



Research On Academic Writing Interventions for University Students: A Systematic Review

Muh. Al Fachrizah Fitra^{1*}, Sultan Baa², Andi Hudriati³, Ulvah Sari⁴

^{1*}Pendidikan Bahasa Inggris Program Doktoral, Fakultas Bahasa dan Sastra, Universitas Negeri Makassar, Makassar, Indonesia

²Pendidikan Bahasa Inggris, Fakultas Bahasa dan Sastra, Universitas Negeri Makassar, Makassar, Indonesia

³Sastra Inggris, Fakultas Sastra, Ilmu Komunikasi dan Pendidikan, Universitas Muslim Indonesia, Makassar, Indonesia

⁴Kebidanan dan Keperawatan, Fakultas Kesehatan, Universitas Kurnia Jaya Persada, Palopo, Indonesia
Email: ^{1*}muhalfachrizahfitra@gmail.com, ²sultan7304@unm.ac.id, ³andi.hudriati@umi.ac.id, ⁴ulvah.sari23@gmail.com

Abstract

Academic writing remains a central yet challenging competence for university students, especially in EFL and ESL contexts where linguistic, rhetorical, and disciplinary demands often intersect. This study reports a systematic literature review of academic writing interventions in higher education, with the objectives of identifying major intervention types, synthesizing their reported benefits and challenges, and examining the contextual conditions that influence their effectiveness. Guided by the PRISMA framework, the review analyzed 25 peer-reviewed studies published between 2017 and 2024 using thematic analysis. The synthesis reveals that genre-based instruction is the most prevalent and consistently effective intervention, particularly in enhancing rhetorical organization, coherence, and control of academic conventions. Other productive approaches include technology-mediated writing support, self-regulated learning, self-assessment, model-text use, and contextual or intercultural pedagogies, all of which contribute to linguistic improvement, metacognitive development, learner autonomy, and greater motivation. At the same time, intervention effectiveness is constrained by variations in teacher preparedness, institutional support, student readiness, and technological infrastructure. These findings suggest that no single intervention is universally effective; rather, successful academic writing instruction depends on context-responsive, integrative pedagogies. This review contributes to the field by providing a consolidated understanding of how instructional, institutional, and learner-related factors interact in shaping academic writing development in higher education.

Keywords: Academic Writing, Writing Interventions, Writing Pedagogy, University Students, Systematic Literature Review.

INTRODUCTION

Academic writing is a crucial competence in higher education because it shapes how students engage with disciplinary knowledge, communicate ideas, and demonstrate intellectual achievement (Wilson, 2022; J. Zhang et al., 2024). However, its importance extends beyond the technical ability to produce grammatically correct and well-organized texts (Chen et al., 2024; Fitra et al., 2022; Raimes, 1983). In contemporary higher education, academic writing also functions as a means of entering knowledge-producing communities and participating in wider scholarly conversations (Fitra et al., 2024; Nurkamto et al., 2024). For university students, particularly those in EFL and ESL contexts, writing is therefore not merely an instructional requirement but also a form of social participation through which they negotiate academic identity, legitimacy, and access to the global circulation of knowledge (Amelya et al., 2022; Wischgoll, 2017). This issue becomes even more significant in many developing or Global South contexts, where unequal access to linguistic resources, academic conventions, and institutional support may limit students' opportunities to participate fully in academic discourse.

In practical terms, academic writing remains one of the most demanding areas of university learning. Across disciplines, students are expected to express ideas clearly, systematically, and argumentatively in coursework, research papers, and theses (Masrul & Erliana, 2024; Nurkamto et al., 2024). Yet many students, especially in EFL and ESL settings, continue to struggle with the linguistic, rhetorical, and disciplinary demands of academic writing (Hoa, 2022; Kennedy, 2015). These difficulties include limited control of academic text structures, weak critical engagement with sources, and insufficient use of rhetorical and metadiscursive strategies (Song et al., 2024). As Hyland (2014) argues, academic writing is not a single act but a staged and complex process that requires planning, drafting, revising, and awareness of audience expectations. In this sense, writing is better understood not simply as text production, but as a thinking process through which writers construct meaning in relation to readers and disciplinary norms (Fatmawati et al., 2025; Hyland & Hyland, 2019).

In response to these challenges, a range of interventions has been developed to support students' academic writing development. These include genre-based approaches (Ariyanfar & Mitchell, 2020; Setlight et al., 2023; Zhai & Razali, 2023), digital and technology-mediated tools (Astuti et al., 2023; Kassim et al., 2024; Mahapatra, 2024), self-regulated learning strategies (Eswaey & Ihmoumah, 2024; Nadhifah et al., 2023; Ngoc, 2023), the use of model texts (Castillo-Martínez & Ramírez-Montoya, 2021; Haerazi & Irawan, 2020; Wei, 2024), and structured feedback (Moybeka et al., 2023; Sulistyo & Heriyawati, 2017; Wischgoll, 2017). Although these interventions have shown promise, their effectiveness varies across educational settings, teaching practices, and learner characteristics (D. Zhang et al., 2023). This variation suggests that academic writing interventions should not be viewed only in terms of technical skill improvement, but also in relation to the broader social, institutional, and cultural conditions that shape students' access to academic participation.

Against this background, a systematic mapping of recent research is needed to clarify what kinds of interventions have been used, what benefits and challenges they generate, and under what contextual conditions they are most effective. This study presents a systematic literature review of 25 empirical articles published between 2017 and 2024. It aims to identify the major types of academic writing interventions, examine their reported benefits and limitations, and analyze the contextual factors influencing their implementation. By doing so, this review offers not only a pedagogical synthesis of academic writing support in higher education, but also a broader understanding of how intervention practices may enable or constrain students' participation in academic knowledge-making, particularly in EFL and ESL contexts.

METHODS

This review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Moher et al., 2009; Page et al., 2021). A total of 253 records were initially identified through database searches (Google Scholar, ERIC, Scopus, and WoS) and manual tracking. After removing duplicates and screening titles and abstracts, 65 full-text articles were assessed for eligibility. A final set of 25 empirical studies met the inclusion criteria, which focused on university students, included an academic writing intervention, and were published in peer-reviewed sources between 2017 and 2024. Data were extracted and analyzed thematically.

Study inclusion and exclusion criteria were based on keyword query, document type, research field, and research questions. To ensure the rigor and relevance of the review, a set of inclusion and exclusion criteria was established prior to the screening process (Eswaey & Ihmoumah, 2024; Kassim et al., 2024; D. Zhang et al., 2023). These criteria guided the selection of studies by defining which articles were eligible for review based on their focus, methodology, population, language, and accessibility. The specific inclusion and exclusion criteria applied in this study are outlined in Table 1 below:

Table 1. Inclusion and Exclusion Criteria

Inclusion	Exclusion
The primary focus was on interventions aimed at improving academic writing skills.	Did not involve a specific writing intervention (e.g., exploratory, descriptive, or opinion-based papers).
The participants were university students (undergraduate or postgraduate).	Participants were not university-level students (e.g., high school or primary school).
The study was empirical in nature.	The main focus was not on academic writing.
The article was published between 2017 and 2024.	The study was a theoretical paper or literature review, not original empirical research.
The article was written in English.	The article was not written in English.
The full-text of the article was available	The full-text of the article was not available.
The article was published in a peer-reviewed academic journal.	The article was a duplicate publication.

This research was guided by the PRISMA 2020 Framework (source), a preferred reporting standard for Systematic Reviews and Meta-analyses (Moher et al., 2009; Page et al., 2021). PRISMA offers a methodological framework for conducting research that ranges from selecting pertinent studies, to processing data, to assessing content (Kassim et al., 2024; J. Zhang et al., 2024). In addition to the PRISMA screening procedure, the methodological quality of the 25 selected studies was appraised using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist. Because the included studies represented different research designs, the JBI checklist appropriate to each study design was applied. The appraisal examined key methodological dimensions, including the clarity of research objectives, the appropriateness of the study design, the adequacy of data collection procedures, the rigor of data analysis, and the coherence between findings and conclusions. Each study was assessed using the standard JBI response categories: Yes, No, Unclear, and Not Applicable. The results of this quality assessment were used to evaluate the trustworthiness of the included evidence and to strengthen the validity of the synthesis. All studies retained in the final review demonstrated sufficient methodological quality to support inclusion in the analysis.

Figure 1 presents the four stages of the review process: identification, screening, eligibility, and inclusion. In the identification stage, 253 records were retrieved from Google Scholar (n=90), ERIC (n=50), Scopus (n=55), Web of Science (n=40), and manual search/reference tracking (n=18). Subsequently, 43 duplicate records were removed, leaving 210 articles for title and abstract screening. This stage resulted in 65 full-text articles for eligibility assessment. Following full-text review, 40 articles were excluded because they did not meet the inclusion criteria, leaving 25 studies for the final analysis.

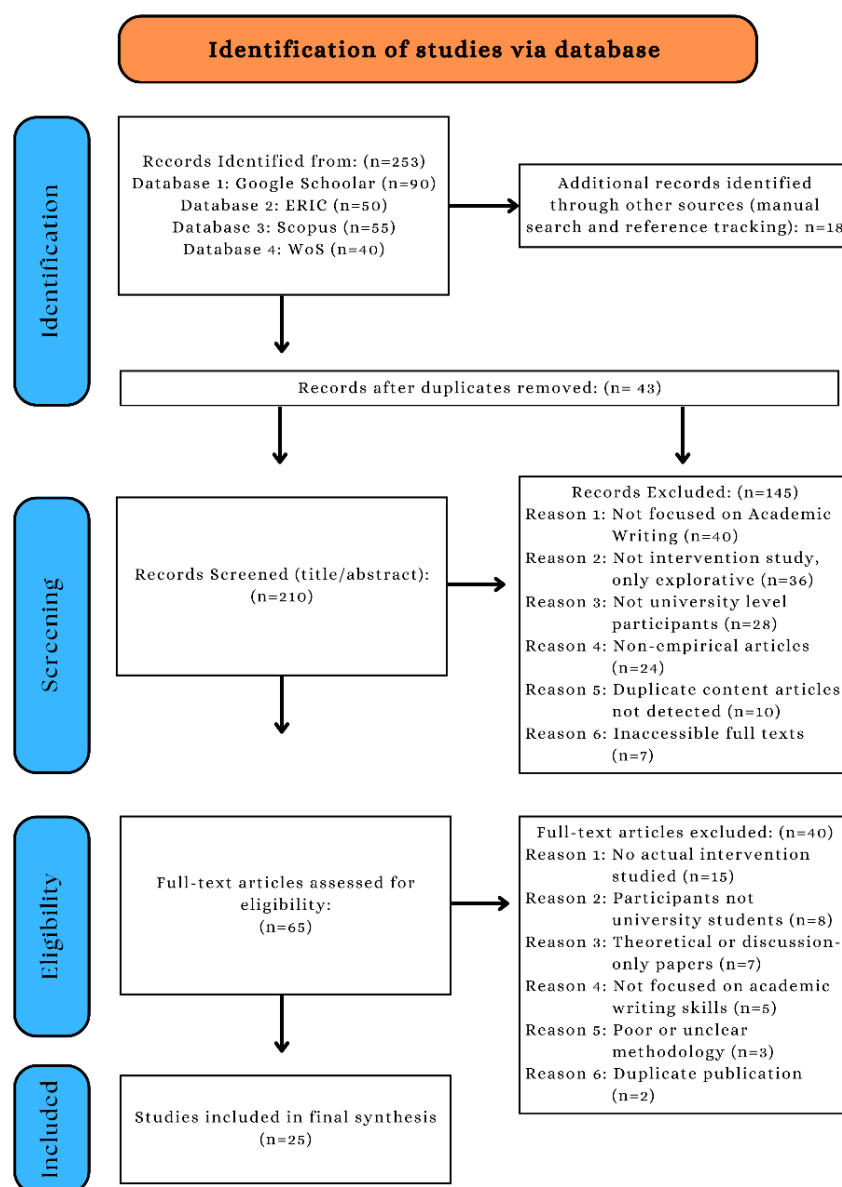


Figure 1. PRISMA Flow Diagram

The search process focused on journal articles published between 2017 and 2024 to ensure the relevance and currency of the reviewed evidence. The main search terms combined keywords such as “academic writing,” “intervention,” “university students,” “EFL/ESL,” and “writing instruction.” Boolean operators such as AND, OR, and quotation marks were used to refine the search strategy and improve retrieval accuracy. Where possible, filters for peer-reviewed, open-access, and full-text availability were also applied. After the search process, all retrieved articles were recorded in a spreadsheet to manage bibliographic information systematically, including title, author, year of publication, journal, and DOI. This process also supported duplication tracking and facilitated subsequent screening and analysis.

FINDINGS AND DISCUSSIONS

Findings

Thematic analysis of these studies revealed several recurring intervention strategies, the interventions of benefits and challenges, as well as contextual factors influencing their implementation. Based on the focus of this research problem, data from the studies analyzed in this research are shown in Table 2 below to make it easier to classify the focus of this research.

Table 2. Literature Matrix of Relevant Studies

Authors	Countries	Desgin	Objectives	Interventions
[1] Zhang et al. (2023)	Malaysia	Systematic Review (42 Studies)	Reviewing the types and effectiveness of interventions to improve students' writing skills.	Scaffolding, feedback, cooperative learning, and digital tools.
[2] Nurkamto et al. (2024)	Indonesia	Systematic Review	Identifying factors influencing academic writing anxiety.	Not a specific intervention, but includes anxiety reduction approaches.
[3] Astuti et al. (2023)	Indonesia	Systematic Review	Reviewing the advantages, disadvantages, and challenges of using Grammarly in academic writing.	Grammarly as a writing aid.
[4] Ugun & Aziz (2020)	Malaysia	Systematic Review	Reviewing approaches in teaching writing.	Process, Genre, and Task-Based Writing.
[5] Mahapatra (2024)	India	Intervention Study with Mixed-Methods	Identifying the impact of ChatGPT on students' academic writing.	Using ChatGPT as a feedback tool in writing.
[6] Eswaey & Ihmoumah (2024)	Libya	Systematic Review	Examining the role of self-assessment on students' writing ability.	Self-assessment in the writing process.
[7] Wischgoll (2017)	Germany	Experimental Research	Measuring the effectiveness of Cognitive Strategies and Feedback to improve students' writing ability.	Cognitive writing strategies and feedback.
[8] Kitajroonchai et al. (2022)	Thailand	Quasi-Experimental Research	Comparing the effectiveness of genre process and pure process approaches on EFL students' writing ability.	Process-based and Genre-based Writing.
[9] Erden (2022)	Turkey	Qualitative Research (Text analysis + Observation)	Examining the impact of using model texts in writing instruction.	Use of model text in instruction.
[10] Rad et al. (2021)	Iran	Experimental Research	Exploring the effects of discussion-based flipped classroom and teacher-student role reversal.	Flipped classroom with discussion and role reversal.

[11] Ariyanfar & Mitchell (2020)	Iran	Quasi-Experimental Research	Applying genre approach in teaching writing in Iran.	Genre-based writing approach.
[12] Sulistyو & Heriyawati (2017)	Indonesia	Quasi-Experimental Research	Examining the effect of text reformulation and modeling on academic writing.	Reformulation and text modeling.
[13] Apriani et al. (2022)	Indonesia	Mixed-Methods	Examining the role of ICT in improving higher order thinking skills in writing.	Use of ICT (Information Communication and Technology) in teaching writing.
[14] Haerzai & Irawan (2020)	Indonesia	RnD	Developing a cross-cultural writing learning model.	Intercultural Language Learning (ILL).
[15] Moybeka et al. (2023)	Indonesia	Classroom Action Research	Improving writing ability through a contextual approach.	Contextual Teaching and Learning (CTL).
[16] Dan et al. (2024)	Malaysia	Systematic Literature Review	Reviewing the use of lexical bundles in students' academic writing.	Focus on the use of repetitive phrases (lexical bundles).
[17] Zhai & Razali (2023)	Malaysia	Systematic Literature Review	Developing a genre approach in teaching writing based on three methods.	Genre-based Approach.
[18] Martinez & Montoya (2021)	Mexico	Systematic Literature Review	Reviewing research competencies that support academic literacy.	Research and Literacy Reinforcement.
[19] Kassim et al. (2024)	Malaysia	Systematic Literature Review	Reviewing the application of online tools to support writing classes.	Technology or web-based tools.
[20] Nadhifah et al. (2023)	Indonesia	Systematic Literature Review	Reviewing EFL students' learning strategies in academic writing.	Self-regulated strategies.
[21] Zhang et al. (2024)	China	Systematic Literature Review	Examining the use of stance markers in EFL students' writing.	Discourse Analysis – Stance markers.
[22] Wei (2024)	China	Mixed-Methods	Assessing the effects of dictionary format on academic writing outcomes.	Dictionaries (electronic vs print).
[23] Ngoc (2023)	Vietnam	Qualitative Research	Examining self-directed learning strategies in an online writing course.	SRL (Self-Regulated Learning) strategies and online learning.
[24] Song et al. (2024)	Malaysia	Systematic Literature Review	Reviewing the use of metadiscourse in different disciplines.	Metadiscourse (text structure).
[25] Setlight et al. (2023)	Indonesia	Experimental Research	Offering PBL as an alternative to teaching writing.	Problem-based Learning (PBL).

Interventions Categories

The studies reviewed in this systematic literature review implemented a range of interventions designed to improve academic writing skills among university students, particularly in EFL and ESL contexts. Here is a classification of 25 articles based on the type of intervention used in teaching academic writing to college students. The researchers grouped them into several main categories (Table 3).

Table 3. Interventions Categories

Types of Intervention	n	Authors	Main Results
Genre-Based Instruction (24%)	6	[1]	The most effective feedback and technology-based interventions.
		[4]	The genre approach is the most effective in forming the structure of academic writing.
		[8]	Both approaches improved writing performance, genre-based was superior in organization and structure.
		[11]	Significant improvement in writing structure and organization.
		[12]	Reformulation has been shown to improve the quality of students' texts.
		[17]	Provides a global discovery-based model.
Technology-Based Tools (20%)	5	[3]	Grammarly helps with grammar and structure, but does not improve writing logic.
		[5]	Significant improvement in academic writing skills and positive perceptions towards the use of ChatGPT.
		[13]	ICT increases HOTs and the elaboration of ideas in writing.
		[19]	Online tools support interaction, collaboration, and real-time feedback.
		[22]	Electronic dictionaries improve lexical accuracy.
Self-Regulated Learning and Self-Assessment (20%)	5	[6]	Self-assessment can improve metacognitive awareness and writing quality.
		[18]	Research competency helps to write more critically and structured.
		[20]	Students use metacognitive and affective strategies.
		[23]	Technical challenges are overcome with motivational strategies and time management.
		[25]	PBL improves independence and argument quality.
Model Texts (8%)	2	[7]	Improve text quality and self-monitoring skills in writing.
		[9]	Use of model texts helped understanding academic structures and increased clarity of the ideas.
Contextual and Intercultural Approaches (8%)	2	[14]	Increase cross-cultural awareness and ability to develop arguments.
		[15]	CTL makes students more active, writing results are more relevant to the context.
Innovative Pedagogical Strategies (20%)	5	[2]	High anxiety is caused by lack of knowledge of academic styles and fear of being wrong.
		[10]	
		[16]	Increased participation and writing quality, students were more independent in writing.
		[21]	
		[24]	Use of lexical bundles varies by discipline and level.
			Stance use is influenced by L1/L2 and writing genre.
			Major differences across disciplines in writing style and cohesion.

Among the identified interventions, the genre-based approach emerged as the most frequently implemented strategy. Six studies (e.g., Kitajroonchai et al., 2022; Ariyanfar & Mitchell, 2020; Zhai & Razali, 2023) applied this approach to help students internalize the rhetorical structures of academic genres. The use of model texts and text reformulation also featured prominently in four studies, indicating its role in scaffolding learners' understanding of academic conventions (e.g., Erden, 2022; Sulistiyo & Heriyawati, 2017). Technology-enhanced interventions constituted another major theme, with five studies exploring web-based tools, flipped classrooms, or digital dictionaries as writing aids (e.g., Rad et al., 2021; Kasim et al., 2024; Wei, 2024). These studies underscore the increasing integration of digital solutions to support writing development. Additionally, interventions focusing on self-regulated learning (SRL), intercultural/contextual teaching, and problem-based learning (PBL) were also identified.

Interventions Benefits and Challenges

This systematic research revealed the wide range of benefits resulting from the academic writing interventions implemented across the 25 selected studies. These benefits can be categorized into four major domains and explained in Table 4 below.

Table 4. Interventions Benefits

Outcomes	Benefits
Linguistics and Structural Improvement	Based on the review, most of studies reported that interventions significantly enhanced students' control over academic language, grammar accuracy, vocabulary use, and genre-specific structure. For example, 1) genre-based instruction helped students organize their ideas according to academic conventions. In this case, such as a thesis statement, cohesion devices, paragraph structure, and 2) feedback-based interventions contributed to reductions in sentence-level errors and improved revision quality. In this case, such as peer review, teacher commentary, and automated tools like Grammarly.
Cognitive and Writing Development	Based on the review, most of studies reported that many interventions fostered students' metacognitive awareness and strategic approach to writing. Students learned to plan, monitor, and revise their text more systematically, as seen in process-oriented and SRL-based interventions. Moreover, understand writing as a process that involves stages of reflection and refinement.
Learner Autonomy and Self-Regulation	Based on the review, several interventions, especially those involving self-assessment or SRL strategies, enhanced students' ability to take ownership of their writing development. This includes setting personal goals, evaluating their own work critically, and making independent revisions without relying solely on teacher feedback.
Affective Benefits	Based on the review, students who participated in interventions reported increased confidence in academic writing, higher motivation, and more positive attitudes toward writing tasks. In this case, collaborative writing and peer feedback fostered a sense of shared learning and reduced writing anxiety, as well as technology-assisted tools provided timely support that made students feel more capable and less overwhelmed.

The various studies reviewed indicate that while academic writing interventions provide significant benefits, their implementation is not without challenges and limitations. These challenges include instructional constraints, learner-related barriers, technological limitations, and contextual and institutional issues (Figure 2).

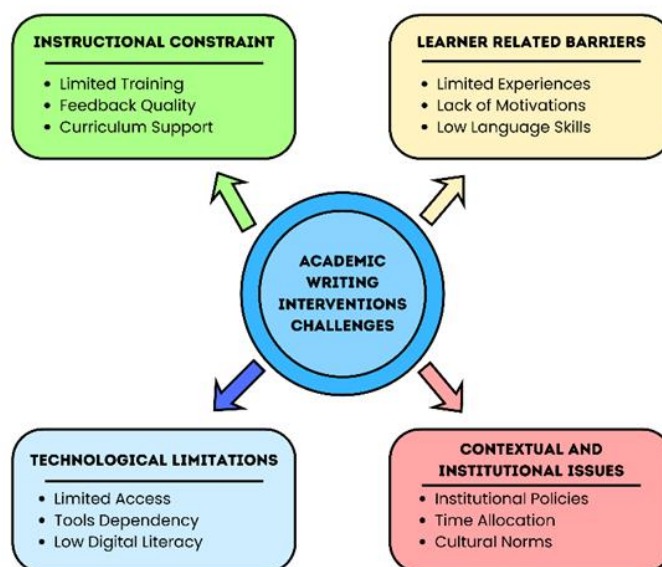


Figure 2. Academic Writing Interventions Challenges

It starts from an instructional constraint, lecturers often struggle to effectively design and implement scaffolded instruction due to limited training and understanding of specific approaches, such as genre-based teaching or metacognitive strategies. Furthermore, time constraints, particularly in large classes, make it difficult to provide high-quality, individualized feedback, while the integration of new approaches or technologies is often hampered by a lack of institutional support and inconsistencies with the existing curriculum. Meanwhile, the learner-related barriers, challenges arise in the form of a lack of prior experience with academic writing genres, low motivation and passivity toward revision and self-regulation, particularly in teacher-oriented learning environments, and limited English language skills that hinder engagement in higher-level writing assignments. In technology-based interventions, issues include unequal access to devices and internet networks, over-reliance on automated tools like Grammarly that tend to encourage superficial corrections without in-depth understanding, and students' low digital literacy in utilizing technology as a learning tool. Furthermore, contextual and institutional factors also influence the effectiveness of interventions, such as institutional policies that do not support innovative practices, an imbalance between academic writing demands and learning time allocation, and certain cultural norms that discourage peer feedback and self-assessment, thus limiting the success of implemented strategies.

Contextual Factors

The effectiveness of academic writing interventions in the reviewed studies was not solely determined by instructional design or tools used, but also shaped by a variety of contextual factors. These factors played a crucial role in either supporting or constraining the success of implementation. The main contextual influences are identified as shown in Table 4 below.

Table 4. Contextual Factors

Contextual Factors	Issues
Sociocultural and Educational Context	1) In EFL contexts (for example, Indonesia, Iran, and Vietnam), academic writing is often taught in large classes with a teacher-centered approach. This created difficulties in promoting student autonomy, critical thinking, and revision-based writing habits.
	2) Cultural attitudes toward feedback also influenced the intervention impact. In some settings, students were hesitant to give or receive peer feedback due to fear of offending others or being judged.
Institutional Support	1) The degree of institutional backing for innovation (for example, availability of writing centers, support for technology integration, training for instructors) significantly affected the sustainability of interventions.
	2) Institutions that encouraged curriculum flexibility and professional development allowed instructors to apply genre-based or self-regulated learning models more effectively.
Instructor Expertise and Beliefs	1) Some instructors lacked prior experience or training in specific approaches (for example, genre pedagogy, scaffolding techniques), which led to superficial or inconsistent implementation.
	2) Teacher beliefs about writing (for example, focus on product vs. process) also influenced how interventions were delivered and received.
Students Preparedness and Prior Exposure	1) Students' background knowledge, language proficiency, and familiarity with academic conventions varied widely across contexts.
	2) In some studies, students with limited academic literacy struggled more, especially when interventions assumed prior knowledge of academic genres or writing strategies.
Technological Infrastructure	1) Reliable access to technology was a determining factor in the success of digital and hybrid interventions.
	2) In under-resourced universities, limited bandwidth, outdated devices, or lack of training hindered the effective use of tools like Grammarly, Padlet, or Google Docs.

The majority of studies were conducted in Asian EFL contexts, such as Indonesia, Iran, Vietnam, and China, with a focus on undergraduate learners. These settings often involved traditional classrooms transitioning to more interactive or digital modes of instruction. This trend reflects a broader shift in academic writing pedagogy towards learner-centered and technology-integrated models. The contextual reality of each educational setting, shaped by institutional culture, resource availability, and pedagogical traditions, plays a central role in the impact of academic writing interventions.

Taken together, these findings do not merely show which interventions are commonly used, but also reveal the pedagogical and contextual tensions that shape their actual effectiveness in higher education

Discussions

The findings of this systematic literature review suggest that academic writing interventions in EFL and ESL higher education cannot be understood merely in terms of which technique appears most frequently or which tool produces immediate gains. Rather, their effectiveness depends on how instructional strategies interact with learner readiness, teacher expertise, and the wider institutional and sociocultural environment. In this sense, the reviewed studies collectively indicate that academic writing development is not a purely technical matter of improving grammar, structure, or vocabulary. Support from findings by Kitajroonchai et al. (2022) stated that it is a situated pedagogical process in which students learn to enter academic discourse through forms of instruction that are either enabling or constraining, depending on context. This broader reading is important because it shifts the discussion from isolated intervention types to the conditions under which those interventions become meaningful and sustainable.

A first major pattern concerns the continued dominance of genre-based instruction. Its strong presence across the reviewed studies suggests that explicit teaching of rhetorical organization, discourse structure, and academic conventions remains central in EFL and ESL writing pedagogy. This is unsurprising, since many students struggle not only with language accuracy but also with understanding how arguments are conventionally organized in academic communities, as mentioned by Swales & Feak (2012) in their book. Genre-based instruction, therefore, appears effective because it makes implicit expectations visible. However, the value of this approach lies not simply in helping students reproduce textual forms, but in socializing them into the communicative norms of academic writing. Put differently, genre pedagogy is most productive when it moves beyond formulaic imitation and supports students in understanding why academic texts are structured in particular ways and how such structures position them as legitimate academic writers.

The Digital Gap: Promise, Dependency, and Unequal Readiness

The review also shows that technology-based interventions have become a major component of academic writing instruction. Tools such as Grammarly, ChatGPT, electronic dictionaries, and online collaborative platforms were associated with improvements in linguistic accuracy, idea elaboration, interaction, and learner engagement. At one level, this confirms that digital support can reduce some of the immediate barriers students face when writing in an additional language (Elnaffar et al., 2025). Yet the findings also reveal a more complex paradox: the same tools that support writing development may, if used uncritically, weaken the very intellectual processes that academic writing is meant to cultivate.

This paradox is especially visible in AI-assisted and automated feedback tools. Grammarly may help students notice surface-level grammatical and structural problems, while ChatGPT may accelerate drafting, feedback, and idea generation. However, when these tools are treated as substitutes rather than supports, students may become less engaged in the demanding work of evaluating evidence, refining claims, and developing an original argument (Yang et al., 2025). In such cases, technological efficiency can come at the cost of intellectual independence. The issue, therefore, is not whether technology helps, but what kind of help it provides and under what pedagogical conditions. The reviewed studies imply that digital tools are most beneficial when embedded within explicit instruction, guided reflection, and teacher mediation. Without such scaffolding, students may improve the polish of their texts without deepening their rhetorical awareness or critical thinking.

A further issue is the existence of a digital gap across institutions and learner populations. The findings indicate that the success of technology-based interventions is uneven because access to devices, stable internet connection, and digital literacy is not equally distributed. This means that technology in academic writing is not simply a pedagogical resource; it is also a question of educational equity. In under-resourced settings, digital interventions may reproduce rather than reduce inequality, especially when students are expected to use tools they cannot access consistently or critically (Srivastava & Agarwal, 2024). For that reason, the review supports a more cautious conclusion: technology should be understood as a conditional enabler of academic writing development, not as a universally transferable solution. Its value depends on institutional infrastructure, teacher preparedness, and students' ability to use digital assistance without surrendering authorship and critical agency.

Sociocultural Barriers in Peer Feedback and Revision Practices

Another important theme emerging from the review concerns the sociocultural barriers that shape feedback practices, especially in Asian EFL contexts. Several studies suggest that collaborative writing, peer review, and contextual approaches can reduce anxiety and promote engagement (Haidar et al., 2025). However, these benefits cannot be assumed to operate uniformly across contexts. In settings where classroom relationships are strongly influenced by respect, hierarchy, and the avoidance of open

disagreement, peer feedback may become socially delicate rather than pedagogically liberating. Students may hesitate to critique others' writing directly for fear of causing embarrassment, appearing impolite, or disrupting interpersonal harmony (Oskarita & Arasy, 2024). As a result, peer feedback may remain superficial, overly cautious, or focused on minor language issues rather than substantive weaknesses in argument, organization, or evidence use.

This pattern is significant because it shows that the effectiveness of peer feedback is not determined only by the activity itself, but by the cultural norms through which the activity is interpreted. In many Asian educational contexts, students are often socialized into teacher-centered models of learning, where authority is concentrated in the instructor and criticism is not commonly exchanged among peers. Under these conditions, asking students to engage in critical peer review without sufficient preparation may generate compliance rather than genuine dialogue. What appears in pedagogical theory as collaborative autonomy may, in practice, be constrained by sociocultural expectations of politeness and non-confrontation.

The implication is not that peer feedback is unsuitable in these contexts, but that it requires careful adaptation. The review suggests that peer-feedback practices need stronger scaffolding, clearer criteria, and explicit socialization into constructive critique. Students may need to be taught not only how to comment on a text, but also how to frame criticism as an academic responsibility rather than a personal attack. In this sense, sociocultural barriers should not be read as deficits in learners, but as contextual realities that shape how revision, critique, and academic dialogue are enacted. Effective writing pedagogy must therefore address both rhetorical competence and interactional norms if peer-based interventions are to move beyond ritual participation and contribute meaningfully to writing development.

Toward an Integrative and Context-Responsive Model

Taken together, these findings indicate that no single intervention can be considered universally effective. Genre-based teaching, technology-mediated support, self-regulated learning, and peer or contextual approaches each offer distinct benefits, but their success depends on how they are combined and adapted to local conditions. The strongest pattern across the review is therefore not the superiority of one intervention over another, but the need for integrative pedagogy. Academic writing develops most effectively when explicit instruction, reflective practice, technological support, and contextual sensitivity work together rather than in isolation (Bailey, 2015).

This synthesis also strengthens the broader argument of the review: academic writing interventions are most effective when they are understood as socially situated pedagogical practices. They do not simply improve textual products; they shape how students learn to think, respond, revise, and position themselves within academic discourse. For that reason, future writing instruction in higher education should not focus narrowly on technical improvement alone. It should also consider digital inequality, feedback culture, institutional support, and learner agency as central dimensions of academic writing development.

CONCLUSION

This systematic literature review demonstrates that the value of academic writing interventions in higher education lies not simply in improving students' textual accuracy, but in shaping how they participate in academic discourse. The main contribution of this review is to show that academic writing development in EFL and ESL contexts is best understood as a socially situated process in which rhetorical instruction, learner agency, technological mediation, and institutional conditions interact. While genre-based instruction emerged as the most consistently influential approach, the broader pattern across the reviewed studies suggests that no intervention is inherently effective in all settings. Rather, the success of writing support depends on whether pedagogical strategies are integrated, context-responsive, and capable of addressing both the cognitive and social dimensions of academic writing.

This review also highlights an important implication for practice and policy. Writing pedagogy in higher education should move beyond narrowly technical correction and toward models that combine explicit genre instruction, reflective learning, carefully mediated use of digital tools, and culturally sensitive feedback practices. For educators and institutions, this means strengthening teacher preparation, ensuring more equitable technological access, and designing learning environments in which peer interaction and revision can function meaningfully rather than superficially. These implications are relevant not only for Indonesian and other Global South higher education contexts, where academic writing is closely tied to questions of access and participation, but also for international audiences concerned with academic literacy, educational equity, and the responsible integration of AI and digital resources in writing instruction. In this sense, the review offers both a pedagogical synthesis and a broader argument: improving academic writing requires not a single best method, but a more inclusive and context-aware ecology of support.

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