accomplish through their own knowledge and judgment.

Human interaction must likewise remain central to EFL pedagogy. Language learning involves social meaning-making, identity formation, interpersonal communication, and cultural interpretation. AI can simulate many forms of conversation, but simulated interaction does not eliminate the need for human relationships. Teachers provide encouragement, challenge, contextual interpretation, and pedagogical judgment, while peers provide opportunities for negotiation, collaboration, and authentic communication. Generative AI should therefore expand the range of interaction available to learners without becoming the dominant or exclusive interlocutor. A balanced learning ecology recognizes that technological interaction and human interaction provide different forms of educational value.

These findings imply that EFL teacher education also needs to evolve. Teachers require more than familiarity with AI tools. They need the pedagogical knowledge necessary to determine when AI can enhance learning, when it may create dependency, and how activities can be designed to preserve learner agency. Teacher education should therefore incorporate AI literacy alongside assessment literacy, language pedagogy, feedback literacy, and digital pedagogy. Future teachers need to be prepared to evaluate AI-generated materials, establish appropriate classroom policies, design AI-supported tasks, and facilitate critical discussion about the benefits and limitations of generative AI.

The conceptual contribution of this study lies in framing human-AI collaboration as a relationship of complementarity rather than substitution. AI contributes speed, accessibility, generative capacity, and flexible technological support. Learners contribute intention, experience, judgment, interpretation, and responsibility. Teachers contribute pedagogical expertise, contextual knowledge, professional judgment, and relational support. The educational potential of generative AI emerges when these different forms of capability are coordinated around learning purposes. When technological capability is allowed to replace human decision-making, collaboration can deteriorate into dependence. When technology is critically integrated within a human-directed learning process, it can expand opportunities for language development while preserving learner agency and teacher professionalism.

CONCLUSION

Generative AI is reshaping EFL learning by introducing new forms of interaction among learners, teachers, and intelligent technological systems. Its ability to generate language, provide feedback, simulate communication, personalize learning resources, and support instructional preparation creates significant opportunities for expanding language-learning experiences. However, the educational significance of these capabilities cannot be determined solely by technological performance. What matters is how AI participation is integrated into the

learning process and whether learners and teachers retain meaningful control over educational decisions. Human-AI collaboration should therefore be understood as a pedagogically mediated relationship rather than as a technological replacement for established forms of teaching and learning. The study demonstrates that learner agency is a central condition for productive human-AI collaboration. Generative AI can increase learners' access to resources and create greater opportunities for individualized practice, but these advantages can be undermined when learners transfer essential cognitive decisions to technology. Meaningful agency requires learners to identify their needs, determine the purpose of AI use, evaluate AI-generated responses, make informed decisions, and assume responsibility for their learning outcomes. The ability to use AI effectively must therefore be accompanied by the ability to question it, regulate it, and deliberately work without it when independent cognitive engagement is necessary.

The role of the teacher is likewise being transformed rather than eliminated. Teachers remain essential because educational learning requires contextual interpretation, pedagogical judgment, emotional and social support, and the capacity to understand individual learners. Generative AI may reduce certain routine tasks, but it also creates new responsibilities for teachers as designers, mediators, evaluators, and facilitators of AI-supported learning. Teachers need to help learners distinguish between productive assistance and cognitive outsourcing, evaluate AI-generated information, and develop responsible practices of technological engagement.

The broader contribution of this study is the argument that effective EFL education in the age of generative AI should move toward a balanced model in which technological capabilities and human capacities are complementary. AI can expand access, flexibility, personalization, and opportunities for practice, while learners and teachers provide intention, judgment, contextual understanding, reflection, and responsibility. The goal should not be to determine whether humans or AI are more capable in general, but to identify which forms of educational work are best supported by technology and which should remain fundamentally human. In this perspective, the success of AI integration should be judged not by how much educational activity can be automated, but by whether technology contributes to deeper learning, stronger learner agency, meaningful human interaction, and more purposeful language teaching. As a library research study, this article is limited by the scope and methodological diversity of the existing literature and by the rapidly evolving nature of generative AI technologies. Future empirical research should investigate human-AI collaboration across different EFL contexts, proficiency levels, institutional settings, and instructional models. Longitudinal studies would be particularly valuable for examining whether sustained interaction with generative AI strengthens or weakens learner agency over time. Future research should also investigate how teachers negotiate professional responsibility when AI becomes increasingly involved in lesson preparation, feedback, assessment, and classroom interaction. Ultimately, the future of EFL education should not be framed as a choice between human teaching and artificial intelligence. It should focus on designing learning environments in which technological capabilities are purposefully integrated while human agency, pedagogical judgment, and responsibility remain at the center of language education.

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