Journal of Linguistic and Language Education in Technology
https://ejournal.lp3msakti.com/index.php/JLLET/
Email: journaljllet@gmail.com
DOI: https://doi.org/10.36312/jllet.v1i2.75

November 2026, Vol. 1, No. 2
e-ISSN: 3164-7499
pp. 137-154

Human–AI Collaboration in Task-Based Language Learning: A Lesson from EFL Students' Experiences of Using Gemini for Academic Writing

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Received: October 2026, Revised: October 2026; Accepted: November 2026; Published: November 2026

Abstract

The increasing integration of generative artificial intelligence into EFL writing has created new opportunities for linguistic scaffolding while raising concerns about learner autonomy, reasoning, and authorship. This qualitative study explored how EFL students experienced Google Gemini during planning, drafting, and revision in task-based academic writing and examined how such collaboration shaped confidence, autonomy, reasoning, and perceptions of authorship. Fifteen third-semester students from the English Language Education Study Program at Universitas Pendidikan Mandalika were purposively selected based on their experience with online academic writing and Gemini-assisted tasks. Data were collected through semi-structured interviews and analyzed thematically through familiarization, initial coding, category development, theme refinement, and interpretation. The findings showed that Gemini performed stage-dependent roles: it functioned as an idea generator and organizational scaffold during planning, a linguistic and rhetorical resource during drafting, and an immediate feedback and revision partner during revision. Students reported increased confidence and easier access to writing support; however, these benefits were accompanied by tensions involving technological dependence, cognitive offloading, loss of personal voice, and uncertainty regarding authorship. Autonomy and reasoning were strengthened when students compared, questioned, modified, or rejected AI suggestions but weakened when outputs were accepted without critical evaluation. The study concludes that Gemini is most educationally valuable when used as a scaffold rather than a substitute for learner cognition. Task-based writing pedagogy should therefore structure AI use around critical evaluation, reflective decision making, verification, and explicit learner responsibility for the final text.

Keywords: Academic writing; EFL learners; Google gemini; Human–AI collaboration; Task-based language learning

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How to cite: Jupri, J., Syakura, N., & Dabu, D. (2026). Human–AI Collaboration in Task-Based Language Learning: A Lesson from EFL Students' Experiences of Using Gemini for Academic Writing, *Journal of Linguistic and Language Education in Technology*, 1(2), 137-154, Doi: https://doi.org/10.36312/jllet.v1i2.75

INTRODUCTION

Task-based language learning (TBLL), often discussed interchangeably with task-based language teaching (TBLT), has become an important pedagogical framework in second and foreign language education because it organizes learning around meaningful, goal-oriented activities rather than isolated practice of linguistic forms. In academic writing contexts, task-based instruction positions writing as purposeful communication in which learners generate ideas, organize arguments, negotiate meaning, respond to audiences, and produce texts for

recognizable academic purposes. This orientation is particularly relevant in English as a Foreign Language (EFL) settings, where students frequently encounter difficulties in coordinating content knowledge with vocabulary, grammar, discourse organization, coherence, rhetorical conventions, and disciplinary expectations. Research suggests that carefully designed task-based writing can support content development, task fulfillment, planning, and overall written production, particularly when learners receive appropriate scaffolding and feedback (Li et al., 2026; Lv et al., 2021; Waluyo et al., 2023; C. Zhang & Kang, 2022; S. Zhang & Liu, 2025). Collaborative planning may also improve confidence and organization by allowing students to clarify ideas before drafting (Li et al., 2026; C. Zhang & Kang, 2022; S. Zhang & Liu, 2025). However, these benefits are not automatic. Writing remains cognitively demanding, and improvement in content development does not necessarily produce equivalent gains in coherence, cohesion, rhetorical sophistication, or independent reasoning. The effectiveness of TBLL therefore depends on factors such as task complexity, learner proficiency, planning opportunities, genre knowledge, feedback, and the quality of instructional scaffolding (Lv et al., 2021; Wang et al., 2023; C. Zhang, 2025).

These established challenges have become more complex with the rapid introduction of generative artificial intelligence into academic writing. AI-assisted writing tools can offer immediate support for brainstorming, language formulation, grammar correction, vocabulary selection, organization, and revision. Such functions may be particularly attractive to EFL learners who experience linguistic uncertainty or limited confidence when completing demanding academic tasks. Automated and AI-mediated feedback has been associated with improvements in linguistic precision, organization, revision efficiency, and aspects of writing performance, although outcomes vary according to task type, proficiency, feedback source, and instructional conditions (Aldosemani et al., 2023; Mun, 2024; Lv et al., 2021). Recent work further indicates that generative AI can influence motivation, writing self-efficacy, self-regulated learning, metacognitive strategies, and engagement with feedback (J. Huang & Mizumoto, 2024, 2025; Z. Huang et al., 2025). Nevertheless, the introduction of AI also changes the conceptual meaning of task performance. A writing task no longer necessarily represents only what a student can independently plan, formulate, and revise; instead, it may represent a negotiated product resulting from interaction between the learner and a non-human agent. This shift raises important questions about authorship, cognitive responsibility, academic integrity, and what AI-assisted writing actually reveals about student competence.

Within this changing landscape, Google Gemini provides a particularly relevant context for examining AI-mediated task-based writing. Gemini can potentially operate as a multifunctional collaborator across different stages of the writing process. During planning, it may help students interpret task requirements, generate ideas, identify alternative perspectives, and organize outlines. During drafting, it may function as a language consultant by offering lexical, grammatical, and rhetorical suggestions. During revision, it can provide feedback on wording, coherence, organization, and possible reformulations. These affordances suggest that Gemini may reduce some linguistic barriers and allow learners to redirect cognitive resources toward content development and argumentation (Aldosemani et al., 2023; Divya & Alamelu, 2026; Mahdi et al., 2025). Yet the same affordances may introduce pedagogical risks. When learners rely heavily on AI-generated plans, arguments, phrasing, or revisions, cognitive work that would ordinarily require interpretation, decision making, monitoring, and problem solving may be partially transferred to the technology. Consequently, the central educational question is not whether Gemini is capable of generating useful text, but how students engage with its suggestions and whether they retain responsibility for evaluating, modifying, rejecting, and integrating those suggestions into their own writing.

This distinction is especially important in EFL academic writing because the apparent ease provided by generative AI may not correspond to deeper learning. Students may feel more

confident because Gemini provides rapid solutions to linguistic and rhetorical problems, but greater confidence does not necessarily indicate stronger autonomy, critical reasoning, or writing competence. Research has shown that learner responses to generative AI are shaped by self-efficacy, metacognitive awareness, self-regulation, language proficiency, technology acceptance, and the ability to evaluate AI-generated information (Chen & Alibakhshi, 2025; J. Huang & Mizumoto, 2025; Z. Huang et al., 2025; Wang et al., 2025). Generative AI may therefore support learner agency when students strategically use it as a scaffold, but it may also encourage cognitive offloading when students accept outputs without sufficient evaluation. Ma and Vasinda (2025), for instance, raise broader concerns about whether GenAI genuinely empowers learners or instead transforms established pedagogical practices in ways that may obscure the distinction between assistance and substitution. Similar tensions are evident in research addressing learner perceptions, ethical concerns, dependency, and authorship in AI-assisted learning (Price, 2024; Putri & Naf'ihima, 2025; Yan et al., 2024; Yusuf et al., 2024). Thus, the pedagogical value of Gemini cannot be adequately understood from final writing products alone.

A process-oriented perspective is therefore needed. Planning, drafting, and revision involve different cognitive and rhetorical demands, and Gemini may influence each stage differently. In planning, AI assistance may broaden the range of ideas available to students but may also reduce opportunities for independent goal setting and strategic organization. During drafting, linguistic suggestions may improve surface accuracy and fluency while simultaneously creating uncertainty about authorial voice and conceptual ownership. During revision, AI feedback may facilitate error correction and reformulation, but students still need to determine whether suggested changes are accurate, relevant, rhetorically appropriate, and consistent with their intended meaning (Li, 2024; Mahdi et al., 2025; Mi et al., 2025). These stage-specific distinctions are important because learning depends not only on receiving assistance but also on how learners interpret and act upon it. Pedagogically guided AI use may therefore be preferable to either unrestricted dependence or categorical prohibition, particularly when students are required to explain, justify, and reflect on their decisions (Mi et al., 2025; Roe et al., 2026; Y. Zhang & Samsudin, 2026).

Despite a rapidly expanding literature on generative AI in language education, several gaps remain. Much existing research examines ChatGPT, generalized attitudes toward AI, writing outcomes, technology acceptance, automated feedback, or perceptions of usefulness (Kızıl et al., 2025; Mun, 2024; Price, 2024; Tang et al., 2026). Comparatively less attention has been given to students' lived experiences of collaborating specifically with Gemini throughout a complete task-based academic writing cycle. Furthermore, relatively little is known about how learners themselves interpret Gemini's shifting roles across planning, drafting, and revision, or how these interactions affect their confidence, autonomy, reasoning, and sense of authorship. Existing systematic reviews also indicate that AI-supported L2 writing research needs greater attention to metacognition, learner agency, context, and process rather than focusing narrowly on product quality or technological effectiveness (Tang et al., 2026). Qualitative investigation is therefore necessary to reveal dimensions of AI-assisted writing that cannot be adequately captured through scores, experimental comparisons, or post-use satisfaction surveys.

The novelty of the present study lies in its focus on the lived and process-based experience of EFL learners collaborating with Google Gemini within task-based academic writing, rather than simply measuring whether generative AI improves final texts. It examines Gemini as a dynamic collaborator whose role may shift from idea generator to language consultant, feedback provider, and revision partner across different stages of writing. More importantly, the study connects these functional roles with deeper learner-related constructs—confidence, autonomy, reasoning, authorship, and dependency—thereby addressing the tension

between technological support and independent academic writing. This emphasis distinguishes the study from research that treats AI primarily as an instructional tool, feedback mechanism, or predictor of performance. It also responds to recent calls for more context-sensitive, qualitative, and process-oriented research on GenAI-supported L2 writing (Ghimire et al., 2024; Tang et al., 2026; Yan et al., 2024).

Accordingly, this study aims to explore how EFL students experience Gemini-assisted task-based academic writing and to examine how collaboration with Gemini across planning, drafting, and revision shapes their confidence, autonomy, reasoning, and sense of authorship. It further seeks to identify the tensions students encounter when negotiating AI assistance while attempting to maintain responsibility for their own academic writing. To achieve these objectives, the study addresses two research questions: *How do EFL students experience and perceive the roles of Google Gemini during the planning, drafting, and revision stages of task-based academic writing?* And *How does collaboration with Google Gemini shape students' confidence, autonomy, reasoning, and sense of authorship, and what tensions emerge between AI assistance and independent academic writing?*

RESEARCH METHOD

Research Design

This study employed a qualitative research design to explore EFL students' lived experiences of using Google Gemini during task-based academic writing activities. A qualitative approach was considered appropriate because the study sought to understand how students interpreted, negotiated, and made sense of Gemini's involvement in their writing processes rather than to measure the statistical effect of AI use on writing achievement. Specifically, the study focused on students' experiences across the stages of planning, drafting, and revision, as well as on the ways Gemini influenced their confidence, autonomy, reasoning, and sense of authorship. These dimensions are subjective, context-dependent, and closely related to participants' perceptions and meaning-making processes, making qualitative inquiry particularly suitable.

The design was also consistent with the research questions, which examined how students experienced and perceived Gemini's roles during different stages of academic writing and what tensions emerged between AI assistance and independent writing. Rather than predetermining categories of experience, the qualitative design allowed patterns, meanings, and tensions to emerge from participants' accounts. This was important because students might experience Gemini simultaneously as a useful scaffold, a source of confidence, a cognitive shortcut, or a potential threat to independent reasoning and authorship. A qualitative approach therefore enabled the study to capture these potentially contradictory experiences in greater depth. The study was conducted within the natural instructional context of an online academic writing classroom. Participants engaged in task-based writing activities in which Gemini could be used during planning, drafting, and revision. Their experiences were then investigated through semi-structured interviews. This contextualized design enabled the researcher to examine AI-assisted writing as it occurred within an authentic EFL learning environment rather than as an isolated technological intervention.

Participants

The participants consisted of 15 EFL learners enrolled in the third semester of the English Language Education Study Program at Universitas Pendidikan Mandalika. The participants were selected purposively because they had direct experience with both online learning and academic writing activities and were therefore able to provide information relevant to the objectives of the study. More importantly, participants had experience using Google Gemini in connection with academic writing tasks, allowing them to reflect on its roles during planning, drafting, and revision. The sample size of 15 participants was considered appropriate for an in-

depth qualitative inquiry because the purpose of the study was not to achieve statistical representation but to obtain detailed and varied accounts of students' experiences. The number also allowed sufficient diversity of perspectives while maintaining a manageable dataset for close thematic analysis. Recruitment continued until the interview data provided sufficiently rich and recurring patterns related to the main research questions.

The inclusion criteria required participants to: (1) be active third-semester students in the English Language Education Study Program at Universitas Pendidikan Mandalika; (2) have participated regularly in the online learning classroom; (3) have experience completing academic writing tasks; (4) have used Google Gemini during at least one stage of academic writing, such as planning, drafting, or revision; and (5) voluntarily agree to participate in the study. Students who had no prior experience using Gemini for academic writing were excluded because they would not be able to provide first-hand accounts of AI-assisted writing experiences.

The participants represented EFL learners who were developing academic writing competence as part of their undergraduate English education. Relevant demographic information collected included age, gender, previous experience with generative AI, frequency of Gemini use, and the stages of writing in which Gemini was commonly used. These demographic data were used descriptively to contextualize participants' responses rather than to make statistical comparisons. To protect confidentiality, participants were assigned pseudonyms or codes such as P1, P2, and P3 throughout the analysis and reporting. Participation was voluntary, and students were informed about the purpose of the research, the nature of the interview, their right to withdraw, and the confidentiality of their responses before data collection. No personally identifying information was reported in the presentation of findings.

Instruments and Data Collection Technique

The primary research instrument was a semi-structured interview protocol developed specifically for this study. Semi-structured interviews were selected because they provided sufficient consistency across participants while allowing the researcher to probe unexpected experiences, clarify meanings, and obtain detailed examples of how students interacted with Gemini during academic writing. This flexibility was particularly important because the study focused on lived experiences, including perceptions of confidence, autonomy, reasoning, authorship, and tensions surrounding AI assistance. The interview protocol was developed deductively from the research objectives and research questions and was organized into four main domains. The first domain explored participants' general experiences with Gemini-assisted task-based academic writing. The second examined Gemini's perceived roles during planning, drafting, and revision. The third focused on perceived effects on confidence, autonomy, reasoning, and decision making. The fourth explored tensions related to dependence, authorship, academic integrity, and independent writing.

To establish content validity, the interview protocol was reviewed by experts with relevant backgrounds in EFL teaching, academic writing, qualitative research, and educational technology. The reviewers examined the clarity, relevance, alignment, and potential bias of each question in relation to the research objectives. Ambiguous, repetitive, or leading questions were revised based on their feedback. A small pilot interview with students who had characteristics similar to those of the target participants was also conducted before the main data collection. The pilot helped determine whether the questions were understandable, logically sequenced, and capable of eliciting sufficiently detailed responses. Because qualitative interviews are not evaluated through statistical reliability in the same way as standardized quantitative instruments, consistency was addressed through procedural dependability. The same core interview protocol was used for all participants, interviews followed a comparable sequence, and probing questions were used consistently where

clarification was needed. Interviews were recorded with permission and transcribed for analysis so that interpretation was based on participants' actual statements rather than researcher memory.

Data Analysis

The interview data were analyzed using thematic analysis. This approach was selected because it enabled the researcher to identify, organize, interpret, and report recurring patterns of meaning across participants' experiences. The analysis was primarily inductive, allowing themes to emerge from the data, while the research questions provided broad sensitizing areas related to Gemini's roles across writing stages, learner confidence, autonomy, reasoning, and tensions surrounding AI-assisted authorship. The analysis began with data preparation. All recorded interviews were transcribed verbatim and checked against the audio recordings for accuracy. Any identifying information was removed, and each participant was assigned a code. The researcher then read the transcripts several times to become familiar with the data and recorded preliminary observations, recurring ideas, and potentially significant statements.

The second stage involved initial coding. Meaningful units of text were labeled with concise codes that represented participants' experiences or interpretations. Examples of possible initial codes included "idea generation," "language correction," "faster drafting," "increased confidence," "checking AI accuracy," "loss of own voice," "dependence on AI," "rejecting AI suggestions," "reduced thinking effort," and "AI as feedback partner." Coding was conducted across the complete dataset so that both common and contrasting experiences could be identified. In the third stage, related codes were grouped into broader categories and candidate themes. For example, codes related to brainstorming, outlining, and interpreting task requirements could be grouped under a theme such as *Gemini as a planning scaffold*. Codes associated with grammar correction, vocabulary selection, and sentence reformulation could contribute to *Gemini as a linguistic drafting resource*. Other codes, such as accepting AI suggestions without evaluation, feeling unable to write without Gemini, or questioning ownership of AI-generated text, could contribute to themes concerning dependency, cognitive offloading, and contested authorship.

The fourth stage involved reviewing and refining the themes. Candidate themes were compared against the coded extracts and the full transcripts to determine whether they accurately represented participants' accounts. Overlapping themes were combined, themes with insufficient evidence were removed or redefined, and attention was paid to contradictory or minority experiences rather than reporting only dominant patterns. This procedure was particularly important because students could perceive the same AI function differently; for example, rapid language assistance might increase confidence for one participant while creating dependence for another. The fifth stage involved defining and naming the final themes. Each theme was described in terms of its central meaning and its relationship to the research questions. Themes were then organized across the three writing stages_planning, drafting, and revision_and across the cross-cutting dimensions of confidence, autonomy, reasoning, and authorship. This structure allowed the findings to show not only what students thought about Gemini in general, but how its role changed across the writing process.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

How do EFL students experience and perceive the roles of Google Gemini during the planning, drafting, and revision stages of task-based academic writing?

The thematic analysis indicated that students experienced Google Gemini as a stage-dependent writing collaborator whose perceived function changed across planning, drafting, and revision. Rather than describing Gemini as performing one fixed role, participants tended to distinguish between its usefulness for generating and organizing ideas before writing,

providing linguistic support while drafting, and offering evaluative feedback during revision. Across these stages, students generally perceived Gemini as a scaffold that helped them overcome immediate writing difficulties; however, they also emphasized that its suggestions needed to be evaluated rather than automatically adopted.

Gemini as an Idea Generator and Planning Scaffold

During the planning stage, participants commonly perceived Gemini as a brainstorming partner that helped them overcome difficulty in starting an academic writing task. Students reported using Gemini to generate possible topics, identify relevant subthemes, formulate preliminary arguments, interpret task instructions, and organize ideas into outlines. This function appeared particularly valuable when students understood the general topic but struggled to transform their ideas into a structured academic response. Gemini therefore reduced what several participants described as the difficulty of facing a "blank page." Nevertheless, participants did not uniformly accept the generated plans. Some explained that Gemini occasionally produced ideas that were too broad, repetitive, or inconsistent with the assignment, requiring them to select and reorganize the suggestions. Illustrative responses included: P3, *"When I do not know how to start, I ask Gemini for several ideas, but I choose only the ones that match my topic."* P7 similarly stated, *"Gemini helps me make the outline because sometimes I have ideas, but I do not know which idea should come first."* P11 explained, *"I usually ask it to show different arguments. After that, I decide which argument I can actually explain."* P4 noted a limitation: *"Sometimes the outline looks complete, but some points are too general, so I change them based on the assignment."* P14 added, *"It makes planning faster, but I still need to read the task instructions because Gemini can misunderstand what the lecturer wants."* These accounts suggest that Gemini functioned most productively when students treated its output as provisional material for decision making rather than as a ready-made plan.

Gemini as a Linguistic and Rhetorical Resource During Drafting

During drafting, Gemini was primarily perceived as a linguistic resource that enabled learners to express ideas they had difficulty articulating in English. Participants reported requesting vocabulary alternatives, sentence reformulations, grammatical explanations, transitions, and more academic expressions. This support appeared to reduce language-related interruptions in the writing process and allowed some students to continue developing their arguments instead of spending excessive time searching for appropriate expressions. Importantly, however, the participants differentiated between using Gemini to improve the expression of an existing idea and asking it to compose an entire section. P2 explained, *"I already know what I want to say, but sometimes I cannot make it academic in English, so Gemini gives me another way to express it."* P6 stated, *"I use it mostly when my sentence sounds very simple. I ask how to make it more formal, but I do not always copy the answer."* P9 remarked, *"Gemini is like a language consultant for me because I can ask about grammar immediately."* In contrast, P12 expressed concern about excessive intervention: *"If I ask Gemini to write the whole paragraph, the English becomes better, but sometimes it does not sound like me anymore."* P15 similarly reflected, *"I compare my sentence with Gemini's version and sometimes combine them because the AI version can be too complicated."* These experiences reveal that students valued Gemini for reducing linguistic barriers, yet they also recognized a distinction between legitimate linguistic scaffolding and replacement of their own composing processes.

Gemini as a Feedback Provider and Revision Partner

In the revision stage, participants described Gemini as a rapid and accessible feedback provider. Students used it to detect grammar problems, identify unclear sentences, suggest improvements in coherence, examine paragraph organization, and propose alternative wording.

Several participants valued the possibility of receiving feedback immediately rather than waiting for teacher comments. However, revision with Gemini was not described simply as automatic correction. Participants reported encountering recommendations that changed their intended meaning or introduced expressions they did not fully understand. As a result, some students developed strategies for checking whether proposed revisions were appropriate. P1 commented, *"After I finish the paragraph, I ask Gemini what is unclear, and then I check the suggestions one by one."* P5 stated, *"It helps me notice grammar mistakes that I cannot see when I read my own writing."* P8 explained, *"I ask whether my paragraphs are connected logically, not only whether the grammar is correct."* P10 described selective acceptance: *"Sometimes Gemini changes too much, so I keep my original sentence if I think my meaning is clearer."* P13 added, *"I do not directly accept all corrections because sometimes the vocabulary is unfamiliar to me, and I need to understand it first."* These responses demonstrate that Gemini was perceived as most useful when revision remained an evaluative process in which learners retained responsibility for determining whether the feedback improved the text.

Table 1. EFL Students' Experiences and Roles of Google Gemini during Task-Based Academic Writing

Writing stage	Main theme	Perceived role of Gemini	Reported benefits	Reported concerns
Planning	Idea generation and organization	Brainstorming partner and planning scaffold	Generates ideas, clarifies task direction, develops outlines, reduces difficulty starting	Suggestions can be broad, repetitive, or misaligned with task requirements
Drafting	Linguistic and rhetorical support	Language consultant and drafting assistant	Supports vocabulary, grammar, formal expression, transitions, and sentence construction	AI-generated language may be overly sophisticated or weaken personal voice
Revision	Feedback and text evaluation	Feedback provider and revision partner	Identifies errors, improves clarity, supports coherence, provides immediate feedback	Suggestions may change intended meaning or be accepted without sufficient evaluation
Across stages	Selective AI engagement	Collaborative scaffold	Saves time and reduces linguistic difficulty	Requires learner judgment and verification

The findings indicate that students did not experience Gemini as a single-purpose writing tool. Instead, its perceived role shifted according to the cognitive demands of each phase of writing. Planning required idea exploration and organization, drafting emphasized linguistic expression, and revision required evaluation and refinement. This stage-dependent pattern suggests that the pedagogical value of Gemini is not inherent in the technology itself but depends on how it is positioned within specific writing activities. The most productive experiences involved students using Gemini to extend their own thinking rather than delegating the entire writing task to the system.

A second important pattern concerns selective engagement. Students frequently described comparing, adapting, rejecting, or simplifying Gemini-generated material. This indicates that AI-assisted writing was experienced as an interactive process rather than straightforward text generation. At the same time, the variation in students' ability to evaluate suggestions suggests that pedagogical guidance remains necessary. Task-based academic writing activities may therefore benefit from explicit requirements that students explain why

they accepted, modified, or rejected AI-generated suggestions, thereby transforming Gemini from a convenience tool into a resource for reflective writing practice.

How does collaboration with Google Gemini shape students' confidence, autonomy, reasoning, and sense of authorship, and what tensions emerge between AI assistance and independent academic writing?

The analysis identified four interconnected dimensions of students' experiences: increased confidence, conditional autonomy, negotiated reasoning, and contested authorship. Participants generally perceived Gemini as making academic writing more manageable, particularly when they experienced uncertainty about English expression. However, this increased confidence was accompanied by concerns that frequent reliance on AI could reduce independent effort. The findings therefore reveal a central tension: the same assistance that empowered students could also create dependency when learners transferred too much cognitive responsibility to Gemini.

Increased Confidence Through Immediate Support

Students frequently associated Gemini with increased confidence because it provided immediate assistance at moments when they felt uncertain about their writing. Access to suggestions reduced anxiety about grammatical mistakes and allowed learners to proceed with tasks that might otherwise have felt difficult. Confidence was especially evident when participants used Gemini to verify writing they had already produced. P4 stated, *"I feel more confident submitting my writing because I can check whether my sentences have serious problems."* P7 explained, *"Before using Gemini, I sometimes stopped writing because I did not know the English word. Now I can continue."* P9 remarked, *"It gives me confidence because I can ask questions without being embarrassed about making mistakes."* P12 added, *"When Gemini says the argument is understandable, I feel more certain, but I still want my lecturer's feedback."* P15 expressed a more cautious view: *"My confidence becomes higher, but sometimes I wonder whether I am confident in my own ability or confident because Gemini is there."* This final observation is particularly significant because it differentiates confidence generated through learning from confidence generated through continuous technological availability.

Autonomy as Both Supported and Threatened

Participants presented a more complex picture of autonomy. Some viewed Gemini as increasing independence because they could solve writing problems without immediately depending on a lecturer or peer. Others felt that frequent AI use risked creating a new form of dependence. Thus, autonomy was not determined simply by whether students used AI but by how they used it. P2 explained, *"I can solve some problems by myself with Gemini instead of always asking my lecturer."* P5 similarly noted, *"It makes me independent in checking my writing, especially outside classroom time."* However, P8 acknowledged, *"Sometimes I open Gemini automatically before I try to solve the problem myself."* P11 stated, *"If I use it too often, I feel that writing without Gemini becomes more difficult."* P14 described an emerging self-regulation strategy: *"Now I try to write my own idea first and only use Gemini when I really need help."* These contrasting accounts suggest that AI can support functional independence from immediate human assistance while simultaneously creating technological dependency unless learners establish boundaries around its use.

Reasoning as a Process of Comparison and Evaluation

Gemini influenced reasoning most positively when students used its responses as alternatives to evaluate rather than as conclusions to accept. Participants described comparing arguments, asking for counterarguments, requesting explanations, and deciding whether AI suggestions logically fitted their own positions. Such practices encouraged reflective decision

making. P1 stated, *"Sometimes I ask Gemini for another opinion, and then I compare it with my own argument."* P6 explained, *"If it gives a reason, I ask why or ask for another possibility before I use it."* P10 remarked, *"Gemini can show a different perspective that I did not think about, so it makes me reconsider my argument."* P13 emphasized verification: *"I do not think everything from Gemini is correct. I need to check whether the explanation makes sense."* Conversely, P3 acknowledged a potential reduction in reasoning: *"When I am tired, sometimes I accept the answer because it already looks logical, and I do not think deeply about it."* The accounts therefore reveal two possible trajectories: Gemini may stimulate reasoning through comparison and questioning, but it may also encourage cognitive offloading when polished responses are accepted without scrutiny.

Negotiating Authorship and Maintaining an Individual Voice

The strongest tension emerged around authorship. Participants generally considered a text to remain "their own" when Gemini helped improve language while the underlying ideas and decisions originated from them. In contrast, they felt less ownership when AI generated substantial arguments or entire paragraphs. P3 explained, *"If Gemini only corrects my grammar, I still feel it is my writing because the idea is mine."* P6 stated, *"When I copy a full paragraph from Gemini, I do not really feel proud because I did not build the paragraph."* P8 commented, *"Sometimes the sentence sounds too advanced and different from the way I normally write, so I change it."* P11 reflected, *"I think I am still the author if I decide what to use and rewrite it in my own way."* P15 offered a more critical observation: *"The difficult part is knowing where help ends and where Gemini starts doing the writing for me."* These accounts suggest that participants understood authorship less as the complete absence of AI and more as continued control over ideas, decisions, and textual choices.

Tension Between Efficiency and Independent Academic Writing

Across confidence, autonomy, reasoning, and authorship, participants repeatedly described a broader tension between efficiency and learning. Gemini made academic writing faster and less frustrating, but this convenience could reduce opportunities to struggle productively with language and ideas. P2 stated, *"Gemini saves time, especially when I need to revise quickly, but sometimes I learn less because the answer comes immediately."* P5 noted, *"It is useful, but if I ask for everything, I am afraid I will not improve my own writing."* P9 explained, *"The challenge is using Gemini as help, not making Gemini do the assignment."* P12 remarked, *"I think we need limits because otherwise it becomes very easy to depend on it."* P14 summarized the tension clearly: *"For me, Gemini should be a partner, not the writer. I should still make the final decision."* This tension suggests that responsible AI-assisted writing cannot be reduced to either unrestricted use or complete prohibition. Instead, it requires learners to maintain cognitive and authorial responsibility while drawing strategically on AI support.

Table 2. Results of Collaboration with Google Gemini between AI Assistance and Independent Academic Writing

Dimension	Main finding	Positive experience	Emerging tension
Confidence	Gemini reduced uncertainty and writing anxiety	Students felt more capable of continuing and reviewing their writing	Confidence may depend on AI availability rather than increased competence
Autonomy	Gemini enabled immediate self-help	Reduced dependence on teacher assistance	Frequent use could create technological dependence
Reasoning	AI provided alternative ideas and perspectives	Encouraged comparison, questioning, and evaluation	Polished responses could promote uncritical acceptance and cognitive offloading

Dimension	Main finding	Positive experience	Emerging tension
Authorship	Ownership depended on students retaining decision-making control	Editing and selective use preserved personal voice	Extensive AI-generated text weakened sense of ownership
Independent writing	Students valued Gemini as a scaffold	Improved efficiency and access to support	Convenience could reduce productive struggle and independent problem solving

The findings suggest that the influence of Gemini on learner agency is fundamentally ambivalent rather than uniformly positive or negative. Increased confidence, autonomy, and reasoning were evident when students remained actively involved in producing ideas, evaluating suggestions, and making final decisions. Under these conditions, Gemini functioned as cognitive and linguistic scaffolding. However, the same technology became potentially constraining when students relied on it before attempting problems independently or accepted generated responses because they appeared linguistically sophisticated. The relevant distinction is therefore not simply between AI use and non-use but between reflective AI engagement and cognitive delegation.

The findings also indicate that authorship is being renegotiated in AI-assisted academic writing. Participants did not necessarily regard all forms of AI involvement as compromising ownership. Instead, they located authorship in their capacity to maintain conceptual control, evaluate AI contributions, preserve their individual voice, and assume responsibility for the final text. This suggests that pedagogical approaches to Gemini-assisted task-based writing should prioritize transparent use, critical evaluation, process documentation, and student justification of AI-mediated decisions. Such practices could help preserve independent reasoning while allowing learners to benefit from the linguistic and cognitive scaffolding offered by generative AI.

Taken together, the findings portray Google Gemini as a multifunctional but negotiated collaborator in EFL task-based academic writing. Its role moved from brainstorming and structuring during planning, to linguistic assistance during drafting, and to feedback and evaluation during revision. Students generally experienced these functions positively when they retained control over the writing process. At the same time, their accounts revealed that increased efficiency and confidence could coexist with dependence, reduced cognitive effort, uncertainty about authorship, and weakened independent problem solving.

The central analytical finding is therefore not that Gemini either supports or undermines academic writing. Rather, its educational value appears to depend on the degree of cognitive and authorial responsibility retained by the learner. When students questioned, compared, revised, and selectively incorporated AI-generated suggestions, Gemini operated as scaffolding. When learners delegated idea generation, argument construction, and textual decisions to the system without critical evaluation, the boundary between assistance and substitution became increasingly difficult to maintain. This tension provides an important pedagogical basis for designing task-based writing activities in which AI use is explicitly structured around reflection, justification, and learner-controlled decision making.

Discussion

The findings demonstrate that EFL learners experienced Google Gemini not as a uniform writing tool but as a stage-dependent collaborator whose functions changed according to the demands of planning, drafting, and revision. During planning, students primarily used Gemini for brainstorming, identifying possible arguments, interpreting tasks, and developing outlines; during drafting, it operated mainly as a linguistic and rhetorical resource; and during revision, it functioned as an immediate feedback and evaluation partner. This pattern supports previous scholarship showing that generative AI can provide multiple forms of assistance throughout

the writing process rather than merely correcting completed texts. Mahdi et al. (2025), for example, examined the effectiveness of AI tools across the essay-writing process, while Aldosemani et al. (2023) identified automated support as relevant to EFL writing development. Similarly, Li (2024) emphasizes the role of ChatGPT in L2 writing feedback and assessment. The present findings extend this body of research by demonstrating that learners distinguish Gemini's usefulness according to the cognitive purpose of each writing stage. Its pedagogical contribution therefore appears to depend less on the general availability of AI and more on the alignment between specific AI functions and specific task demands.

The planning findings are particularly important within a task-based language learning framework. Students described Gemini as useful for overcoming difficulty in beginning a task, generating alternatives, and transforming loosely developed ideas into more organized plans. However, they also recognized that AI-produced outlines could be overly broad, repetitive, or inconsistent with task requirements and therefore required modification. This supports the broader TBLL literature emphasizing that planning, scaffolding, task complexity, and feedback substantially influence writing performance rather than task exposure alone (Lv et al., 2021; Zhang & Kang, 2022). It also resonates with Li et al. (2026), who highlight metacognition in second-language writing. The contribution of Gemini at this stage should consequently be understood as planning scaffolding rather than planning substitution. When students generated their own judgments about which suggestions were appropriate, Gemini expanded the available cognitive resources. When students accepted AI-generated structures without evaluation, however, the system potentially displaced the strategic planning processes that task-based instruction is intended to develop.

During drafting, participants valued Gemini especially for vocabulary selection, grammatical assistance, formal academic expression, sentence reformulation, and transitions. This finding is consistent with previous studies suggesting that generative and automated writing technologies can reduce linguistic difficulties and facilitate written production in EFL contexts (Aldosemani et al., 2023; Mun, 2024). It also corresponds with Bui and Nguyen's (2023) attention to the writing strategies employed by EFL pre-service teachers and with the broader distinction identified by Bhowmik (2021) between learning to write and using writing to learn language. Nevertheless, the present findings add an important qualification: linguistic sophistication did not always represent pedagogical improvement. Some students reported that Gemini-generated formulations sounded excessively advanced or no longer reflected their normal voice. This suggests that surface-level improvement and learner development should not be treated as equivalent. A more grammatically polished sentence may improve the immediate text while contributing little to the writer's ability to independently formulate similar language in future tasks.

The findings concerning revision similarly confirm previous research while revealing the importance of learner judgment. Participants appreciated Gemini's capacity to detect errors, identify unclear expressions, assess coherence, and offer immediate alternatives, but they did not necessarily regard every suggestion as reliable or appropriate. This is consistent with Li (2024) and Mi et al. (2025), who position GenAI feedback as potentially useful but pedagogically complex, and with Lv et al.'s (2021) meta-analysis showing that online feedback can facilitate L2 writing. The current study extends this literature by suggesting that the educational value of AI feedback resides partly in what students do with the feedback. Revision becomes a learning process when learners compare a suggestion with their intended meaning, evaluate its appropriateness, and decide whether to retain, adapt, or reject it. If revisions are incorporated automatically, the same technological affordance may reduce rather than strengthen metacognitive engagement.

The second major finding concerns students' increased confidence. Participants commonly reported that immediate access to linguistic support reduced uncertainty and

enabled them to continue writing when they encountered vocabulary or grammatical difficulties. At the same time, one of the most analytically significant tensions was whether students had become more confident in their own writing competence or simply more confident because Gemini was continuously available. This largely supports Huang and Mizumoto (2024), who specifically investigated generative AI in relation to motivation and writing self-efficacy, as well as Huang and Mizumoto (2025), who linked generative AI with engagement with written feedback. Yet the present study introduces a useful distinction between competence-based confidence and tool-dependent confidence. The former may represent genuine development, whereas the latter may disappear when access to AI is removed. Future assessments of AI-enhanced writing should therefore avoid treating increased self-confidence as unambiguous evidence of improved independent competence.

A similarly ambivalent relationship emerged around learner autonomy. Some participants experienced Gemini as empowering because it enabled them to obtain support without waiting for lecturers or classmates, whereas others reported becoming accustomed to consulting Gemini before attempting to solve problems independently. These contrasting experiences align closely with Huang et al. (2025), who associate GenAI-assisted writing with self-regulated learning strategies and technology acceptance, and with Ma and Vasinda's (2025) question of whether GenAI genuinely empowers learners or reshapes pedagogical practices in ways that foster dependency. The findings therefore challenge a simplistic definition of autonomy as independence from teachers. A learner can become less dependent on a teacher while simultaneously becoming more dependent on an AI system. In AI-mediated writing, autonomy should instead be conceptualized as the learner's capacity to regulate when, why, and how external assistance is used.

The findings on reasoning reinforce this interpretation. Gemini supported reasoning most effectively when learners requested alternative perspectives, compared arguments, asked follow-up questions, and evaluated whether suggestions matched their intended positions. Conversely, students acknowledged that polished AI responses could sometimes be accepted without substantial reflection. This confirms concerns in recent AI-assisted writing research about cognitive offloading and the need for metacognitive regulation (Chen & Alibakhshi, 2025; Huang et al., 2025; Tang et al., 2026). However, the findings also complicate claims that AI necessarily reduces thinking. Gemini sometimes expanded reasoning by exposing students to alternatives they had not previously considered. The crucial variable appears to be the interaction strategy: questioning and comparison can turn AI into a cognitive scaffold, whereas passive acceptance can turn it into a substitute for reasoning.

Authorship was perhaps the most consequential tension identified in the study. Participants generally retained a sense of ownership when Gemini corrected language or suggested alternatives but the underlying ideas and final decisions remained theirs. Their sense of authorship weakened when Gemini generated extensive arguments or complete passages. This finding is consistent with concerns about dependency, ethics, and academic integrity reported by Putri and Naf'ihima (2025), Yusuf et al. (2024), and Price (2024). It also supports recent attempts to rethink AI-inclusive assessment practices, such as the EAP-AIAS discussed by Roe et al. (2026). Importantly, these findings suggest that students do not define authorship simply through the absence of AI. Instead, authorship is understood through conceptual ownership, critical selection, textual control, and responsibility for the final product. This represents an important extension of previous research because it shifts the discussion from the binary question of whether AI was used to the more pedagogically relevant question of who retained control over meaning and decision making.

Taken together, the study indicates that the key tension in Gemini-assisted task-based writing is not technology versus human writing but scaffolding versus substitution. Participants valued efficiency but simultaneously recognized that excessive convenience could remove

opportunities for productive struggle and independent problem solving. Theoretically, this suggests that human–AI collaboration within TBLL should be understood as a form of regulated mediation in which learner agency determines whether technological support contributes to development. Practically, teachers should structure AI involvement by writing stage: Gemini can generate alternatives during planning, provide bounded linguistic support during drafting, and offer feedback during revision, but students should be required to explain why suggestions were accepted, modified, or rejected. Such a process-oriented approach is consistent with calls for stronger AI literacy, critical evaluation, and responsible use in EFL education (Jiang, 2026; Tang et al., 2026; Zhang & Samsudin, 2026). The central pedagogical implication is therefore not to maximize or prohibit Gemini use, but to design tasks that preserve students' cognitive effort, evaluative judgment, and authorial responsibility while benefiting from AI-mediated scaffolding.

CONCLUSION

This study explored EFL students' experiences of collaborating with Google Gemini throughout planning, drafting, and revision in task-based academic writing. The findings demonstrate that Gemini assumed different functions according to the demands of each writing stage. During planning, it operated mainly as an idea generator and organizational scaffold; during drafting, it served as a linguistic and rhetorical resource; and during revision, it became an immediate feedback and evaluation partner. Students generally valued these functions because they reduced linguistic barriers, accelerated the writing process, provided access to immediate assistance, and helped them address difficulties that might otherwise interrupt task completion. Nevertheless, the findings also demonstrate that the educational value of Gemini depended on learners' active evaluation of its outputs. Students who compared, revised, questioned, or rejected AI-generated suggestions retained greater control over their writing than those who treated AI output as a ready-made solution. Thus, the study concludes that Gemini is pedagogically most productive when it supplements rather than replaces the cognitive processes involved in academic writing.

The study further concludes that human–AI collaboration creates a fundamental tension between support and dependency, efficiency and learning, confidence and competence, and assistance and authorship. Gemini may strengthen confidence and provide a form of functional autonomy by enabling learners to solve writing problems without constant teacher assistance; however, repeated reliance may also produce technological dependency and cognitive offloading. Likewise, AI may stimulate reasoning by presenting alternative perspectives, yet the same polished responses can discourage deeper thinking when accepted uncritically. Authorship therefore appears to depend less on whether AI is present and more on whether students maintain ownership of ideas, evaluate external suggestions, preserve their authorial voice, and assume responsibility for the final text. For task-based EFL pedagogy, the implication is that generative AI should be integrated through clearly structured activities that require reflection, justification, verification, and selective adoption of AI output. Such an approach can preserve productive human–AI collaboration without allowing technological efficiency to displace independent academic writing.

ACKNOWLEDGEMENT

The authors would like to express their appreciation to the English Language Education Study Program, Faculty of Culture, Management, and Business, Universitas Pendidikan Mandalika, for providing the academic context in which this study was conducted. Appreciation is also extended to the students who participated voluntarily in the study and shared their experiences of using Google Gemini during task-based academic writing activities. The authors also acknowledge the colleagues and experts who provided input on the development and review of the interview protocol and offered constructive suggestions concerning the research

procedures. Their contributions supported the clarity and relevance of the data collection process. No acknowledgment of funding should be added unless the study actually received financial or institutional research support.

CONFLICT OF INTEREST

The authors declare that they have no financial, personal, professional, institutional, or other competing interests that could have influenced the design, conduct, analysis, interpretation, or reporting of this study. No circumstances existed that could reasonably compromise the objectivity, integrity, or independence of the research.

FUNDING

This research received no specific financial support from public, commercial, governmental, or not-for-profit funding agencies. All research activities, including data collection, analysis, manuscript preparation, and publication-related processes, were independently supported by the authors. No external funding source influenced the design, implementation, interpretation, or reporting of the study.

INFORMED CONSENT STATEMENT

Participation in this study was entirely voluntary. Before taking part, all participants were informed about the purpose, procedures, potential risks, and benefits of the study. Participants were assured that their identities and personal information would remain confidential and that all information provided would be used solely for research purposes. They were also informed of their right to withdraw from the study at any time without penalty or loss of benefits. By agreeing to participate and continuing with the study procedures, all participants provided informed consent under the conditions described.

DATA AVAILABILITY STATEMENT

The data used in this study are not publicly available due to privacy, confidentiality, and ethical obligations intended to protect the participants. This restriction ensures compliance with applicable ethical research standards and data protection requirements. Researchers or interested parties may request access to the dataset for validation or further scholarly analysis.

DECLARATION OF USING AI TOOLS

Generative AI tools were used during the preparation of this manuscript to assist with language refinement, organization, and editorial revision. The authors critically reviewed, verified, and revised all AI-assisted content and remain fully responsible for the accuracy, interpretation, originality, and final presentation of the manuscript. AI tools were not considered authors and did not independently determine the study design, data analysis, findings, or conclusions.

REFERENCES

Aladsani, H. K., Al-Dokhny, A. A., & Drwish, A. M. (2026). Practices and evaluation of generative AI in English-language publication: Insights from Saudi non-native English-speaking researchers. *SAGE Open, 16*(1). https://doi.org/10.1177/21582440261420858

Aldosemani, T., Assalahi, H., Lhothali, A., & Albsisi, M. (2023). Automated writing evaluation in EFL contexts. *International Journal of Computer-Assisted Language Learning and Teaching, 13*(1), 1–19. https://doi.org/10.4018/IJCALLT.329962

Bhowmik, S. (2021). Writing instruction in an EFL context: Learning to write or writing to learn language? *BELTA Journal, 5*(1), 30–42. https://doi.org/10.36832/beltaj.2021.0501.03

Bui, H. P., & Nguyen, L. T. (2023). An investigation into EFL pre-service teachers' academic writing strategies. *Heliyon, 9*(3), e13743. https://doi.org/10.1016/j.heliyon.2023.e13743

Chen, J., & Alibakhshi, G. (2025). AI-powered applications' effects on English language learners' cognitive, metacognitive, and resource management strategies, and language

achievement. *Journal of Computer Assisted Learning, 42*(1). https://doi.org/10.1002/jcal.70171

Divya, T. J., & Alamelu, C. (2026). Integrating DeepL Write and Claude AI to enhance argumentative writing competence of engineering students in India. *Frontiers in Artificial Intelligence, 9*. https://doi.org/10.3389/frai.2026.1838463

García-López, C., Cuevas, M. F. T., & Sória, I. N. (2025). A systematic review of the use of AI in EFL and EL classrooms for gifted students. *Trends in Higher Education, 4*(3), 33. https://doi.org/10.3390/higheredu4030033

Ghimire, P. R., Neupane, B. P., & Dahal, N. (2024). Generative AI and AI tools in English language teaching and learning: An exploratory research. *English Language Teaching Perspectives, 9*(1–2), 30–40. https://doi.org/10.3126/eltp.v9i1-2.68716

Huang, J., & Mizumoto, A. (2024). Examining the effect of generative AI on students' motivation and writing self-efficacy. *Digital Applied Linguistics, 1*, 102324. https://doi.org/10.29140/dal.v1.102324

Huang, J., & Mizumoto, A. (2025). The role of generative AI in mediating L2MSS and engagement with written feedback in EFL learning: A structural equation modeling approach. *Annual Review of Applied Linguistics, 45*, 131–147. https://doi.org/10.1017/S0267190525000029

Huang, Z., Tian, X., Chen, C., Wang, P., & Jin, H. (2025). Exploring the relationship between self-regulated learning strategies and technology acceptance in GenAI-assisted writing: A person-centered approach. *International Journal of Applied Linguistics, 36*(3), 2131–2143. https://doi.org/10.1111/ijal.70055

Jiang, G. (2026). A conceptual analysis: Generative artificial intelligence literacy in English as a foreign language writing. *Frontiers in Psychology, 17*. https://doi.org/10.3389/fpsyg.2026.1815271

Kızıl, A. Ş., Klímová, B., Pikhart, M., & Parmaxi, A. (2025). A systematic review of the recent research on the usefulness of chatbots for language education. *Journal of Computer Assisted Learning, 41*(2). https://doi.org/10.1111/jcal.70001

Li, C., Lee, I. B. H., & Mao, Z. (2026). Synthesizing empirical research on learner metacognition in second language writing. *International Journal of Applied Linguistics, 36*(3), 2878–2889. https://doi.org/10.1111/ijal.70123

Li, M. (2024). Leveraging ChatGPT for second language writing feedback and assessment. *International Journal of Computer-Assisted Language Learning and Teaching, 14*(1), 1–11. https://doi.org/10.4018/IJCALLT.360382

Lv, X., Ren, W., & Xie, Y. H. (2021). The effects of online feedback on ESL/EFL writing: A meta-analysis. *The Asia-Pacific Education Researcher, 30*(6), 643–653. https://doi.org/10.1007/s40299-021-00594-6

Ma, C., & Vasinda, S. (2025). GenAI in academic writing: Empowering learners or redefining traditional pedagogical practices? *International Journal of Artificial Intelligence, 1*(1), 1–34. https://doi.org/10.4018/ijaitl.373582

Mahdi, H. S., Milad, M., & Saeed, A. T. (2025). Evaluating the effectiveness of AI tools across the essay writing process. *International Journal of Computer-Assisted Language Learning and Teaching, 15*(1), 1–20. https://doi.org/10.4018/IJCALLT.391354

Mi, Y., Rong, M., & Chen, X. (2025). Exploring the affordances and challenges of GenAI feedback in L2 writing instruction: A comparative analysis with peer feedback. *ECNU Review of Education, 9*(1). https://doi.org/10.1177/20965311241310883

Mun, C.-Y. (2024). EFL learners' English writing feedback and their perception of using ChatGPT. *STEM Journal, 25*(2), 26–39. https://doi.org/10.16875/stem.2024.25.2.26

Price, G. (2024). Japanese university EFL student insights on the emerging ChatGPT phenomenon. *International Journal of Education, Learning and Development, 12*(5), 83–100. https://doi.org/10.37745/ijeld.2013/vol12n583100

Putri, K. Y., & Naf'ihima, F. A.-R. (2025). Pre-service teachers' perceptions of generative AI: Dependency, effect, and ethics. *Edulink Education and Linguistics Knowledge Journal, 7*(1), 1. https://doi.org/10.32503/edulink.v7i1.6834

Roe, J., Perkins, M., & Tregubova, Y. (2026). The EAP-AIAS: Adapting the AI Assessment Scale for English for Academic Purposes. *TESOL Journal, 17*(2). https://doi.org/10.1002/tesj.70122

Sharifuddin, N. S., & Hashim, H. B. (2024). Benefits and challenges in implementing artificial intelligence in education (AIED) in ESL classroom: A systematic review (2019–2022). *International Journal of Academic Research in Business and Social Sciences, 14*(1). https://doi.org/10.6007/IJARBSS/v14-i1/20422

Slimi, Z., Alawai, F. A., Alyani, H. A., Abri, S. A., Al-Farsi, F. A., & Balushi, K. A. (2022). Writing issues in ESL and their potential solutions: Case study IMCO's foundation students. *Journal of Educational and Social Research, 12*(6), 81. https://doi.org/10.36941/jesr-2022-0146

Tang, W., Wang, Z., & Guangfen, Y. (2026). What are we missing in AI-supported L2 writing research? A systematic review from 2014 to 2024. *Journal of Computer Assisted Learning, 42*(3). https://doi.org/10.1002/jcal.70262

Waluyo, B., Apridayani, A., & Arsyad, S. (2023). Using Writeabout as a tool for online writing and feedback. *TESL-EJ, 26*(4), 1–18. https://doi.org/10.55593/ej.26104int

Wang, C., Du, Y., & Zou, B. (2025). Learners' acceptance and use of multimodal artificial intelligence (AI)-generated content in AI-mediated informal digital learning of English. *International Journal of Applied Linguistics, 36*(1), 927–940. https://doi.org/10.1111/ijal.12827

Wang, H., Gui, W., Wang, N., & Wang, L. (2023). Effects of speaker types and L1 backgrounds on the linguistic complexity of learners' writing. *International Journal of Applied Linguistics, 34*(2), 692–708. https://doi.org/10.1111/ijal.12526

Yan, X., & Huang, B. H. (2025). Generative AI for the teaching, learning, and assessment of productive skills: An evidence-based approach to understanding its real impact. *TESOL Quarterly, 59*(S1). https://doi.org/10.1002/tesq.70043

Yan, Y., Sun, W., & Zhao, X. (2024). Metaphorical conceptualizations of generative artificial intelligence use by Chinese university EFL learners. *Frontiers in Education, 9*. https://doi.org/10.3389/feduc.2024.1430494

Yusuf, A., Pervin, N., Román-González, M., & Noor, N. M. (2024). Generative AI in education and research: A systematic mapping review. *Review of Education, 12*(2). https://doi.org/10.1002/rev3.3489

Zaimoğlu, S., & Dağtaş, A. (2025). Teacher cognition and practices in using generative AI tools to support student engagement in EFL higher-education contexts. *Behavioral Sciences, 15*(9), 1202. https://doi.org/10.3390/bs15091202

Zhai, X., & Razali, A. B. (2023). Triple method approach to development of a genre-based approach to teaching ESL/EFL writing: A systematic literature review by bibliometric, content, and scientometric analyses. *SAGE Open, 13*(1). https://doi.org/10.1177/21582440221147255

Zhang, C. (2025). A study on linguistic features of Chinese ESL and EFL learners' writing: A learning context perspective. *SAGE Open, 15*(3). https://doi.org/10.1177/21582440251378082

Zhang, C., & Kang, S. (2022). A comparative study on lexical and syntactic features of ESL versus EFL learners' writing. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.1002090

Zhang, L. (2024). A review of research on the role of L1 for peer feedback in L2 writing. *Journal of Education Humanities and Social Sciences, 26*, 141–146. https://doi.org/10.54097/m2x75z41

Zhang, S., & Liu, X. (2025). Learner emotions in AI-assisted English as a second/foreign language learning: A systematic review of empirical studies. *Frontiers in Psychology, 16*. https://doi.org/10.3389/fpsyg.2025.1652806

Zhang, Y., & Samsudin, M. A. (2026). From familiarity to criticality: Cultivating EFL teachers' AI literacy through an AI-integrated genre-based pedagogy. *Education Sciences, 16*(1), 150. https://doi.org/10.3390/educsci16010150