

Generative AI and the Transformation of EFL Writing: Feedback, Revision, and Learner Agency

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ABSTRACT

The rapid development of Generative Artificial Intelligence (GenAI) has significantly transformed the landscape of English as a Foreign Language (EFL) writing, particularly in relation to feedback, revision, and learner participation in the writing process. Generative AI tools have enabled learners to obtain immediate feedback, explore alternative linguistic expressions, revise their texts iteratively, and engage in more flexible forms of writing support. These developments have created new opportunities for improving writing practices while simultaneously raising concerns about the extent to which learners remain actively involved in evaluating feedback and making decisions about their own texts. This study aims to critically examine and synthesize existing scholarly literature on the role of GenAI in EFL writing, with particular attention to AI mediated feedback, writing revision, and learner agency. The study employs a library research approach by examining relevant academic publications addressing Generative AI, EFL writing, automated feedback, writing revision, learner autonomy, and learner agency. The selected literature is analyzed thematically to identify recurring findings, emerging patterns, pedagogical opportunities, limitations, and unresolved issues. The synthesis indicates that GenAI can provide accessible, immediate, and iterative feedback while supporting learners in engaging with multiple possibilities for textual revision. However, the educational value of AI generated feedback depends substantially on learners' ability to evaluate its relevance, accuracy, and appropriateness rather than accepting its recommendations uncritically. Generative AI can strengthen learner agency when learners retain control over writing decisions, but excessive dependence on AI may reduce cognitive engagement and ownership of the writing process. Therefore, the transformation of EFL writing through GenAI should be understood not merely as the automation of feedback and revision, but as a broader transformation of how learners interact with feedback, exercise judgment, and participate in the construction of their written texts.

Keywords: Generative AI, EFL Writing, AI Mediated Feedback, Writing Revision, Learner Agency

INTRODUCTION

Writing in English as a Foreign Language (EFL) represents a complex learning activity that requires the integration of linguistic, cognitive, metacognitive, and communicative competencies (Al Ayyubi, Riyadi, et al., 2024; Hendiyani et al., 2023; Murharyana et al., 2024). Learners are expected not only to produce grammatically accurate sentences and appropriate vocabulary but also to develop ideas, organize information coherently, construct meaningful arguments, and adapt their writing to particular communicative purposes and contexts (Al Ayyubi, Widiani, et al., 2024; Baroroh & Prastowo, 2023; Muhammad et al., 2023; Patimah et al., 2022; Syamsinar et al., 2020). Writing is therefore widely understood as an iterative process involving planning, drafting, feedback, revision, and editing rather than a single act of text production. Within this process, feedback plays an important pedagogical role because it provides learners with information about the strengths and weaknesses of their writing and helps them identify areas requiring improvement. Nevertheless, conventional feedback practices in EFL contexts continue to face several challenges, including teachers' limited time, large numbers of student writings, delayed responses, and insufficient opportunities for learners to receive continuous support throughout the writing process (Al Ayyubi, Bukhori, et al., 2024; Istiqomah & Indarini, 2021; Muflihah et al., 2024).

The emergence of Generative Artificial Intelligence has introduced new possibilities for addressing some of these challenges and has consequently altered the technological environment in which EFL writing takes place (Krisnayanti & Wiarta, 2022; Mutholingah, 2021; Yahya & Solihati, 2022). Unlike conventional grammar checking applications that primarily identify linguistic errors, GenAI systems can generate explanations, suggest alternative expressions, reorganize sentences, recommend improvements to textual organization, and provide responses to learners' questions about their writing (Andeswari et al., 2022; Astuti et al., 2023; Fitriana, 2023). These capabilities enable learners to interact with AI systems in a more flexible and iterative manner. Learners can request specific forms of feedback, seek clarification regarding particular linguistic choices, compare alternative formulations, and use the resulting information to reconsider aspects of their texts. Consequently, GenAI has the potential to transform writing support from a predominantly teacher mediated activity into a more continuous process in which learners can access assistance throughout different stages of text development (Maarif et al., 2023; Nu'man et al., 2021; Phasa, 2020; Ruli & Indarini, 2022; Susanti & Baroroh, 2025).

Despite these possibilities, the availability of immediate and extensive AI generated feedback does not necessarily result in meaningful learning. The pedagogical value of feedback depends largely on whether learners are able to understand, evaluate, and appropriately apply the information provided (Dewi & Sumarni, 2024; Huda et al., 2022; Santosa, 2022; Sari, 2020; Utami & Idawati, 2023). This issue becomes particularly important when feedback is generated by AI because the system may produce suggestions that are linguistically plausible but inappropriate for the intended meaning, rhetorical purpose, academic context, or individual writing style. Learners who lack sufficient evaluative skills may accept AI recommendations without questioning their accuracy or relevance. Such practices may result in revisions that improve surface level linguistic features while simultaneously altering the intended meaning or weakening the learner's ownership

of the text. Therefore, the central issue is not simply whether GenAI can provide effective feedback, but how learners engage with that feedback and how their engagement influences the quality of subsequent writing decisions (Birgin & Acar, 2022; Edelsbrunner et al., 2025; Ramadhan et al., 2019; Rinawati, 2023; Susilowati, 2020).

The relationship between GenAI and revision is equally important because revision represents more than the correction of grammatical or lexical errors. Meaningful revision requires learners to reconsider the development of ideas, argumentation, organization, coherence, rhetorical purpose, and the overall effectiveness of a text. GenAI can support this process by presenting alternative formulations and drawing attention to areas that may require modification. However, the availability of alternative versions may also encourage learners to adopt AI generated sentences without sufficiently considering why particular changes are necessary. When learners simply replace their original sentences with AI generated alternatives, revision may become a mechanical activity rather than an opportunity for learning and reflection. In contrast, when learners critically compare suggestions, assess their appropriateness, and make deliberate decisions about which recommendations to accept or reject, interaction with GenAI may contribute to deeper engagement with the writing process.

These concerns make learner agency a particularly important concept for understanding the pedagogical implications of GenAI in EFL writing. Learner agency refers to learners' capacity to act intentionally, make decisions, exercise control over their learning, and take responsibility for the consequences of their actions. Within GenAI supported writing environments, agency is reflected not simply in learners' ability to operate technological tools but also in their capacity to determine when AI assistance is necessary, what kind of assistance should be requested, how AI generated information should be evaluated, and which recommendations should be incorporated into their writing. Such a perspective positions learners as active decision makers rather than passive recipients of technological assistance. It also emphasizes that increased access to AI does not necessarily correspond to increased learner autonomy. The educational value of GenAI depends substantially on whether learners maintain intellectual control over their writing processes and decisions.

Although scholarship on Generative AI in education and language learning has expanded rapidly, existing research remains relatively fragmented in its treatment of EFL writing. Some studies have examined the effectiveness of ChatGPT and other GenAI tools in improving writing quality, while others have focused on learner perceptions, writing accuracy, automated feedback, academic integrity, or technology acceptance. Research on AI supported writing has also frequently emphasized the technological capabilities of AI systems rather than the processes through which learners interpret feedback and make revision decisions. In particular, the relationship between feedback, revision, and learner agency has not always been examined as an interconnected process within the broader transformation of EFL writing. This fragmentation creates a need for a more integrative synthesis that considers not only what GenAI can do for writing but also how its use reshapes learners' participation, decision making, and responsibility throughout the writing process.

Against this background, this study aims to critically examine and synthesize existing scholarly literature concerning the transformation of EFL writing through

Generative AI, with particular attention to feedback, revision, and learner agency. The study conceptualizes GenAI not merely as a technological instrument for correcting or generating text, but as an emerging component of the writing environment that can reshape interactions among learners, teachers, feedback, and writing practices. By bringing together these three dimensions, the study seeks to provide a more comprehensive understanding of the opportunities and challenges associated with GenAI supported writing and to identify pedagogical conditions under which AI can support learners' development without displacing their cognitive engagement, decision making, and ownership of written work.

METHOD

This study employs a library research approach with a qualitative interpretive orientation to examine and synthesize scholarly literature concerning the use of Generative Artificial Intelligence in EFL writing (Creswell & Creswell, 2017). The library research design was selected because the purpose of the study is to develop an evidence informed understanding of existing knowledge rather than to collect primary data directly from learners or teachers. Academic publications are treated as the principal sources of research data and are examined to identify conceptual developments, empirical findings, recurring patterns, theoretical debates, and unresolved issues concerning the relationship between GenAI, writing feedback, revision, and learner agency. Through this approach, the study seeks to move beyond a simple summary of previous studies by interpreting connections among findings and identifying broader implications for EFL writing pedagogy.

The literature was identified through academic databases and scholarly search platforms that provide access to research relevant to language education and educational technology. The search process focused primarily on peer reviewed journal articles and other scholarly publications addressing Generative AI, ChatGPT, EFL writing, AI mediated feedback, automated writing feedback, writing revision, learner autonomy, and learner agency. Several combinations of these terms were used to accommodate differences in terminology across studies and disciplines. The search strategy was designed to capture both empirical and conceptual contributions concerning the role of GenAI in writing development and to identify literature that could contribute to an integrated understanding of feedback, revision, and learner agency.

The selection of literature was guided by relevance, academic quality, conceptual alignment, and contextual suitability. Studies were considered relevant when they addressed the application of GenAI or closely related AI technologies in language learning, particularly EFL or ESL writing, or when they examined issues directly associated with feedback, revision, learner autonomy, or learner agency. Publications that discussed artificial intelligence in general without a meaningful connection to language learning or writing were excluded from the core synthesis. Greater attention was given to recent scholarship because GenAI represents a rapidly developing field, while foundational theoretical studies were retained when they provided important conceptual explanations of feedback, writing processes, revision, autonomy, or agency.

The selected literature was analyzed through thematic synthesis. Relevant information was extracted concerning the functions of GenAI in writing, the

characteristics of AI generated feedback, learners' engagement with revision, patterns of interaction between learners and AI systems, and implications for learner agency. Findings with similar conceptual characteristics were grouped and compared to identify recurring themes and contrasting perspectives. Particular attention was given to the ways in which AI mediated feedback influences revision practices and how these practices affect learners' control over the writing process. The synthesis then integrated findings across studies to develop a broader interpretation of the ways in which GenAI may transform EFL writing and the pedagogical conditions required to ensure that technological assistance contributes to meaningful learning.

RESULT AND DISCUSSION

RESULT

The synthesis of the selected literature indicates that Generative AI has expanded the role of technology in EFL writing, particularly by providing learners with immediate, flexible, and iterative forms of feedback. GenAI systems can respond to different dimensions of writing, including grammar, vocabulary, sentence construction, coherence, organization, and aspects of academic style. This accessibility allows learners to seek assistance at different stages of the writing process rather than waiting until a completed assignment has been reviewed by a teacher. The findings therefore suggest a shift from feedback as a predominantly post writing evaluative activity toward a more continuous form of interaction that can accompany drafting and revision. GenAI consequently functions not only as a mechanism for identifying errors but also as a source of information that learners can consult while developing their texts.

The literature further indicates that GenAI can support revision by providing alternative formulations, explanations, and suggestions for textual improvement. Learners can compare their original expressions with AI generated alternatives and use these comparisons to reconsider particular aspects of their writing. The possibility of repeated interaction may increase opportunities for revision and encourage learners to engage more frequently with their texts. However, the depth and quality of revision vary considerably. AI support appears particularly useful for addressing surface level linguistic issues, whereas more complex forms of revision involving argument development, organization, coherence, rhetorical intention, and conceptual clarity require substantial learner involvement. The findings therefore suggest that GenAI can facilitate revision but cannot independently ensure that revision becomes a meaningful learning activity.

The findings concerning learner agency reveal a more complex relationship between technological assistance and learner participation. GenAI can create conditions that support agency by allowing learners to access information independently, request specific types of assistance, and explore multiple possibilities before making decisions about their writing. Such flexibility may reduce learners' dependence on teachers for immediate assistance and provide greater control over aspects of the writing process. However, agency may be compromised when learners accept AI generated suggestions without sufficient evaluation or allow AI systems to perform substantial portions of the writing and revision process. The literature therefore suggests that the educational consequences of GenAI depend less on the

mere presence of the technology than on the extent to which learners actively regulate and critically evaluate their interactions with it.

The synthesis also reveals changes in the relationship between teachers, learners, and technological systems. As learners gain direct access to AI generated feedback, teachers are no longer the sole providers of immediate writing support. Nevertheless, the continuing role of teachers remains important because AI systems cannot consistently account for individual learning needs, instructional objectives, disciplinary conventions, or the communicative intentions of particular writing tasks. Teachers increasingly need to help learners interpret AI generated feedback, recognize potential inaccuracies, evaluate alternative suggestions, and make responsible decisions concerning AI use. The changing technological environment therefore does not eliminate the pedagogical role of teachers but instead creates new responsibilities associated with critical AI use, writing development, and learner decision making.

DISCUSSION

The findings suggest that the transformation of EFL writing through GenAI should be understood as a transformation of the broader feedback environment rather than simply as the introduction of a faster correction mechanism. Although immediate feedback can provide practical advantages, its educational significance depends on the extent to which learners transform feedback into understanding and informed writing decisions (Al Ayyubi, Rohaendi, et al., 2025; Damayani et al., 2020; Farida, 2021; Nopriana et al., 2021; Papageorgiou et al., 2024). AI generated feedback can encourage greater interaction with written texts because learners can request clarification and explore alternative solutions whenever difficulties arise. Nevertheless, AI systems do not necessarily understand the learner's communicative intention, disciplinary context, or personal writing goals (Al Ayyubi, Prayetno, et al., 2025; Arif et al., 2023; Şaşmazören et al., 2022). Consequently, feedback provided by GenAI requires critical interpretation rather than automatic acceptance. This finding reinforces the importance of viewing feedback as an active learning process in which learners must participate in evaluating and responding to information.

The relationship between GenAI and revision further demonstrates that technological assistance can produce both opportunities and challenges (Dörnyei & Ushioda, 2021; Feriska & Dewi, 2026; Mainali, 2021; Ökmen et al., 2020; Tatto, 2021). The availability of multiple alternatives may encourage learners to reconsider their linguistic choices and experiment with different ways of expressing ideas. However, an excessive focus on AI generated alternatives may result in revisions that improve linguistic accuracy while weakening the learner's original voice or altering intended meanings. Meaningful revision requires learners to understand the reasons for textual changes and consider their effects on the overall communicative purpose of the text. GenAI can therefore be most pedagogically valuable when it encourages learners to compare possibilities and justify their decisions rather than simply adopt the version that appears most polished (Azizah et al., 2026; Kulavuz-Onal, 2015; Mailani, 2019).

Learner agency emerges as a central factor in determining whether GenAI functions as a supportive learning resource or as a source of dependence (Amin et al., 2022; Ardiansyah et al., 2025; Kosim & Maryani, 2025; Lie, 2022; Sabarudin et al., 2023). The same technological tool can produce different educational outcomes depending on how learners use it. Learners who treat AI as a source of information while

retaining responsibility for evaluating and selecting suggestions may develop greater independence and confidence in managing their writing processes. Conversely, learners who rely on AI to generate, evaluate, and revise their texts may gradually surrender control over important cognitive aspects of writing. This distinction indicates that frequent use of GenAI should not automatically be interpreted as evidence of greater autonomy. Agency is better understood through the quality of learners' decisions, their capacity to evaluate technological suggestions, and their willingness to assume responsibility for the final form and meaning of their texts.

These findings have important implications for EFL writing pedagogy. The integration of GenAI should extend beyond teaching learners how to operate AI applications and should instead cultivate the ability to use these technologies critically and strategically. Learners need opportunities to formulate effective prompts, request specific forms of feedback, verify AI generated information, compare alternative suggestions, explain their revision choices, and reflect on how AI assistance influences their writing. Such practices can connect AI literacy with writing literacy, feedback literacy, and revision literacy (Chrostowski, 2025; Fuadi & Shohib, 2024; Mudinillah et al., 2023). This approach positions GenAI as a scaffold that expands learners' access to support while preserving their cognitive engagement and responsibility for the writing process.

The findings also have implications for the changing role of teachers. Although GenAI may reduce some of the routine burden associated with identifying linguistic errors, it cannot replace the broader pedagogical functions of teachers. Teachers remain important in helping learners understand the purposes of writing, evaluate the quality of feedback, recognize inappropriate AI suggestions, and develop informed criteria for revision (Al Ayyubi, Hayati, et al., 2024; Rosyidah et al., 2024; Sabarudin et al., 2024; Sholeh et al., 2024; Somantri et al., 2024). Classroom activities can therefore require learners to compare AI feedback with their own judgments, explain why particular recommendations are accepted or rejected, and reflect on how their texts have changed through interaction with AI. Such practices can transform AI use from an efficiency oriented activity into a pedagogically meaningful process that promotes critical thinking and learner responsibility.

More broadly, the synthesis indicates that the transformation of EFL writing should not be evaluated solely through improvements in the linguistic quality of final texts. A more comprehensive evaluation should also consider whether learners become more capable of identifying writing problems, evaluating feedback, making informed revision decisions, and reflecting on their own writing development. From this perspective, the significance of GenAI lies in its capacity to create a more interactive writing environment in which learners have greater access to feedback and opportunities for experimentation. However, these opportunities become educationally meaningful only when learners remain intellectually engaged and retain control over decisions concerning the development of their texts. The transformation of writing therefore depends on the interaction between technological affordances and learners' capacity to exercise judgment.

CONCLUSION

This study concludes that Generative AI has considerable potential to transform EFL writing by changing how learners access feedback, engage in revision,

and participate in decisions concerning their written texts. GenAI provides opportunities for immediate and iterative feedback that can support learners throughout different stages of writing. Its ability to generate explanations and alternative formulations may also increase opportunities for learners to reconsider and refine their texts. However, the availability of technological assistance does not by itself guarantee meaningful writing development. The educational value of GenAI depends substantially on learners' capacity to understand, evaluate, and appropriately apply the feedback and suggestions they receive. The synthesis further demonstrates that learner agency plays a central role in determining the consequences of GenAI supported writing. When learners critically evaluate AI generated feedback and retain responsibility for decisions concerning their texts, GenAI can function as a resource that supports independence, reflection, and greater engagement with the writing process. In contrast, excessive reliance on AI may reduce cognitive engagement and weaken learners' ownership of their writing. The distinction between productive and unproductive AI use therefore lies not primarily in the amount of technology used but in the degree of control and responsibility retained by learners throughout the writing process.

The study consequently argues that the transformation of EFL writing through GenAI should be understood as both a technological and pedagogical development. GenAI should not be positioned as a replacement for learners' thinking or teachers' pedagogical responsibilities, but as a supportive resource that can expand opportunities for feedback, revision, experimentation, and reflection. Effective integration requires a pedagogical orientation that simultaneously develops AI literacy, writing literacy, feedback literacy, revision literacy, and learner agency. Such an approach can ensure that technological assistance contributes to learners' development as reflective and critical writers rather than merely enabling them to produce more polished texts. As a library research study, this research is limited by the scope, quality, methodological diversity, and availability of existing literature. The rapidly changing nature of Generative AI also means that current findings may continue to evolve as technologies, educational practices, and institutional policies develop. Future empirical research should therefore examine the proposed relationships across diverse EFL contexts and learner populations. Particular attention should be given to how AI literacy, writing proficiency, metacognitive awareness, and learner agency interact in shaping learners' use of AI generated feedback and their revision practices. Such research would provide further evidence regarding the conditions under which GenAI can genuinely contribute to writing development while preserving learners' intellectual engagement, autonomy, and ownership of their written work.

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