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Narrative Explorations of EFL Learners' Engagement with AI Tools in Developing Writing Proficiency

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Abstract: This study explores the lived experiences of English as a Foreign Language (EFL) learners engaging with Artificial Intelligence (AI) tools to support their academic writing development. Using a narrative inquiry approach, the research investigates how learners describe their interactions with AI technologies such as ChatGPT and Grammarly, and what challenges and opportunities they perceive. Eighteen university-level EFL students participated in in-depth interviews, revealing that AI tools are widely appreciated for enhancing linguistic accuracy, improving efficiency, boosting writing confidence, and supporting idea generation. These benefits align with the Technology Acceptance Model and Sociocultural Theory, suggesting that AI acts as both a facilitator of ease and a scaffold within learners' Zones of Proximal Development. However, the findings also highlight substantial concerns related to academic integrity, over-reliance, and AI's limitations in generating culturally nuanced or critically engaging content. This duality reflects the "Paradox of Assistance," where the same features that make AI valuable can also inhibit deeper learning if uncritically used. The study emphasizes the need for intentional, pedagogically guided integration of AI in EFL writing instruction, promoting a balanced Human-AI collaboration that empowers learners as autonomous and reflective writers.

Keywords: academic writing, artificial intelligence, EFL learners, human-AI collaboration, learner perceptions

INTRODUCTION

The digital age has profoundly reshaped language education, with Artificial Intelligence (AI) emerging as a transformative force. From grammar checkers like Grammarly to generative models such as ChatGPT, AI tools are increasingly integrated into educational contexts, offering novel opportunities for English as a Foreign Language (EFL) learners to enhance their writing proficiency (Virlan & Tomak, 2024). This growing shift necessitates a deeper understanding of how learners interact with these evolving technologies. Traditional EFL writing instruction often struggles to provide timely, individualized feedback due to large class sizes and diverse learner needs (Han & Sari, 2024). AI tools promise to ease these challenges by delivering immediate, tailored support, potentially transforming how written language is taught and learned. The rapid

proliferation of AI in education highlights the urgent need for empirical inquiry into its real-world impact, particularly from the learners' perspective (Adewale et al., 2024). As teaching practices adapt, educators are transitioning from knowledge transmitters to facilitators who guide students in the effective and ethical use of AI tools (Bettayeb et al., 2024). This evolving role requires not only technical competence but also pedagogical awareness of how AI influences learning processes and learner autonomy.

Despite the growing integration of AI tools in EFL writing instruction, the literature lacks a rich understanding of the lived experiences of learners who use these tools. Much existing research focuses on technical efficiency or measurable improvements in writing quality (Lin, 2024; Marzuki et al., 2023; Rahmi et al., 2024), often neglecting the cognitive, emotional, and strategic dimensions of learner engagement. There is limited empirical evidence on how learners perceive the influence of AI tools on their writing processes, confidence, creativity, and overall development. Moreover, the dual nature of AI—as both an enabler and a potential crutch—raises important concerns. While these tools can accelerate writing and reduce cognitive load, over-reliance may undermine critical thinking, creativity, and learner agency (Pratiwi et al., 2025). Ethical concerns, such as the authenticity of AI-assisted work, also remain underexplored from the learner's perspective. What remains unclear is how learners navigate the affordances and limitations of AI: whether they passively accept AI-generated content or actively engage in a process of negotiation, decision-making, and critical evaluation. Addressing this gap is essential for designing pedagogical frameworks that encourage meaningful, reflective use of AI in writing development.

This study is significant in adopting a narrative inquiry approach to explore EFL learners' subjective experiences with AI writing tools. Unlike quantitative studies that focus on outcomes, narrative inquiry captures the depth of learners' reflections, meaning-making processes, and evolving attitudes toward AI integration (Smith & Luke, 2023; Weiss & Johnson-Koenke, 2023). This qualitative perspective enables a more human-centered understanding of how learners engage with technology in authentic writing contexts. The findings aim to inform educators, curriculum designers, and policymakers on how to strategically incorporate AI tools into language instruction while promoting responsible use. The study highlights the importance of digital and AI literacy, helping learners become critical users rather than passive recipients of AI-generated feedback. It also contributes to theory-building around learner autonomy and technology acceptance in second language writing. Furthermore, by exploring learners' ability to manage their interaction with AI—what can be termed "Human-AI Interactive Negotiation Competence" (HAINC)—this research may guide future AI tool design toward fostering collaborative rather than merely assistive roles in writing development.

This study focuses on the narrative accounts of EFL learners who use AI tools to support their writing development. It involved 18 undergraduate and postgraduate students from a major public university in Southeast Asia, representing diverse academic disciplines and varying levels of AI familiarity. It explores their perceptions of usefulness, ease of use, challenges encountered, and perceived opportunities across the writing process,

including brainstorming, drafting, revising, and editing. The primary data consists of qualitative, self-reported reflections and experiences. The study does not measure improvements in writing proficiency quantitatively or compare AI-assisted writing to traditional instruction methods. It also does not delve into the technical mechanisms or linguistic modeling capabilities of the AI tools used. Instead, the scope is intentionally centered on learners' subjective experiences, meaning-making, and interactional strategies in engaging with AI during the writing process. The novelty of this research lies in its use of narrative inquiry to explore EFL learners' subjective experiences with AI tools—an area underexplored in existing studies that often rely on quantitative measures and focus on performance outcomes rather than learner perspectives. In more detail, this research aims to address the research questions below:

1. How do EFL learners describe their experiences of using AI tools to support their writing development?
2. What challenges and opportunities do EFL learners perceive in their engagement with AI-assisted writing tools.

LITERATURE REVIEW

Theoretical and Conceptual Framework

This study is theoretically grounded in two complementary frameworks: Sociocultural Theory (SCT) and the Technology Acceptance Model (TAM). These frameworks provide distinct but interconnected perspectives for understanding EFL learners' engagement with AI tools in the development of writing proficiency (Tetik et al., 2024). While SCT emphasizes the socially mediated and interactive nature of learning, TAM focuses on the motivational and perceptual dimensions of technology use. Together, they offer a comprehensive lens through which learners' experiences, choices, and reflections on AI-assisted writing can be interpreted.

Sociocultural Theory (SCT), primarily developed by Vygotsky, posits that learning is not an isolated cognitive activity but a socially situated and mediated process (Alkhudiry, 2022; Lantolf & Xi, 2023; Poehner & Lu, 2024). Central to SCT is the concept of the Zone of Proximal Development (ZPD)—the space between what a learner can do independently and what they can achieve with appropriate support (Gillespie et al., 2022; Jama, 2023; Rubtsov et al., 2022; Zaretsky, 2024). In the context of this study, AI tools such as ChatGPT or Grammarly can be conceptualized as mediating artifacts or even “more knowledgeable others” that provide scaffolding to help learners bridge this gap. These tools offer real-time feedback, modeling, and corrective support that enable learners to perform writing tasks beyond their unaided capabilities. From an SCT perspective, the learner's experience with AI is not merely transactional but interactive and developmental, shaping their linguistic awareness, confidence, and autonomy over time. This study uses SCT to explore how learners narrate their engagement with AI tools as part of a broader social and cognitive learning process, particularly in terms of how support is internalized and transformed into independent competence.

In parallel, the Technology Acceptance Model (TAM) provides a framework for understanding the motivational and behavioral aspects of learners' interaction with AI tools (Alharbi, 2023; Sulistiyo et al., 2022). TAM posits that two key perceptions—Perceived Usefulness and Perceived Ease of Use—significantly influence a user's attitude toward a technology and their intention to use it. Within this study, learners' descriptions of their experiences using AI tools for writing are analyzed in light of how helpful and user-friendly they perceive these tools to be. For instance, if learners believe that AI tools improve their grammar, structure, or clarity, and that they are intuitive and accessible, they are more likely to engage with them consistently and positively. TAM also accounts for external variables such as social influence (e.g., recommendations from peers or teachers) that may shape learners' technology use behaviors. In this research, TAM helps explain the underlying beliefs and decision-making processes learners describe in their narratives—whether they adopt AI tools enthusiastically, use them selectively, or approach them with skepticism.

By integrating SCT and TAM, this study not only examines how AI tools function as learning mediators but also why learners choose to engage with them. This dual lens offers a richer understanding of EFL learners' experiences by capturing both the cognitive-social dynamics of scaffolded writing development and the affective and behavioral factors that influence technology acceptance. In doing so, the study contributes to the growing field of AI in education by linking learner perceptions with established theories of learning and technology use.

The research instrument, specifically the semi-structured interview guide, was developed based on key constructs from Sociocultural Theory (SCT) and the Technology Acceptance Model (TAM). From SCT, questions were designed to elicit learners' experiences of scaffolding, social mediation, and self-regulation while using AI tools. From TAM, items explored learners' perceptions of usefulness, ease of use, and behavioral intention to engage with AI in their writing tasks. This theoretical alignment ensured that the interview prompts captured both cognitive-social interactions and motivational dimensions of learners' engagement with AI-assisted writing.

Previous Studies, Research Gap, and Novelty

In recent years, the integration of Artificial Intelligence (AI) tools into English as a Foreign Language (EFL) instruction—particularly in writing—has attracted growing scholarly interest. Numerous studies have examined the effectiveness of AI-based applications, such as Grammarly, QuillBot, and ChatGPT, in improving linguistic accuracy, enhancing lexical diversity, and fostering writing fluency among EFL learners (AbuHussein & Badah, 2025; Mizumoto et al., 2024). These investigations often emphasize the measurable gains in writing quality through pre- and post-intervention assessments, demonstrating AI's potential as a supplemental instructional tool. Other research strands have explored the pedagogical utility of AI in automating feedback, reducing teacher workload, and enabling individualized learning, particularly in large or under-resourced classrooms (Burner et al., 2025; Celik et al., 2022). Moreover, some

studies have assessed the alignment of AI-generated feedback with instructional objectives, highlighting concerns over accuracy, tone, and contextual appropriateness.

Yet, much of this body of research remains focused on product-oriented outcomes, such as linguistic improvements or instructional efficiency, rather than the learner's evolving relationship with AI tools in authentic writing contexts. While these studies demonstrate what AI can do for EFL writing, few examine how learners actually engage with these tools, make decisions, and reflect on their use during the writing process. This underscores a critical need for qualitative, learner-centered inquiries that move beyond technical performance to explore affective, strategic, and ethical dimensions of AI integration in writing.

However, despite this expanding body of literature, a significant gap remains in understanding the lived experiences of EFL learners as they engage with AI tools in writing contexts. Much of the existing research relies on quantitative or quasi-experimental designs, focusing on performance outcomes rather than the cognitive, emotional, and strategic dimensions of learner interaction with AI. There is limited empirical insight into how learners perceive these tools beyond their surface functionality—how they integrate them into their writing processes, how they negotiate trust, dependency, or agency, and what challenges or uncertainties arise during use. Furthermore, few studies have explored the learner's voice in articulating both the opportunities and the ethical or pedagogical dilemmas presented by AI-assisted writing. Questions around over-reliance, diminished creativity, and critical engagement remain largely under-theorized, especially from the learner's perspective. As AI becomes more embedded in everyday educational practice, this lack of learner-centered qualitative inquiry leaves a critical blind spot in understanding how these technologies are reshaping not just writing outcomes, but the experience of learning itself.

The novelty of this study lies in its narrative inquiry approach to exploring EFL learners' experiences with AI writing tools. Rather than treating learners as passive users or data points in a performance metric, this research positions them as active meaning-makers whose stories offer valuable insight into the evolving relationship between human writers and intelligent systems. By focusing on the subjective accounts of learners—how they describe, interpret, and emotionally respond to their use of AI—this study provides a deeper, more holistic understanding of AI's impact on L2 writing development. It also introduces the concept of Human-AI Interactive Negotiation Competence, referring to learners' capacity to set goals, interpret feedback, and make strategic decisions when working with AI tools. In doing so, the research advances both theoretical and practical discussions in the field, offering implications not only for EFL pedagogy and curriculum design, but also for the development of AI tools that are more pedagogically responsive and aligned with learner needs.

METHODS

Research Design

This study was guided by an interpretivist paradigm (Bilki et al., 2023), which focuses on uncovering how individuals construct meaning from their personal experiences within particular social and cultural contexts. This approach is especially appropriate for research aiming to explore the nuanced, subjective perspectives of EFL learners as they engage with AI tools in their writing practices. Instead of aiming for statistical generalization or establishing cause-effect relationships, the interpretivist lens values detailed, context-sensitive insights into how participants experience, interpret, and navigate their learning environments. Given that the research questions focus on learners' descriptions of their experiences and their perceived challenges and benefits of AI-assisted writing, a qualitative methodology was most suitable. This allowed the researcher to explore the emotional depth and contextual complexity embedded in participants' reflections.

To guide the inquiry, narrative inquiry was adopted as the principal methodological framework (Ghanbar et al., 2024; Kral, 2023; Xu et al., 2024). Recognized in language education and applied linguistics, narrative inquiry enables the examination of personal stories as a window into lived experience. It captures how individuals construct meaning over time and across settings, offering a multidimensional understanding of their interactions with AI tools. This method aligns well with the study's focus on learner voice and meaning-making, providing rich, detailed insights into how EFL students perceive the evolving role of AI in their writing development.

Participants

The participants in this study were university-level learners of English as a Foreign Language (EFL) who regularly used Artificial Intelligence (AI) tools to support their academic writing. A total of 18 students were selected from a major public university in Southeast Asia, a region gaining prominence in the study of AI-enhanced language education. This context provided a relevant cultural and educational setting to explore learner experiences with AI-assisted writing.

Participants were chosen through purposive sampling based on specific inclusion criteria: active involvement in EFL academic writing and consistent use of AI tools such as ChatGPT or Grammarly. This approach ensured the selection of individuals with meaningful insights into the research focus. The sample size was determined by the principle of data saturation, which was reached once no additional themes emerged in the final stages of data collection. Including 18 participants allowed for a diverse range of perspectives and experiences to be analyzed meaningfully.

The group consisted of both undergraduate and postgraduate students, with a balanced gender representation and an age range of 19 to 24 years. They came from varied academic fields—including humanities, social sciences, and engineering—providing insight into how AI tools were applied across different writing demands. Their familiarity

with AI varied, ranging from initial experimentation to routine integration in their writing practice.

Data Collection

Data for this study were gathered using semi-structured interviews, selected for their effectiveness in uncovering rich, personal accounts while allowing flexibility to explore emerging topics. This method struck a balance between guided inquiry and open dialogue, enabling participants to articulate their thoughts, experiences, and perspectives in depth. The semi-structured interview guide was constructed based on key theoretical constructs from Sociocultural Theory (SCT) and the Technology Acceptance Model (TAM). SCT informed questions related to scaffolding, self-regulation, and social mediation in learners' interactions with AI tools, while TAM guided items exploring perceived usefulness, ease of use, and behavioral intentions. This theoretical grounding ensured that the interviews captured both cognitive-social dynamics and motivational factors relevant to AI-assisted writing.

An interview guide was prepared, consisting of broad, open-ended questions designed to explore learners' use of AI in writing, perceived benefits, challenges encountered, and evolving attitudes. Sample prompts included, "Can you share a moment when you used an AI tool for a writing task?" and "In what ways has your approach to writing shifted since incorporating AI?" Follow-up questions were used to deepen responses and clarify meanings.

Each interview was conducted one-on-one using secure online meeting tools such as Zoom and lasted between 45 and 75 minutes. Prior to the sessions, participants were given a comprehensive consent form explaining the study's purpose, data handling procedures, and their right to discontinue participation at any point. Verbal and written consent were both obtained. With participants' permission, interviews were audio-recorded for transcription accuracy, and field notes were taken to capture contextual details and non-verbal cues that could enrich the interpretive analysis.

Recruitment was carried out through the university's English language center and online communities where EFL learners were active. The researcher used a warm and conversational style to build rapport, encouraging participants to speak openly and authentically. Ethical protocols were strictly followed throughout. Pseudonyms were assigned to all participants, and any information that could reveal identities was omitted from transcripts and reports. Audio files and transcripts were stored on encrypted, password-protected devices accessible only to the research team. All procedures adhered to ethical guidelines for research involving human participants.

Data Analysis

Thematic analysis was employed to examine the qualitative data, following an inductive approach that is well-suited for uncovering recurring patterns and constructing meaning from in-depth narrative accounts (Braun & Clarke, 2021). This method was selected for its compatibility with narrative inquiry and its ability to explore learners' subjective perceptions, emotional responses, and interpretive experiences. The analysis was guided by Braun and Clarke's six-step model, which includes: (1) becoming familiar with the data, (2) generating initial codes, (3) identifying potential themes, (4) reviewing themes, (5) defining and naming themes, and (6) compiling the final report.

In the initial stage, the researcher engaged deeply with the data by reading and re-reading transcripts, listening to audio recordings, and reviewing field notes to ensure a thorough understanding. Coding was carried out by systematically highlighting segments that reflected learners' experiences, advantages they perceived, obstacles they faced, and strategies used when engaging with AI tools. These codes were then clustered into broader categories, which were refined through several rounds of analysis to ensure coherence and thematic precision. Final themes were clearly defined and supported by direct quotations from participants to enhance authenticity. NVivo software was used to assist in managing and organizing the data. This tool facilitated structured coding, efficient retrieval of coded excerpts, and visualization of thematic patterns, thereby strengthening the transparency and rigor of the analytical process.

FINDINGS AND DISCUSSION

This section presents the comprehensive findings addressing the two research questions. The thematic analysis of participants' narratives revealed several overarching themes related to their engagement with AI tools in developing writing proficiency, encompassing both their experiences and their perceived challenges and opportunities.

Findings for Research Question 1

This section presents the findings addressing Research Question 1: *"How do EFL learners describe their experiences of using AI tools to support their writing development?"* Through thematic analysis of participant narratives, three core themes emerged: enhanced linguistic accuracy and fluency, boosted writing confidence and reduced anxiety, and increased efficiency and idea generation. These perceived benefits reflect not only the functional utility of AI tools but also their broader pedagogical and affective impact.

Table 1

EFL Learners' Described Experiences with AI Tools in Writing Development

Theme	Description of Benefit	Representative Excerpt
Enhanced Linguistic	AI tools provide immediate and accurate corrections for	<i>"ChatGPT has enhanced my vocabulary, corrected my</i>

Accuracy & Fluency	grammar, spelling, and vocabulary, improving clarity and stylistic quality.	<i>grammar... it's like having a 24/7 study buddy for me... just double-checking my grammar.</i> ” (Participant R10)
Boosted Writing Confidence & Reduced Anxiety	Real-time, non-judgmental feedback increases self-efficacy, lowers writing anxiety, and encourages experimentation.	<i>“The AI tool’s ability to streamline revisions and identify errors boosted my confidence... reducing writing anxiety and fostering greater engagement.”</i> (Participant S2)
Increased Efficiency & Idea Generation	AI accelerates the writing process and supports brainstorming, allowing learners to focus on higher-order tasks.	<i>“I noticed that using generative AI significantly reduced the time it took me to complete writing assignments. I could focus more on the content because the AI handled language refinement.”</i> (Participant S3)

The findings align closely with the Technology Acceptance Model (TAM), where learners’ positive experiences were driven by strong perceptions of both usefulness—such as improved grammar, faster revision, and idea support—and ease of use. Additionally, participants’ descriptions suggest that AI tools operate as dynamic learning partners, consistent with Sociocultural Theory (SCT) and Scaffolding Theory. Learners positioned AI as a form of scaffolding within their Zone of Proximal Development (ZPD), offering timely, non-judgmental feedback that promoted self-regulation and reduced writing anxiety. Table 1 above summarizes these perceived benefits, providing a concise synthesis of each theme, its impact, and representative participant excerpts.

Theme 1: Enhanced Linguistic Accuracy and Fluency

Participants overwhelmingly reported that AI tools, particularly ChatGPT, significantly supported their development of grammatical accuracy and lexical variety. The tools were consistently described as reliable aids for identifying and correcting errors in real-time—especially in grammar and word choice—areas in which learners often expressed limited confidence. Unlike traditional feedback, which was sometimes perceived as delayed or overly critical, AI feedback was valued for its immediacy, availability, and non-judgmental tone. One participant referred to ChatGPT as a “24/7 study buddy,” reflecting both the tool’s accessibility and its supportive role in reducing writing anxiety.

In addition to correcting errors, learners noted that AI tools enhanced the stylistic quality of their writing. They appreciated suggestions for more precise vocabulary and improved phrasing, which contributed to greater clarity and coherence. This points to AI’s function not only as a grammatical checker but also as a lexical and rhetorical enhancer. Moreover, several participants highlighted the efficiency gains in the revision process, with AI enabling quicker editing and freeing cognitive resources for higher-order writing tasks,

such as content development and argumentation. Collectively, these insights suggest that learners experienced AI as a multifaceted linguistic scaffold, simultaneously promoting fluency, accuracy, and confidence in academic writing.

Theme 2: Boosted Writing Confidence and Reduced Anxiety

Participants consistently emphasized the positive emotional impact of AI tools on their writing experiences, particularly in terms of confidence and reduced anxiety. The immediate, private, and non-judgmental nature of AI-generated feedback was seen as a key factor in alleviating the fear of making mistakes—a common barrier among EFL learners. Unlike traditional feedback, which may be delayed or associated with evaluative pressure, AI tools provided a supportive environment that encouraged risk-taking and experimentation in writing. Several learners noted that receiving prompt corrections and revision suggestions helped them feel more in control of their writing process, leading to greater engagement and motivation.

Importantly, learners described AI not only as a functional tool but as a dependable companion throughout the writing journey. The metaphor of a “24/7 study buddy” was repeatedly used, underscoring the emotional reassurance derived from AI’s constant availability. This perception of ongoing support helped mitigate feelings of isolation often experienced during independent writing tasks, especially outside classroom settings. Overall, these findings highlight the dual role of AI tools in supporting both linguistic competence and emotional well-being, suggesting that affective outcomes are a critical yet often underexamined dimension of AI-assisted language learning.

Theme 3: Enhanced Efficiency and Idea Generation

Another prominent theme emerging from the narratives was the role of AI tools in enhancing writing efficiency and supporting idea generation. Participants frequently described AI as instrumental in overcoming writer’s block and facilitating quicker progression through various stages of the writing process. For many, AI tools provided an immediate cognitive boost—suggesting relevant ideas, offering structural outlines, or proposing introductory sentences—that helped initiate writing when they felt stuck. The perception of AI as a “personal writing tutor” was common, reflecting its value not only as a linguistic aid but also as a creative collaborator.

Beyond idea generation, learners reported that AI tools significantly improved their time management. By automating mechanical aspects such as grammar correction and vocabulary refinement, participants could redirect their focus to content development, argument construction, and critical thinking. This division of cognitive labor allowed for deeper engagement with higher-order writing tasks without being delayed by surface-level concerns. Additionally, some learners leveraged AI-generated suggestions for improving coherence and structure, demonstrating a more advanced, strategic use of the tool to elevate the overall quality and organization of their academic texts. Collectively, these findings underscore AI’s dual role in accelerating the writing process and fostering

creative momentum, positioning it as both a productivity enhancer and a generative support system.

Findings for Research Question 2

This section addresses Research Question 2: “*What challenges and opportunities do EFL learners perceive in their engagement with AI-assisted writing tools?*” Thematic analysis revealed a nuanced landscape in which learners navigate both significant affordances and critical limitations of AI in writing development. While participants acknowledged the benefits of AI for supporting higher-order skills and promoting personalized learning, they also voiced concerns about over-reliance, academic integrity, and the limitations of AI-generated content.

Table 2

Perceived Challenges and Opportunities of AI-Assisted Writing Tools

Category	Theme	Description	Representative Excerpt
Challenges	Academic Integrity & Plagiarism Risk	Difficulty in determining appropriate AI use, raising concerns about plagiarism and authentic learning.	<i>“I copied all the answers, and my writing's plagiarism percentage showed it was high, like 86%.” (S1)</i>
	Over-Reliance & Skill Erosion	Excessive dependence on AI may erode creativity, critical thinking, and independent writing development.	<i>“I worry that depending too much on AI could rob me of my creativity and lower my grades overall because I won't be developing my own writing muscles.” (S1)</i>
	Bias, Inaccuracy & Lack of Nuance	AI may generate grammatically correct yet contextually or culturally inappropriate content.	<i>“AI often struggles with understanding the cultural context and emotional nuance of language. It can make sentences grammatically correct but sometimes they just don't 'feel' right.” (S34)</i>
	Digital Divide & Teacher Preparedness	Uneven access and limited AI literacy among students and	<i>“Lecturers need to make sure all students have the necessary training and</i>

		educators require institutional support.	<i>support to use these tools effectively.” (S18)</i>
Opportunities	Fostering Higher-Order Skills	By handling lower-order concerns, AI allows learners to focus on argumentation, content, and critical analysis.	<i>“AI helps me with the basic stuff... so I can spend more time thinking about my arguments and researching deeply.” (S24)</i>
	Personalized & Adaptive Learning	AI can deliver tailored feedback aligned with individual needs, acting as a virtual writing tutor.	<i>“It’s like having a personalized tutor who knows my weaknesses.” (S24)</i>
	Reduced Instructor Workload	Automation of basic corrections frees teachers to provide deeper, content-focused feedback.	<i>“AI handles all the grammar checks... so teachers can focus on the content.” (S4)</i>
	Enhanced Collaboration & Engagement	AI supports collaborative learning and increases motivation through interactive and responsive writing tools.	<i>“AI-powered tools help us stay interested and involved in the writing process.” (S23)</i>

These findings reflect what can be termed the “Paradox of Assistance”—where AI’s efficiency and ease of use, if not critically managed, may lead to dependency and hinder the development of independent writing skills. Simultaneously, the study highlights a “Human-AI Collaboration Imperative,” emphasizing that the most effective use of AI occurs when it is strategically integrated to handle mechanical tasks, thereby allowing learners and educators to concentrate on deeper cognitive, creative, and communicative dimensions of writing. Table 2 summarizes the key themes, illustrating both the perceived risks and transformative potential of AI in EFL writing instruction.

Theme 1: Challenges – Academic Integrity and Over-Reliance

A central concern expressed by participants was the tension between the functional benefits of AI tools and their potential to compromise academic integrity and learner autonomy. Several learners acknowledged the temptation to misuse AI for completing entire writing tasks, which led to plagiarism concerns and inflated similarity scores. This underscores a critical ethical issue: while AI can support the writing process, its misuse may bypass essential learning, undermining genuine skill development and academic honesty.

Beyond plagiarism, participants reported anxiety about becoming overly dependent on AI tools. They feared that reliance on automated feedback might erode their creativity, critical thinking, and writing confidence over time. This reflects what has been termed the “Paradox of Assistance”—where the same features that make AI appealing (e.g., efficiency, accuracy) can also discourage active learning if not critically mediated. Moreover, some participants noted that AI, particularly in its standard or free versions, often lacked the depth, originality, and contextual sensitivity required for advanced academic writing. This perceived limitation reinforced the belief that human insight and innovation remain irreplaceable, particularly in generating novel arguments and nuanced expression. Together, these findings highlight the need for clear pedagogical guidance to foster responsible, reflective, and balanced use of AI in academic settings.

Theme 2: Challenges – Bias, Inaccuracy, and Lack of Nuance

Participants expressed critical awareness of the limitations inherent in AI-generated content, particularly regarding factual reliability, cultural appropriateness, and emotional tone. Several learners highlighted instances where AI provided inaccurate suggestions or relied on outdated information, reinforcing the importance of cross-referencing and not accepting outputs uncritically. These insights reflect growing digital literacy among users and underscore the need for AI-assisted writing to be supplemented by human judgment and independent verification.

In addition to technical inaccuracies, participants emphasized the lack of cultural and emotional nuance in AI outputs. While grammatically correct, some AI-generated sentences were described as contextually inappropriate or lacking the intended tone for specific audiences. For EFL learners writing in academic and intercultural contexts, this absence of subtlety poses a barrier to producing authentic, rhetorically effective texts. These concerns highlight the limitations of AI as a communication partner and suggest that, despite its linguistic fluency, AI still struggles with the pragmatic and affective dimensions of human language—areas where human intuition remains essential.

Theme 3: Opportunities – Fostering Higher-Order Skills and Collaboration

Participants identified clear opportunities for AI tools to enhance writing development by shifting focus from surface-level correctness to higher-order cognitive and communicative skills. By automating routine tasks such as grammar correction and vocabulary refinement, AI was perceived as freeing learners to concentrate on more

substantive aspects of writing—namely, critical thinking, argument construction, and idea development. This cognitive redistribution aligns with the “Human-AI Collaboration Imperative,” which emphasizes strategic division of labor between humans and machines in educational contexts.

Learners also highlighted the potential of AI to deliver personalized feedback based on individual writing patterns, simulating the role of a responsive tutor. This capacity for tailored support, often unfeasible in large classroom settings, was seen as instrumental in addressing specific weaknesses and fostering self-directed learning. Furthermore, participants noted that AI could reduce teacher workload by handling mechanical corrections, thereby enabling instructors to provide more meaningful, content-focused feedback. Collectively, these perspectives position AI as a catalyst for pedagogical innovation—enhancing both learner autonomy and instructional quality when integrated thoughtfully within human-centered learning environments.

DISCUSSION

The findings of this narrative inquiry reveal the multifaceted nature of EFL learners’ engagement with AI tools in developing writing proficiency, marked by a dynamic interplay between perceived affordances and emerging challenges (Cardon et al., 2023). Participants widely affirmed the value of AI tools in enhancing linguistic accuracy, building writing confidence, increasing efficiency, and supporting idea generation. These positive experiences mirror a growing body of literature emphasizing AI’s strengths in providing immediate, accessible feedback and automating lower-order writing tasks (Alghannam, 2024; Fleckenstein et al., 2023). Notably, many learners described a reduction in writing-related anxiety, positioning AI not only as a linguistic support tool but also as a psychological enabler that fosters a more positive emotional climate for language learning (Shi, 2025; Zhai et al., 2024). This affective impact suggests a transformative role for AI in scaffolding not only technical accuracy but also learner confidence and engagement.

However, participants also articulated significant concerns, particularly around academic integrity and over-reliance. Several learners admitted to using AI in ways that undermined authentic learning, raising ethical questions about authorship and plagiarism. Others expressed apprehension that excessive dependence on AI might diminish their creativity and hinder the development of independent writing skills. These concerns give rise to what can be termed the “*Paradox of Assistance*”: the same features that make AI attractive—its immediacy, accuracy, and ease of use—can, if uncritically adopted, discourage the deep cognitive effort required for sustained language development (Kreps et al., 2023). Moreover, participants reported AI’s limitations in producing contextually appropriate, culturally nuanced, or emotionally resonant content, further underscoring the need for human intervention in refining and contextualizing AI-generated output. These findings, similar to Willian et al. (2024), suggest that the central pedagogical challenge is not whether to use AI, but how to integrate it in a way that enhances, rather than replaces, human judgment, critical thinking, and creativity.

From a theoretical perspective, this study enhances existing understandings of learner-AI interaction by extending established models through real-world learner experiences. The participants' frequent emphasis on usability and functional value lends empirical support to the Technology Acceptance Model (TAM), reinforcing its relevance in explaining EFL learners' willingness to adopt AI tools (Ibrahim et al., 2025; Lim & Zhang, 2022; Na et al., 2022). Simultaneously, their descriptions of AI offering adaptive, instructional support reflect the foundational ideas of Sociocultural Theory (SCT) and Scaffolding Theory. In these frameworks, AI can be seen as a digital "more knowledgeable other," offering guided support within each learner's Zone of Proximal Development (ZPD) (Sætra, 2025; Jama, 2023; Leontjev & DeBoer, 2022; Poehner & Lu, 2024). This study contributes to these theories by offering qualitative evidence of how learners perceive and engage with such support in practice. Moreover, the findings resonate with key principles of Activity Theory and Human-Computer Interaction (HCI), emphasizing the interconnected roles of tool functionality, learner agency, and educational context (Cong-Lem, 2022). Specifically, they illustrate how user-centered AI design (HCI) enhances usability perceptions (TAM), which supports scaffolding (SCT) and contributes to learning as a culturally and contextually situated activity (Activity Theory).

The findings of this study yield several important implications for educators, curriculum designers, and policymakers seeking to responsibly integrate AI into EFL writing instruction. Central among these is the need to shift from a permissive or prohibitive stance toward AI use to a pedagogically informed strategy of *critical engagement*. Teachers must guide students not only in how to use AI tools effectively but also in how to interpret, evaluate, and refine AI-generated content (Pack & Maloney, 2024). Rather than banning AI—which is difficult to enforce and may limit learning opportunities—educators should design process-oriented tasks that encourage reflection on AI use (Slade et al., 2024), such as annotated drafts or writing journals that document how AI tools were used and what decisions the learner made in response.

Educators themselves must also become AI-literate. This involves more than mastering tool operation; it requires a deep understanding of AI's pedagogical affordances, limitations, and ethical implications (Tenberga & Daniela, 2024). Professional development programs should therefore focus on building teachers' technological pedagogical content knowledge (TPACK) to enable them to integrate AI meaningfully into instruction (Zulianti et al., 2024). For instance, AI tools can be used to support early-stage brainstorming, outlining, or revising exercises, while teachers focus their feedback on argumentation, coherence, and originality. When paired with classroom discussion about the strengths and weaknesses of AI output, such approaches can foster critical thinking and metacognitive awareness among learners.

In terms of curriculum development, existing writing frameworks must be adapted to account for AI's presence in the learning ecosystem. This includes embedding AI literacy within writing courses—teaching students not just how to use AI tools but how to interrogate their outputs, question potential biases, and maintain authorship of their ideas (Michalak & Ellixson, 2025). Courses should increasingly emphasize writing tasks that

require human insight—such as ethical reasoning, culturally situated communication, and advanced rhetorical strategies—that AI cannot yet replicate. Shifting from product-based assessment to process-based evaluation can better capture the learner’s journey (Zhang & Chen, 2022), while collaborative writing projects facilitated by AI may offer opportunities for enhanced engagement and peer learning.

At the policy level, institutions must establish clear guidelines for the ethical, responsible, and equitable use of AI in education (Song, 2024). This includes ensuring data privacy, algorithmic transparency, and user accountability. Policymakers must also address the digital divide by investing in equitable access to AI tools and internet infrastructure, particularly in underserved regions. Institutions should support ongoing research and teacher training to monitor the evolving impact of AI in classrooms and update policies accordingly. Importantly, these policies must be co-developed with input from educators and learners to remain responsive and relevant in an ever-changing technological landscape. In sum, while AI tools present substantial opportunities to support EFL writing instruction, their integration must be guided by sound pedagogical principles, ethical considerations, and a commitment to learner autonomy and creativity (Michalak & Ellixson, 2025). The future of AI in education lies not in replacing teachers or learners, but in enhancing their capabilities through thoughtful, collaborative design and implementation.

Despite its contributions, this study has certain limitations. It relied solely on semi-structured interviews, which, while appropriate for narrative inquiry, may have constrained the breadth of perspectives. Future research could incorporate data triangulation strategies, such as reflective journals, screen captures of AI interactions, or AI-revised drafts, to deepen analysis and enhance validity. Expanding participant diversity across institutions and educational levels may also help contextualize learners’ engagement with AI tools in broader settings.

CONCLUSION

This narrative inquiry explored the lived experiences of EFL learners engaging with AI tools for academic writing, offering a human-centered perspective on the integration of emerging technologies in language education. Learners widely perceived AI as a powerful support system—enhancing linguistic accuracy, boosting writing confidence, improving efficiency, and facilitating idea generation. These findings affirm the pedagogical value of AI as a real-time scaffolding mechanism and align with established theoretical frameworks such as the Technology Acceptance Model and Sociocultural Theory. Importantly, learners experienced AI not merely as a corrective tool, but as a catalyst for engagement and self-efficacy, particularly when it supplemented rather than supplanted their own cognitive effort.

However, the study also revealed substantial concerns, including the risk of academic dishonesty, over-reliance on AI for content generation, and the limitations of AI in producing contextually nuanced or culturally appropriate outputs. This tension between AI’s convenience and its potential to impede deeper learning illustrates what this study

identifies as the *Paradox of Assistance*. Learners benefit most when AI is used strategically—delegating routine tasks to technology while reserving complex, creative, and critical thinking tasks for human agency. These findings call for a shift toward intentional, guided integration of AI in writing instruction—one that fosters *Human-AI Collaboration* as a pedagogical imperative rather than relying on passive tool adoption.

Future research should build on these insights through longitudinal and mixed-methods studies that evaluate how AI use impacts long-term writing proficiency and learner autonomy. Additionally, there is a need for AI literacy curricula, targeted teacher training, and policy development to ensure ethical, equitable, and effective AI use in educational contexts. As AI becomes increasingly embedded in academic life, its successful adoption will depend not only on its technological capabilities but on how learners and educators are empowered to engage with it critically, creatively, and responsibly. The future of EFL writing lies not in automation alone, but in fostering a generation of writers who can collaborate with AI to express their ideas with precision, authenticity, and depth.

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