



The Impact of Generative AI Tools (ChatGPT, Grammarly, and Beyond) on Academic English Writing Pedagogy: A Conceptual Review

Meritta Joy

M.A., B.Ed. (English), LFGHSS Chelakkara, Thrissur, Kerala, India

Corresponding Author: * Meritta Joy

DOI: <https://doi.org/10.5281/zenodo.23661671>

Abstract

The rapid diffusion of generative artificial intelligence (AI) tools such as ChatGPT, alongside long-established automated writing evaluation systems such as Grammarly, has begun to reshape how academic English writing is taught, practised, and assessed in higher education. This conceptual review synthesises recent peer-reviewed scholarship to examine how these tools intersect with established models of writing pedagogy, including process, genre, and feedback-oriented approaches. The review situates generative AI within a longer trajectory of computer-assisted writing support before turning to its distinctive pedagogical implications: altered drafting and revision behaviour, changing patterns of teacher and peer feedback, and new anxieties surrounding authorship, originality, and academic integrity. Particular attention is given to English as a second or foreign language contexts, where generative AI has been reported to lower affective barriers to writing while simultaneously raising concerns about linguistic dependency and diminished self-editing capacity. The article is methodologically a narrative literature review rather than an empirical study; no primary data were collected. Drawing on this literature, the review argues that generative AI is best conceptualised not as a substitute for writing instruction but as a mediating tool whose pedagogical value depends on deliberate task design, explicit AI literacy instruction, and revised assessment practices. Implications for classroom practice, institutional policy, and future empirical research are outlined.

Manuscript Information

- **ISSN No:** 3139-9851
- **Received:** 09-08-2026
- **Accepted:** 14-09-2026
- **Published:** 26-10-2026
- **IJCATM:** 1(3); 2026: 231-235
- **©2026, All Rights Reserved**
- **Plagiarism Checked:** Yes
- **Peer Review Process:** Yes
- **Paper type:** Review Paper

How to Cite

Joy M. The impact of generative AI tools (ChatGPT, Grammarly, and beyond) on academic English writing pedagogy: a conceptual review. Int. J. Current Acad. Trend. Multi. 2026;1(3): 231-235

Access this Article Online



www.ijcatmjjournal.com

KEYWORDS: Generative AI, ChatGPT, Grammarly, Academic Writing Pedagogy, English Language Teaching, Academic Integrity

INTRODUCTION

Academic writing has long occupied a central place in English language pedagogy, functioning simultaneously as a marker of disciplinary competence, a site of language development, and a gatekeeping mechanism for academic advancement. The public release of ChatGPT in late 2022 introduced a qualitatively new kind of writing support into this landscape. Unlike earlier computer-assisted tools that corrected or scored existing text, generative AI systems can produce fluent, contextually appropriate prose from a brief prompt, effectively collapsing the boundary between assistance and authorship (Warschauer *et al.*, 2023) ^[17]. This development arrived against a backdrop in which automated writing evaluation (AWE) tools, most notably Grammarly, had already become embedded in many students' writing routines, offering sentence-level correction, style suggestions, and originality checks (Koltovskaia, 2020) ^[6]. Taken together, these two generations of technology now confront English language educators with an unprecedented set of pedagogical questions.

The pedagogical stakes are considerable. Writing instruction in English language classrooms has traditionally drawn on process-oriented models that treat planning, drafting, and revision as recursive cognitive activities requiring sustained learner effort (Flower & Hayes, 1981) ^[3], as well as genre-based approaches that make explicit the rhetorical and linguistic conventions of academic text types (Hyland, 2007) ^[4]. Generative AI intervenes directly in these processes: it can draft, restructure, and revise text on a learner's behalf, and it can do so in ways that are difficult for instructors to detect (Pedersen, 2023) ^[12]. At the same time, proponents argue that when used reflectively, these tools can scaffold planning, model academic register, and reduce the affective burden of writing in a second or foreign language (Tseng & Warschauer, 2023) ^[16]. This tension between disruption and opportunity forms the analytical core of the present review.

This article synthesises recent scholarship to examine how generative AI tools are reshaping academic English writing pedagogy, with attention to both dedicated generative systems such as ChatGPT and hybrid AWE platforms such as Grammarly that have progressively incorporated generative features. The review is organised around four themes that recur across the literature: the evolution of AI-mediated writing support; the reconfiguration of feedback and revision practices; implications for learners of English as a second or foreign language; and the challenges these tools pose for academic integrity and assessment design. The article closes with a discussion of pedagogical implications, a statement of the review's limitations, and directions for future empirical inquiry.

REVIEW OF LITERATURE

From Automated Writing Evaluation to Generative AI

Computer-assisted writing support in English language classrooms predates ChatGPT by several decades. Automated writing evaluation systems were initially developed for large-scale essay scoring and gradually migrated into classroom feedback tools, offering learners rule-based commentary on grammar, mechanics, and, in more advanced systems, discourse-level coherence (Li *et al.*, 2015) ^[7]. Grammarly

emerged within this tradition as a widely adopted browser- and application-based tool that flags grammatical errors, suggests lexical alternatives, and reports an overall clarity or correctness score. Empirical work on Grammarly's use in second language (L2) writing classrooms has generally found that it produces accurate, high-precision feedback on discrete error types while remaining less reliable for higher-order concerns such as argument structure or coherence (O'Neill & Russell, 2019; Ranalli, 2018) ^[9, 14]. Student engagement with this feedback, however, is uneven: case-study research shows that learners vary considerably in whether they treat AWE suggestions as prompts for reflection or as instructions to be mechanically accepted, a distinction with direct consequences for whether the tool supports genuine language development (Koltovskaia, 2020) ^[6].

Generative AI represents a discontinuity within this trajectory rather than a simple extension of it. Where AWE tools respond to text a learner has already produced, generative systems can originate text from minimal input, effectively performing the drafting stage of the writing process rather than merely commenting on it (Pedersen, 2023) ^[12]. This shift has prompted scholars to reconsider foundational models of writing as a cognitive process. Flower and Hayes's (1981) ^[3] classic account frames writing as an iterative interplay of planning, translating, and reviewing, undertaken by an individual writer operating under working-memory constraints; generative AI complicates this model by allowing a substantial share of the translating stage to be offloaded to a non-human agent, raising open questions about what is actually being learned when a text is produced this way (Liu *et al.*, 2024) ^[8].

Generative AI, Feedback, and the Revision Process

A substantial strand of recent research compares AI-generated feedback with feedback from peers or instructors. Banihashem *et al.* (2024) ^[1] conducted a study in which ChatGPT-generated feedback on argumentative essays was compared with peer feedback on the same texts, finding that the AI-generated feedback was more comprehensive in identifying structural and argumentative weaknesses, although questions remained about whether students engaged with this feedback as deeply as they did with peer commentary. This finding resonates with a broader pattern in the literature: generative AI feedback tends to be technically thorough and consistently available, but its pedagogical value depends heavily on how instructors scaffold students' use of it, since feedback that is simply accepted rather than critically evaluated does little to build learners' independent revision skills (Onal & Kulavuz-Onal, 2024) ^[10].

The instructional context in which generative AI is introduced appears to shape outcomes considerably. Raptopoulou (2025) ^[15] reported that when ChatGPT was integrated into a philosophy of education course through structured, goal-directed activities, students used it to generate initial structures and summarise complex material, developments that were described as supportive of academic literacy rather than a shortcut around it. Such findings imply that generative AI's pedagogical effect is not a fixed property of the tool itself but an outcome of the surrounding task design, echoing the broader argument in the AWE literature that automated feedback

functions best as a complement to, rather than a replacement for, human instruction (Ferris, 2010) ^[2].

Implications for English as a Second or Foreign Language Writers

For learners writing in English as an additional language, generative AI carries distinctive affordances and risks. Warschauer *et al.* (2023) ^[17] argue that AI-generated text can lower the linguistic barriers that often accompany academic writing tasks for multilingual students, offering vocabulary, sentence patterns, and organisational scaffolding that would otherwise require extensive teacher support. Their analysis also cautions, however, that heavy reliance on AI-generated language risks producing text that exceeds a learner's genuine proficiency, a mismatch that can mask developmental needs from both the learner and the instructor. Tseng and Warschauer (2023) ^[16] extend this argument by proposing that rather than prohibiting AI-writing tools, second language writing instruction should explicitly teach students how to interrogate, revise, and take ownership of AI-generated content, treating the technology as an object of critical literacy instruction in its own right.

This concern connects to a long-standing debate in second language writing research about the relationship between corrective feedback, whether human or automated, and durable language development (Ferris, 2010; Ortega, 2003) ^[2, 11]. Complexity measures used in this tradition, such as syntactic sophistication and sentence variety, provide one lens through which researchers might assess whether AI-assisted writing reflects a learner's underlying interlanguage or a borrowed proficiency that does not transfer to unsupported writing contexts (Ortega, 2003) ^[11]. This question remains largely unresolved in the empirical literature on generative AI specifically, representing an important gap that the present review returns to in its discussion of future research.

Academic Integrity, Authenticity, and Assessment

The literature is markedly more settled on the disruptive implications of generative AI for academic integrity. Kofinas *et al.* (2025) ^[5] examined whether authentic assessment formats, long considered comparatively resistant to misconduct because they require personalised, context-specific responses, could still safeguard integrity in a generative AI environment. Their findings across two United Kingdom higher education institutions indicated that authentic assessment design alone did not reliably prevent AI-generated submissions from passing as genuine student work, challenging a widely held assumption in assessment design literature. This finding has direct relevance for English writing pedagogy, where authentic, personalised writing tasks have traditionally been championed as an antidote to plagiarism.

A related concern documented across the literature is the declining reliability of detection as a control mechanism. Because generative AI produces fluent, low-error text that increasingly resembles human writing in surface features such as readability and sentence variety, instructors and even specialised detection software struggle to distinguish AI-generated from student-authored prose with confidence

(Pedersen, 2023) ^[12]. This difficulty is compounded by longer-term shifts in the readability and lexical density of published academic writing that predate generative AI but may make stylistic detection heuristics still less reliable going forward (Plavén-Sigra *et al.*, 2017) ^[13]. Collectively, this body of work suggests that policy responses relying primarily on detection and prohibition are unlikely to be sustainable, pointing instead towards assessment redesign and process-based evaluation as more durable responses.

OBJECTIVES OF THE STUDY

This review addresses the following objectives:

1. To examine how generative AI tools, in relation to established automated writing evaluation systems, are reshaping academic English writing pedagogy.
2. To analyse the implications of generative AI for feedback, revision, and the development of independent writing competence, with particular attention to English as a second or foreign language contexts.
3. To identify the principal challenges that generative AI poses for academic integrity and assessment design in English writing instruction.
4. To outline pedagogical and policy implications, together with directions for future empirical research in this area.

RESEARCH METHODOLOGY

This article is conceptual and review-based rather than empirical in design. No primary data were collected, and no human participants were involved. The review draws on a narrative synthesis of peer-reviewed journal articles published predominantly between 2015 and 2025, identified through targeted searches of academic databases and publisher platforms using combinations of the terms generative artificial intelligence, ChatGPT, Grammarly, automated writing evaluation, academic writing pedagogy, second language writing, and academic integrity. Sources were selected for inclusion on the basis of their relevance to English language writing pedagogy in higher education, their publication in peer-reviewed venues, and, wherever possible, the availability of a verifiable digital object identifier (DOI). The review does not claim to be a systematic or exhaustive survey of this rapidly expanding literature; rather, it aims to synthesise recurring themes and tensions in a manner useful for practitioners, curriculum designers, and researchers seeking an orientation to the field. As a conceptual review, the article does not report statistical findings but instead offers an interpretive synthesis, structured thematically, with explicit acknowledgement of the limitations this design entails.

DISCUSSION AND ANALYSIS

Reconfiguring the Writing Process

The literature reviewed above suggests that generative AI does not simply add another feedback channel to existing writing pedagogy; it intervenes in the writing process itself. Where AWE tools such as Grammarly operate largely at the review and editing stage, generative AI can participate in planning and drafting, stages that process-oriented pedagogy has traditionally treated as the locus of a learner's own meaning-making (Flower

& Hayes, 1981). This has two related consequences for classroom practice. First, instructors can no longer assume that a submitted draft reflects a learner's unaided planning and translating processes, which complicates formative assessment of those processes. Second, and more constructively, generative AI creates opportunities to make the normally invisible stages of writing more visible for instructional purposes: a student's prompts, AI-generated draft, and subsequent revisions can together form a process log that instructors can review and discuss, provided that disclosure of AI use is built into task design rather than treated as an afterthought.

Feedback Ecologies: Human, Peer, and Machine

A second theme concerns how generative AI is altering the ecology of feedback available to student writers. Evidence that AI-generated feedback can be more comprehensive than peer feedback on structural and argumentative dimensions (Banihashem *et al.*, 2024) ^[1] suggests a genuine pedagogical opportunity, particularly in large classes where sustained individual instructor feedback is difficult to provide. Yet comprehensiveness is not synonymous with pedagogical effectiveness. The AWE literature has repeatedly shown that the value of automated feedback depends on learner engagement with it rather than its mere availability (Koltovskaia, 2020; Ranalli, 2018) ^[6, 14], and there is no strong reason to expect generative AI feedback to be exempt from this pattern. A plausible synthesis emerging from the literature is that generative AI is best positioned as one voice within a broader feedback ecology that also includes peer review and instructor commentary, rather than as a stand-alone replacement for either.

Equity and Linguistic Diversity

The implications of generative AI are not uniform across the student population. For multilingual and English-as-an-additional-language writers, the capacity of generative AI to model academic register and reduce the cognitive load associated with translating ideas into a non-native language represents a genuine equity opportunity, potentially narrowing gaps between students with differing levels of prior exposure to academic English (Warschauer *et al.*, 2023) ^[17]. At the same time, the risk that AI-generated language may outstrip a learner's demonstrable proficiency raises a distinct equity concern: assessments that reward fluent AI-assisted output may inadvertently obscure genuine gaps in learners' independent English proficiency, with downstream consequences for how accurately institutions can certify graduates' language competence. Resolving this tension requires writing pedagogy to distinguish more clearly between assessment of a finished product and assessment of a learner's demonstrated process and self-editing capacity.

Institutional and Assessment Challenges

The evidence reviewed here on academic integrity carries significant implications for institutional policy. The finding that authentic assessment design does not, on its own, reliably resist generative AI misuse (Kofinas *et al.*, 2025) ^[5] suggests that many institutions' current first line of defence may be less

robust than assumed. Combined with the acknowledged unreliability of AI-text detection tools, this points towards a need for multi-layered responses: process-based assessment components such as annotated drafts, oral defences, or in-class writing; explicit disclosure requirements for AI assistance; and, perhaps most importantly, a shift in assessment criteria towards evaluating a student's critical engagement with, and revision of, AI-assisted output rather than the surface fluency of the final text alone. None of these measures is individually sufficient, but the literature suggests that combining them offers more resilience than reliance on any single mechanism.

FINDINGS

1. Generative AI tools differ qualitatively from earlier automated writing evaluation systems because they can originate text rather than merely evaluate it, which shifts their pedagogical impact from the editing stage of writing to the planning and drafting stages.
2. The pedagogical value of AI-generated feedback, whether from ChatGPT or Grammarly-type tools, depends heavily on how instructors structure student engagement with that feedback rather than on the sophistication of the feedback itself.
3. For English as a second or foreign language writers, generative AI offers meaningful support in reducing linguistic barriers to academic writing, but this benefit is accompanied by a risk of proficiency masking, where AI-assisted text does not accurately reflect a learner's independent competence.
4. Authentic and personalised assessment tasks, previously considered relatively resistant to misconduct, do not reliably prevent generative AI misuse, indicating that academic integrity strategies reliant on task design alone are insufficient.
5. AI-text detection tools remain unreliable as a primary safeguard, which strengthens the case for process-based and disclosure-based assessment approaches over detection-based enforcement.

SCOPE FOR FUTURE RESEARCH

Several avenues merit further empirical investigation. Longitudinal studies are needed to determine whether sustained use of generative AI tools in academic writing instruction supports or undermines the durable development of learners' independent English proficiency, extending the interlanguage complexity measures used in earlier second language writing research (Ortega, 2003) ^[11] to generative AI-assisted contexts specifically. Comparative studies across disciplinary and institutional contexts, including under-researched settings such as Indian higher education, would help clarify how local assessment cultures and resource constraints shape the pedagogical uses of these tools. Further work is also needed on the design and evaluation of explicit AI literacy curricula for writing classrooms, on equity implications for students with differing levels of prior digital access, and on the development of assessment rubrics that can reliably evaluate a student's critical engagement with AI-generated text rather than the fluency of the final product alone.

CONCLUSION

Generative AI tools have introduced a genuine discontinuity into academic English writing pedagogy, extending the long-established influence of automated writing evaluation systems such as Grammarly into the drafting and idea-generation stages of writing that instruction has traditionally treated as central to language development. The literature reviewed here indicates that these tools carry real pedagogical opportunities, particularly for multilingual and second language writers, but that these opportunities are not self-realising: they depend on deliberate task design, explicit instruction in critical engagement with AI-generated text, and a corresponding redesign of assessment practices that no longer rely primarily on authentic task design or automated detection to safeguard academic integrity. Rather than treating generative AI as either a threat to be excluded or a tool to be adopted uncritically, English language educators are better served by an approach that positions these systems as one component within a broader, deliberately structured feedback and instructional ecology. As the technology and its use in classrooms continue to evolve rapidly, sustained empirical attention to its effects on writing development, equity, and assessment validity will remain essential.

REFERENCES

- Banihashem SK, Kerman NT, Noroozi O, Moon J, Drachsler H. Feedback sources in essay writing: Peer-generated or AI-generated feedback? *International Journal of Educational Technology in Higher Education*. 2024;21(1):23. <https://doi.org/10.1186/s41239-024-00455-4>
- Ferris DR. Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*. 2010;32(2):181–201. <https://doi.org/10.1017/S0272263109990544>
- Flower L, Hayes JR. A cognitive process theory of writing. *College Composition and Communication*. 1981;32(4):365–387. <https://doi.org/10.2307/356600>
- Hyland K. Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*. 2007;16(3):148–164. <https://doi.org/10.1016/j.jslw.2007.07.005>
- Kofinas AK, Tsay CH, Pike D. The impact of generative AI on academic integrity of authentic assessments within a higher education context. *British Journal of Educational Technology*. 2025;56(6):2522–2549. <https://doi.org/10.1111/bjet.13585>
- Koltovskaia S. Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*. 2020; 44:100450. <https://doi.org/10.1016/j.asw.2020.100450>
- Li J, Link S, Hegelheimer V. Rethinking the role of automated writing evaluation (AWE) feedback in ESL writing instruction. *Journal of Second Language Writing*. 2015; 27:1–18. <https://doi.org/10.1016/j.jslw.2014.10.004>
- Liu M, Zhang LJ, Biebricher C. Investigating students' cognitive processes in generative AI-assisted digital multimodal composing and traditional writing. *Computers & Education*. 2024; 211:104977. <https://doi.org/10.1016/j.compedu.2023.104977>
- O'Neill R, Russell A. Stop! Grammar time: University students' perceptions of the automated feedback program Grammarly. *Australasian Journal of Educational Technology*. 2019;35(1):42–56. <https://doi.org/10.14742/ajet.3795>
- Onal S, Kulavuz-Onal D. A cross-disciplinary examination of the instructional uses of ChatGPT in higher education. *Journal of Educational Technology Systems*. 2024;52(3):301–324. <https://doi.org/10.1177/00472395231196532>
- Ortega L. Syntactic complexity measures and their relationship to L2 proficiency: A research synthesis of college-level L2 writing. *Applied Linguistics*. 2003;24(4):492–518. <https://doi.org/10.1093/applin/24.4.492>
- Pedersen I. The rise of generative AI and enculturating AI writing in postsecondary education. *Frontiers in Artificial Intelligence*. 2023; 6:1259407. <https://doi.org/10.3389/frai.2023.1259407>
- Plavén-Sigra P, Matheson GJ, Schiffler BC, Thompson WH. The readability of scientific texts is decreasing over time. *eLife*. 2017;6:e27725. <https://doi.org/10.7554/eLife.27725>
- Ranalli J. Automated written corrective feedback: How well can students make use of it? *Computer Assisted Language Learning*. 2018;31(7):653–674. <https://doi.org/10.1080/09588221.2018.1428994>
- Raptopoulou A. ChatGPT in higher education: Supporting academic literacy through ChatGPT-based activities. *European Journal of Education*. 2025;60(3):e70131. <https://doi.org/10.1111/ejed.70131>
- Tseng W, Warschauer M. AI-writing tools in education: If you can't beat them, join them. *Journal of China Computer-Assisted Language Learning*. 2023;3(2):258–262. <https://doi.org/10.1515/jccall-2023-0008>
- Warschauer M, Tseng W, Yim S, Webster T, Jacob S, Du Q, *et al.* The affordances and contradictions of AI-generated text for writers of English as a second or foreign language. *Journal of Second Language Writing*. 2023; 62:101071. <https://doi.org/10.1016/j.jslw.2023.101071>

Creative Commons (CC) License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution–Non-Commercial–No Derivatives 4.0 International (CC BY-NC-ND 4.0) license. This license permits sharing and redistribution of the article in any medium or format for non-commercial purposes only, provided that appropriate credit is given to the original author(s) and source. No modifications, adaptations, or derivative works are permitted under this license.