

Mapping a Decade of EFL Writing Instruction Research: A Bibliometric and Systematic Review of Pedagogical Trends, Challenges, and Emerging Directions

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Abstract: Research on English as a Foreign Language (EFL) writing instruction has expanded substantially over the last decade, reflecting growing interest in pedagogical innovation, learner-centered instruction, feedback practices, and technology-mediated writing. However, the field remains fragmented, as existing studies often examine isolated instructional strategies, learner populations, or digital interventions without offering an integrated view of its intellectual structure and pedagogical development. This study maps and synthesizes Scopus-indexed research on EFL writing instruction published between 2015 and 2024 through an integrated bibliometric analysis and systematic literature review. A total of 1,030 journal articles were analyzed bibliometrically using Biblioshiny and VOSviewer to examine publication trends, influential authors, source journals, contributing countries, citation patterns, and keyword co-occurrence networks. Following PRISMA 2020 guidelines, 82 empirical studies were further selected for qualitative synthesis. The findings reveal a steady increase in EFL writing instruction research, with accelerated growth between 2021 and 2024. Genre-based, process-oriented, and strategy-based instruction emerged as dominant pedagogical approaches, while sociocultural, cognitive, sociocognitive, and self-regulated learning frameworks commonly informed the field. Persistent challenges include learners' limited linguistic and rhetorical resources, writing anxiety, low confidence, instructional constraints, and feedback-related difficulties. At the same time, technology-enhanced and AI-assisted writing tools offer opportunities for feedback, collaboration, learner autonomy, and instructional innovation. This review contributes an integrated understanding of EFL writing instruction research by connecting bibliometric patterns with pedagogical and theoretical insights, while highlighting future directions for longitudinal, teacher-focused, contextually diverse, and ethically informed studies on digital and AI-supported writing pedagogy.

Keywords: EFL writing instruction, bibliometric analysis, systematic literature review, writing pedagogy, AI-assisted writing.

1. Introduction

Writing is widely recognized as one of the most complex skills in second- and foreign-language learning because it requires learners to coordinate linguistic knowledge, rhetorical organization, cognitive processing, audience awareness, and sociocultural conventions into a coherent written text. In English as a Foreign Language (EFL) contexts, this complexity is often intensified by limited exposure to authentic English

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input, restricted opportunities for meaningful written communication, uneven learner proficiency, and classroom practices that may prioritize accuracy and product completion over writing development. As a result, teaching writing remains a persistent pedagogical concern in EFL education, particularly in formal educational contexts where writing competence is closely related to academic achievement, disciplinary participation, and learners' capacity to communicate ideas effectively in written form (De Silva, 2015; Graham, 2019; Hyland, 2019; Manchón, 2018).

Over the last decade, research on EFL writing instruction has expanded substantially, reflecting important developments in pedagogical approaches, theoretical perspectives, feedback practices, and technology-mediated instruction. In this study, EFL writing instruction refers to formal pedagogical practices designed to support the teaching and learning of general or academic writing in EFL contexts, including process-oriented writing, genre-based instruction, strategy-based writing instruction, feedback practices, collaborative writing, disciplinary writing, and technology-enhanced writing activities. Studies focusing exclusively on creative writing, test-preparation courses, informal tutoring, or private training contexts fall outside the scope of this review. This operational boundary is important because writing instruction is a broad, multidimensional field, and the present study focuses specifically on pedagogically oriented research on how writing is taught, supported, practiced, revised, and developed in EFL learning environments.

Several pedagogical and theoretical shifts have shaped EFL writing instruction research in recent years. Genre-based approaches have emphasized rhetorical awareness, communicative purpose, audience, and text organization. At the same time, process-oriented instruction has foregrounded planning, drafting, revising, editing, and reflection as essential components of writing development. Strategy-based and self-regulated learning approaches have further highlighted learners' metacognitive awareness, goal-setting, monitoring, use of feedback, and self-evaluation in writing tasks (Guo et al., 2021; Han & Hiver, 2018; Huang & Zhang, 2020; Teng & Zhang, 2020). At the same time, digital technologies have reshaped the ways writing is taught and learned. Automated writing evaluation, online collaborative platforms, digital feedback tools, and AI-assisted writing applications have created new possibilities for timely feedback, learner engagement, revision support, and individualized writing assistance. However, these developments also raise pedagogical and ethical concerns regarding learner dependence, feedback interpretation, authorship, academic integrity, teacher mediation, and the alignment of digital tools with writing pedagogy (Bai et al., 2021; Ranalli, 2018; Strobl et al., 2019; Tseng & Yeh, 2019).

Despite this growing body of research, the literature on EFL writing instruction remains fragmented. Many empirical studies examine isolated instructional strategies, feedback types, learner populations, educational levels, or digital interventions without situating their findings within the broader intellectual and pedagogical development of the field. This fragmentation makes it difficult to determine how research on EFL writing instruction has evolved, which pedagogical approaches and theoretical frameworks have become dominant, which challenges persist, and which emerging directions are likely to shape future scholarship. Although previous reviews have contributed important insights into specific areas of L2 or EFL writing, such as written corrective feedback, peer feedback, learner engagement, strategy-based instruction, and technology-supported writing, they have often focused on relatively narrow subdomains rather than mapping EFL writing instruction as an integrated research field (Bitchener & Storch, 2016; Yu & Lee, 2016; Zhang & Hyland, 2018).

A broader and more integrated review is therefore needed to connect the field's intellectual structure with its pedagogical development. Bibliometric analysis is useful for this purpose because it enables researchers to identify publication trends, influential authors, productive journals, contributing countries, citation patterns, and thematic networks within a large body of literature. However, bibliometric analysis alone may not adequately explain how pedagogical approaches, theoretical frameworks, classroom challenges, and instructional opportunities are conceptualized in empirical studies. Conversely, a systematic literature review can provide deeper qualitative synthesis, but it may offer limited insight into the macro-level structure and evolution of the research field. Combining bibliometric analysis with a systematic literature

review can therefore provide a more comprehensive understanding by integrating macro-level mapping with micro-level thematic interpretation (Aria & Cuccurullo, 2017; Donthu et al., 2021; Page et al., 2021; Zupic & Čater, 2015).

However, there remains a lack of review studies that systematically examine EFL writing instruction through this dual-method approach within a clearly defined ten-year period. Existing reviews tend to rely primarily on qualitative synthesis, focus on specific topics such as feedback or strategy instruction, or examine writing research without clearly distinguishing EFL instructional contexts. As a result, there remains insufficient evidence on how publication trends, thematic configurations, pedagogical approaches, theoretical frameworks, instructional challenges, and emerging research directions are connected within the broader field of EFL writing instruction. This gap is particularly important given the rapid growth of research on technology-enhanced and AI-assisted writing in recent years, which requires a clearer understanding of how emerging digital directions relate to established pedagogical traditions such as genre-based, process-oriented, and self-regulated writing instruction. To address this gap, the present study conducts an integrated bibliometric analysis and systematic literature review of Scopus-indexed research on EFL writing instruction published between 2015 and 2024. Unlike previous reviews that focus on specific subthemes, this study maps the field's broader intellectual structure and synthesizes empirical evidence on pedagogical approaches, theoretical frameworks, challenges, opportunities, and future directions. The novelty of this study lies in its dual analytical focus: it combines large-scale bibliometric mapping of 1,030 Scopus-indexed articles with qualitative synthesis of 82 empirical studies selected through PRISMA-guided screening. This approach enables the study to show not only how the field has grown and clustered thematically, but also how EFL writing instruction has been conceptualized and operationalized in classroom-oriented empirical research.

Guided by this rationale, the present study addresses two research questions. First, what are the publication trends, influential contributors, and thematic patterns in Scopus-indexed research on EFL writing instruction from 2015 to 2024? Second, what dominant pedagogical approaches are represented in empirical studies on EFL writing instruction? By answering these questions, this study contributes to the field in several ways. Empirically, it provides an evidence-based map of the development of EFL writing instruction research over the past decade. Methodologically, it demonstrates how bibliometric analysis and a systematic literature review can be integrated to link large-scale publication patterns to pedagogical synthesis. Pedagogically, the findings offer useful insights for researchers, teacher educators, curriculum designers, and EFL writing teachers to identify established instructional orientations and emerging areas requiring further investigation. In doing so, the study is expected to support more informed research agendas and more responsive pedagogical decision-making in EFL writing instruction.

2. Method

2.1 Research Design

This study employed a dual-method review design integrating bibliometric analysis and a systematic literature review to examine research on teaching writing in English as a Foreign Language (EFL) contexts from 2015 to 2024. The bibliometric component was used to map the field's intellectual and publication landscape, including annual publication trends, influential authors, high-impact journals, contributing countries, citation patterns, and thematic structures. The systematic literature review component was used to synthesize empirical findings on pedagogical approaches, theoretical frameworks, instructional challenges and opportunities, and emerging research directions in EFL writing instruction. The integration of bibliometric analysis and systematic review was considered appropriate because the study aimed to provide both a macro-level overview of research development and a micro-level synthesis of empirical evidence. Bibliometric analysis is useful for identifying publication patterns, scholarly influence, and thematic networks in a large body of literature, while systematic review procedures strengthen transparency and rigor in study selection and synthesis (Zupic & Čater, 2015; Aria & Cuccurullo, 2017; Donthu et al., 2021;

Page et al., 2021). This combined design was therefore suitable for examining a rapidly growing and methodologically diverse body of literature on EFL writing instruction.

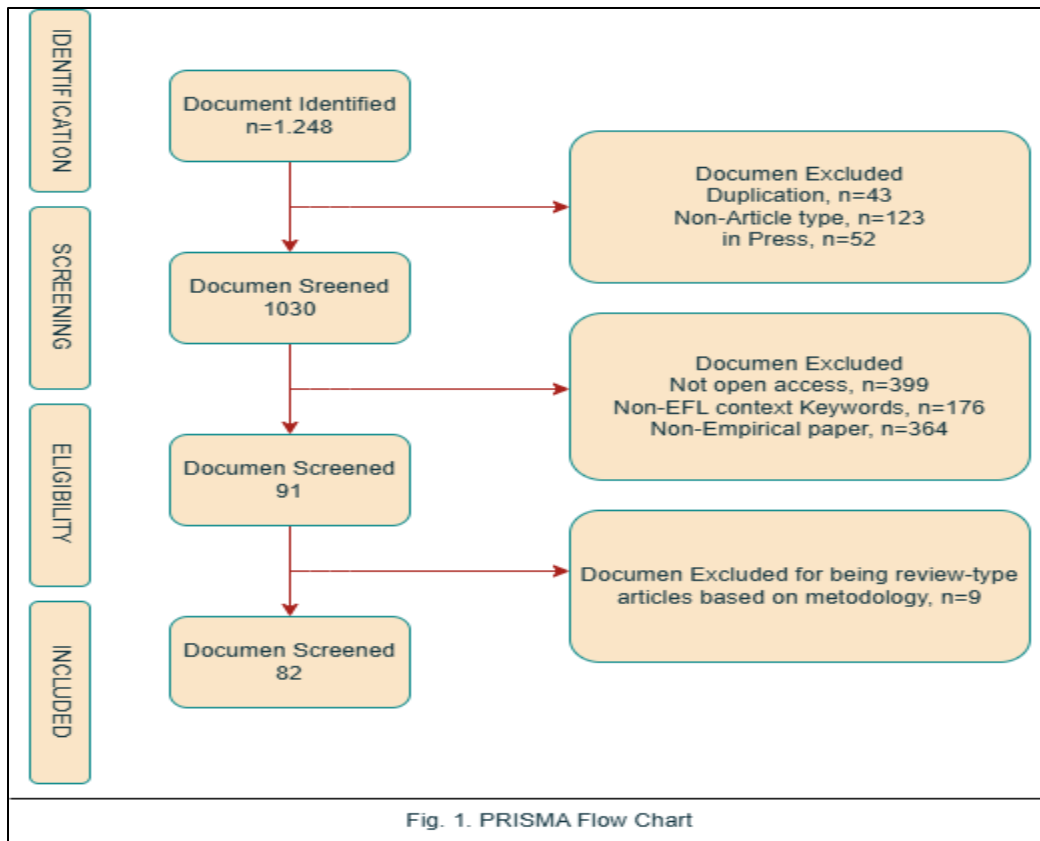
2.2 Data Source and Search Strategy

The data were retrieved from the Scopus database, selected for its broad coverage of peer-reviewed international journals and suitability for bibliometric analysis. Scopus provides structured bibliographic metadata, including authorship, year of publication, source title, affiliation, country, citation count, abstracts, and keywords, which are necessary for bibliometric mapping and systematic screening. The literature search was conducted in October 2025 using a structured search query designed to identify studies explicitly related to writing instruction in EFL contexts. The search string combined terms related to writing pedagogy and EFL settings as follows: (“teaching writing” OR “writing instruction” OR “writing pedagogy” OR “writing skills”) AND (“EFL” OR “English as a Foreign Language”). To maintain a clear and replicable scope, the search was limited to publications issued between 2015 and 2024. Additional filters were applied to include only journal articles, English-language publications, and documents in the final publication stage. The initial search generated 1,248 records.

2.3 Eligibility Criteria and Study Selection

The study selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines, consisting of the identification, screening, eligibility, and inclusion stages (Page et al., 2021). During the identification stage, all records retrieved from Scopus were exported and examined for duplicates and compliance with the initial database filters. Records were removed if they were duplicates or did not meet the predetermined criteria related to language, document type, publication stage, or relevance to the focus of the study. A total of 218 records were excluded at this stage. After this process, 1,030 journal articles were retained for bibliometric analysis.

For the systematic literature review, a more focused screening process was conducted. The titles and abstracts of the 1,030 records were reviewed to identify studies directly related to teaching writing in EFL contexts. Studies were included if they focused on teaching or learning writing in EFL contexts, reported empirical findings using quantitative, qualitative, or mixed-methods designs, and addressed pedagogical approaches, instructional strategies, feedback practices, learner-related factors, assessment-related instruction, or technology-enhanced writing instruction. Studies were excluded if they focused exclusively on ESL or first-language writing, addressed writing without an instructional dimension, examined general language learning without specific attention to writing, discussed writing assessment without pedagogical implications, or were not accessible in full text. Purely theoretical papers, conceptual papers, opinion-based publications, review articles, book chapters, and conference papers were also excluded from the qualitative synthesis because the systematic review component focused specifically on empirical evidence. Following the full-text eligibility assessment, 82 empirical studies were retained for systematic qualitative synthesis. The overall selection process is presented in Figure 1.



2.4 Bibliometric Analysis Procedure

The bibliometric analysis was conducted using the 1,030 Scopus-indexed journal articles. Bibliographic metadata were exported from Scopus, including authorship, publication year, source title, citation count, country affiliation, institutional affiliation, author keywords, and index keywords. Before analysis, the dataset was cleaned to improve consistency and interpretability. Duplicate records were removed, synonymous keywords were merged, spelling variants were standardized, and generic or non-informative terms were excluded where necessary. For example, terms such as “EFL writing,” “writing in EFL,” and “English as a foreign language writing” were standardized to reduce fragmentation in keyword co-occurrence analysis. This cleaning process was necessary because inconsistent terminology may distort bibliometric networks and affect the interpretation of thematic clusters (Donthu et al., 2021).

The bibliometric analysis was performed using Biblioshiny, the web-based interface of the Bibliometrix R package, and VOSviewer. Biblioshiny was used to generate descriptive bibliometric indicators, including annual publication output, influential authors, productive journals, contributing countries, and citation patterns. VOSviewer was used to construct and visualize keyword co-occurrence and co-authorship networks. Full counting was applied, and association strength normalization was used to improve the interpretability of network relationships. A minimum keyword occurrence threshold of five was set to ensure analytical clarity and network stability. The resulting clusters were interpreted using keyword centrality, density, and conceptual coherence to identify dominant and emerging themes in EFL writing instruction research.

2.5 Systematic Review and Thematic Synthesis

The systematic literature review was conducted on the 82 empirical studies included after the eligibility stage. Each study was reviewed and coded according to its educational context, research design, pedagogical approach, theoretical framework, instructional focus, learner-related factors, reported challenges,

opportunities, and implications for future research. The coding process combined deductive and inductive strategies. Deductive coding was guided by the research questions and the main analytical categories established in the review, while inductive coding allowed additional themes to emerge from the reviewed studies. This approach is appropriate for thematic synthesis because it enables the analysis to remain guided by the research objectives while also being open to patterns emerging from the literature (Fereday & Muir-Cochrane, 2006).

The coded data were compared, grouped, and synthesized into broader thematic categories. Studies were classified by their dominant pedagogical approach, including genre-based instruction, process-oriented writing, strategy- or self-regulated learning-oriented instruction, technology-enhanced or AI-assisted writing, product-oriented writing, and other or hybrid approaches. When a study combined multiple instructional orientations, classification was determined based on the primary pedagogical framework emphasized in the research design, instructional procedures, and analytical focus. Theoretical frameworks were synthesized by identifying recurring perspectives, including sociocultural theory, cognitive and sociocognitive frameworks, and self-regulated learning theory. Challenges, opportunities, and future research directions were synthesized thematically by identifying recurring patterns across the reviewed studies.

2.6 Methodological Transparency and Analytical Consistency

Several procedures were applied to strengthen methodological transparency and analytical consistency. First, the database, search string, publication period, document type, language restriction, and publication-stage criteria were specified before screening. This helped ensure that the search procedure was clear, bounded, and replicable. Second, the selection process followed PRISMA 2020 guidelines, which provided a transparent record of how the initial 1,248 records were reduced to 1,030 articles for bibliometric analysis and 82 empirical studies for qualitative synthesis (Page et al., 2021). Third, inclusion and exclusion criteria were applied consistently during title-abstract screening and full-text eligibility assessment to ensure that the final SLR dataset aligned with the study's focus. Fourth, the bibliometric dataset was cleaned before analysis to reduce keyword inconsistency, spelling variation, and conceptual duplication. This step improved the reliability of keyword co-occurrence and thematic mapping. Fifth, a coding table was used during the systematic review to document each study's educational context, research design, pedagogical approach, theoretical framework, instructional focus, reported challenges, opportunities, and future directions. This table served as an audit trail, connecting the reviewed studies to the thematic categories reported in the findings. Sixth, the thematic synthesis used both deductive and inductive coding to balance the review questions with themes emerging from the literature. Finally, the integration of bibliometric findings and a systematic qualitative synthesis enabled the study to cross-check macro-level publication and thematic patterns against micro-level pedagogical evidence from empirical studies. These procedures were used to enhance the transparency, consistency, and credibility of the review process (Nowell et al., 2022).

3. Findings and Discussion

3.1 Publication Trends, Influential Contributors, and Thematic Patterns

The first research question examined publication trends, influential contributors, and thematic patterns in Scopus-indexed research on EFL writing instruction from 2015 to 2024. The bibliometric analysis shows that research in this area increased steadily during the review period. As presented in Figure 2, annual publication output remained relatively modest between 2015 and 2017, with fewer than 60 articles published per year. During this early phase, research tended to focus on established concerns in EFL writing pedagogy, including process-based writing instruction, genre-based pedagogy, teacher feedback, and writing strategy development. This suggests that the early years of the review period functioned as a consolidation stage in which scholars continued to refine foundational approaches to writing instruction. These concerns remain central to EFL writing because they address core dimensions of writing development, such as

planning, drafting, revising, use of feedback, rhetorical awareness, text organization, and language accuracy (De Silva, 2015; Hyland, 2019; Manchón, 2018).

A more visible increase in publication output began after 2018 and became particularly pronounced between 2021 and 2024. This growth indicates that EFL writing instruction has become an increasingly active area of research. The acceleration in the later years of the decade appears to correspond with growing scholarly attention to learner-centered pedagogy, self-regulated writing, collaborative writing, technology-enhanced instruction, automated feedback, and AI-assisted writing. However, this trend should be interpreted carefully. The increase in publication output demonstrates the growing visibility of EFL writing instruction as a research topic. However, it does not necessarily indicate that classroom practices have changed at the same pace. In many EFL contexts, writing instruction may still be shaped by institutional constraints, assessment requirements, limited instructional time, teacher workload, and uneven access to digital technologies. Therefore, the publication trend provides evidence of scholarly expansion, while further classroom-based research is needed to determine the extent to which these developments have been translated into teaching practice.

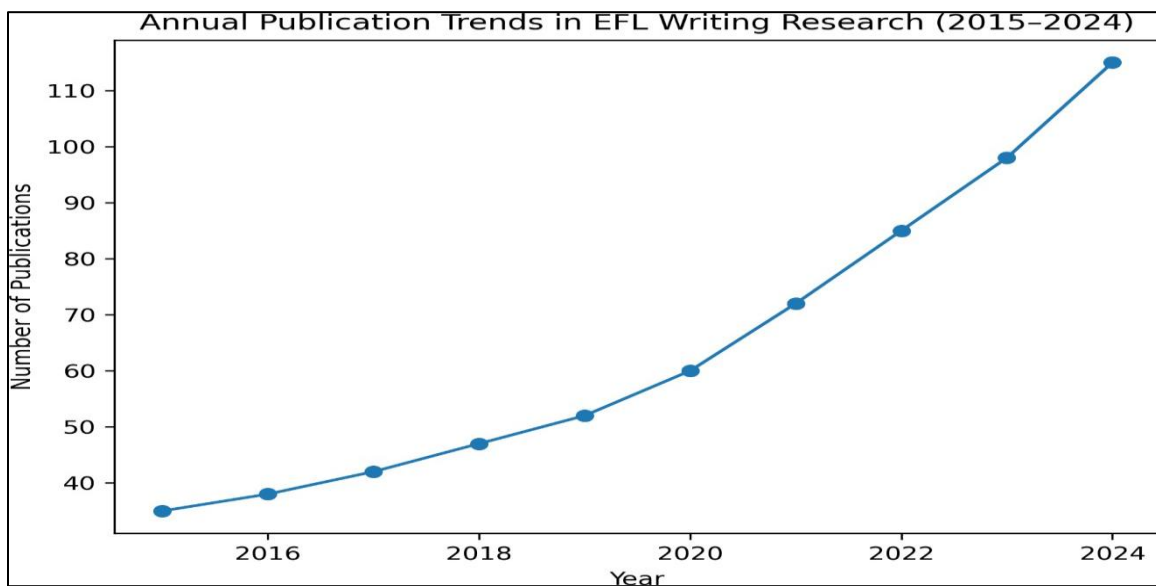


Figure 2. Annual publication trends in EFL writing instruction research, 2015–2024

The analysis of influential contributors also shows an uneven distribution of scholarly impact within the dataset. As shown in Figure 3, a small group of authors recorded higher local impact based on H-index values, while many others showed lower levels of citation influence. Watson Annabel Mary recorded the highest local H-index, followed by Myhill Debra and Monaghan Padraic. Other contributors, including Frost Rebecca L. A., Newman Ruth Malka Charlotte, Petersson Karl Magnus, Pine J. M., Rowland Caroline F., Bidgood Amy, and Dienes Zoltán, showed more moderate local influence. This pattern suggests that EFL writing instruction research is shaped by a combination of highly visible contributors and a broader group of scholars working across more specialized or context-specific areas. Such a pattern is common in expanding research domains, where influence tends to cluster around a limited number of productive or highly cited authors. At the same time, thematic diversification is supported by a wider scholarly community.

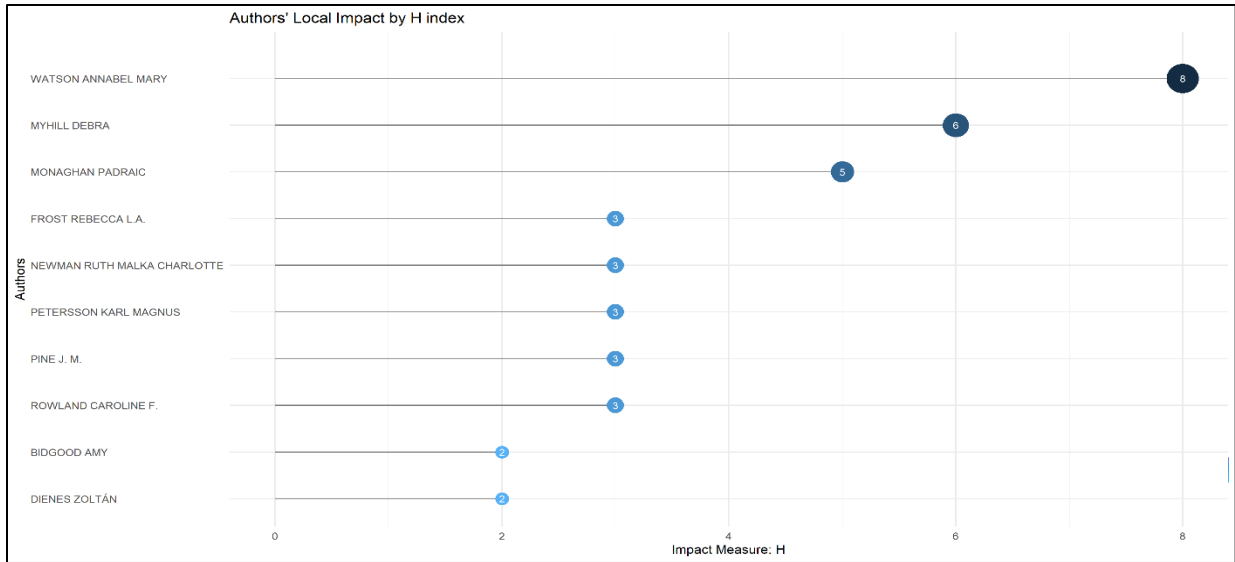


Figure 3. Influential contributors in the Scopus-indexed dataset

The keyword co-occurrence analysis provides further evidence of thematic development in the field. As shown in Figure 4, earlier keyword patterns were associated with broad and established concerns such as writing instruction, writing skills, feedback, genre, and process-oriented pedagogy. More recent keyword patterns indicate increasing attention to technology-enhanced learning, automated written corrective feedback, collaborative writing, self-regulated learning, and AI-supported writing. This thematic shift does not suggest that earlier pedagogical concerns have disappeared. Rather, it indicates that established issues in EFL writing instruction are increasingly being recontextualized within digital, collaborative, and learner-centered environments. Feedback, for example, remains a central theme, but it is now frequently examined in relation to automated feedback systems, digital platforms, and AI-supported writing tools. Similarly, writing strategies and revision remain important, but they are increasingly linked to self-regulated learning and technology-mediated writing practices.

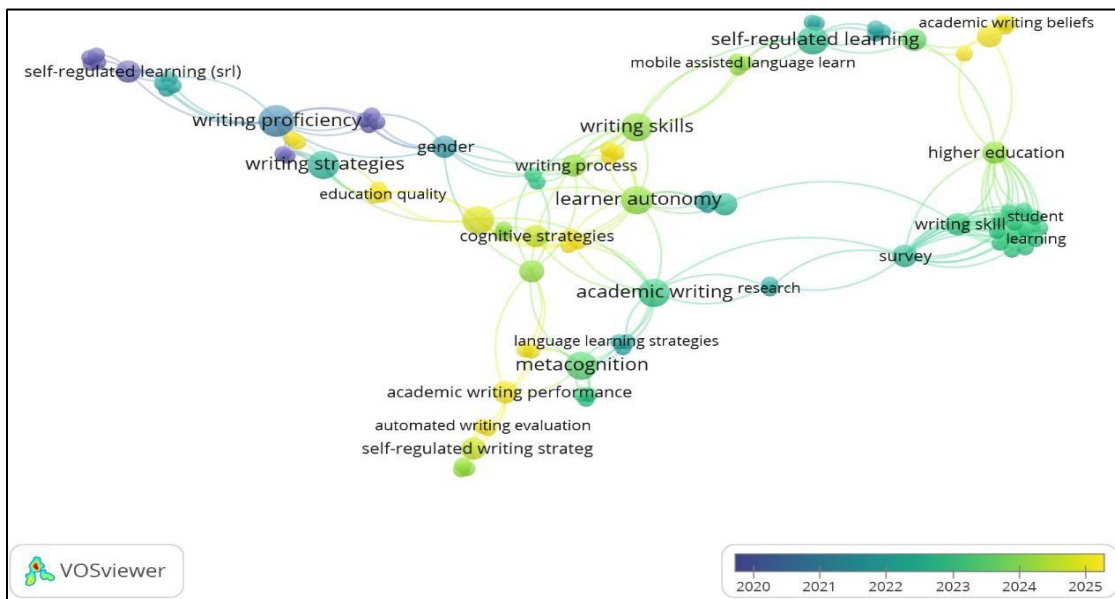


Figure 4. Keyword co-occurrence patterns based on overlay visualization

The findings for the first research question indicate that EFL writing instruction research has expanded steadily over the last decade, with stronger growth in the later years of the review period. The field is characterized by uneven yet identifiable patterns of scholarly influence and a thematic shift from foundational concerns, such as feedback, genre, process writing, and writing strategies, toward digitally mediated and learner-centered directions. This development suggests that EFL writing instruction has become a more dynamic area of research, although it continues to build on long-standing pedagogical foundations.

3.2 Dominant Pedagogical Approaches in EFL Writing Instruction

The second research question asked what dominant pedagogical approaches are represented in empirical studies on EFL writing instruction. The synthesis of the 82 empirical studies shows that the field has been shaped primarily by genre-based instruction, process-oriented writing, strategy-based or self-regulated learning-oriented instruction, technology-enhanced or AI-assisted writing, product-oriented writing, and other or hybrid approaches. For analytical consistency, each study was coded according to its dominant pedagogical orientation. When a study combined multiple instructional approaches, classification was based on the primary framework emphasized in the study's design, instructional procedures, and analytical focus. As shown in Table 1, genre-based instruction was the most frequently represented approach, appearing in 26 studies, or 31.7% of the reviewed empirical literature. Process-oriented writing followed with 22 studies, or 26.8%. Strategy-based or self-regulated, learning-oriented instruction appeared in 14 studies (17.1%), while technology-enhanced or AI-assisted writing accounted for 12 studies (14.6%). Product-oriented writing was represented in only 5 studies (6.1%), and 3 studies (3.7%) were categorized as other or hybrid approaches. These findings indicate that product-oriented views of writing no longer dominate contemporary EFL writing instruction research. Instead, it increasingly emphasizes explicit genre knowledge, recursive writing processes, learner strategy development, and technology-mediated support.

Table 1. Distribution of Dominant Pedagogical Approaches across Reviewed Studies

Pedagogical Approach	Frequency	Percentage
Genre-based instruction	26	31.7%
Process-oriented writing	22	26.8%
Strategy-based / SRL-oriented instruction	14	17.1%
Technology-enhanced / AI-assisted writing	12	14.6%
Product-oriented writing	5	6.1%
Other/hybrid approaches	3	3.7%
Total	82	100%

Genre-based writing instruction emerged as the most dominant pedagogical approach in the reviewed studies. This finding suggests that EFL writing instruction continues to be strongly shaped by the need to make rhetorical structures, communicative purposes, text organization, audience awareness, and disciplinary conventions explicit for learners. In EFL contexts, where students may have limited exposure to English academic and communicative genres, genre-based pedagogy provides systematic scaffolding that helps learners understand how texts are organized and why particular linguistic and rhetorical choices are made. The prominence of this approach is therefore pedagogically significant because it addresses writing not merely as grammar production but as socially situated communication. This interpretation is consistent with broader views of writing as a practice shaped by purpose, audience, genre, and the discourse community's expectations (Hyland, 2019; Han & Hiver, 2018; Nguyen & Truong, 2024).

Process-oriented writing was the second most frequently represented approach. Studies in this category treated writing as a recursive activity involving planning, drafting, revising, editing, and reflection. This emphasis indicates a continuing shift away from product-only instruction toward developmental models of

writing pedagogy. Process-oriented instruction allows learners to engage with writing over time through multiple drafts, feedback cycles, peer interaction, and revision. Such an approach is important in EFL contexts because learners often require sustained support not only to produce accurate texts but also to develop ideas, organize arguments, respond to feedback, and improve coherence across drafts. The prominence of process-oriented writing in the reviewed studies suggests that researchers increasingly recognize writing development as gradual and iterative rather than immediate and product-based (De Silva, 2015; Graham, 2019; Guo et al., 2021). Strategy-based and self-regulated, learning-oriented instruction also constituted an important strand in the reviewed literature. These studies emphasized learners' planning, goal setting, monitoring, revising, self-evaluation, and metacognitive awareness. This finding suggests that EFL writing research increasingly positions learners as active agents who need to manage the cognitive, motivational, and behavioral demands of writing. Self-regulated writing is especially relevant in academic and EFL contexts because students often need to complete complex writing tasks with limited teacher support and varying levels of linguistic confidence. Instruction that develops learners' strategic awareness can therefore support not only writing performance but also learner autonomy, motivation, and persistence (Teng & Zhang, 2020; Bai & Wang, 2021; Teng et al., 2022).

Technology-enhanced and AI-assisted writing instruction accounted for a smaller but increasingly important portion of the reviewed studies. These studies examined automated written corrective feedback, online collaborative writing, digital platforms, and AI-supported writing tools. The evidence suggests that technology-oriented writing research does not replace earlier pedagogical approaches; rather, it extends existing concerns with feedback, revision, collaboration, and learner autonomy into digital environments. Automated feedback and AI-supported writing tools may provide immediate responses to student writing, but their pedagogical value depends on how learners interpret, evaluate, and use such feedback. Therefore, technology-enhanced writing instruction should be understood as part of a broader pedagogical ecology involving teachers, learners, tasks, feedback, and institutional expectations, rather than as a standalone solution to writing difficulties (Ranalli, 2018).

The relatively small number of product-oriented studies suggests that product-based writing instruction has become less central in recent EFL writing research. This does not mean that final text quality, grammatical accuracy, and coherence are no longer important. Rather, it indicates that contemporary writing pedagogy increasingly situates these concerns within broader instructional processes, including genre awareness, drafting, feedback, revision, strategy use, and digital mediation. Taken together, the findings for the second research question show that EFL writing instruction research has moved toward more explicit, developmental, strategic, and technology-supported approaches. Genre-based and process-oriented approaches remain central, while self-regulated learning and AI-assisted writing represent increasingly visible directions in the field.

3.3 Pedagogical Implications and Emerging Directions

Although the research questions focused on bibliometric patterns and dominant pedagogical approaches, the findings also suggest several pedagogical implications and emerging directions for EFL writing instruction research. These implications are derived from the evidence presented in Figures 2–4 and Table 1, particularly the growth of technology-related themes, the dominance of genre-based and process-oriented instruction, and the increasing visibility of strategy-based, self-regulated, and AI-assisted writing approaches. First, the increasing visibility of technology-enhanced and AI-assisted writing in the keyword patterns and empirical synthesis suggests that digital tools have become an important area of scholarly attention. However, this trend should be interpreted as an emerging research direction rather than as evidence of widespread classroom transformation. While automated feedback systems, online collaborative platforms, and AI-supported writing tools may offer opportunities for timely feedback, revision support, and individualized learning assistance, their pedagogical value depends on how they are integrated into writing instruction. Previous research has shown that automated and digital writing support is most effective when learners are guided to interpret feedback, revise strategically, and use technological resources as part of a

broader pedagogical process rather than as stand-alone correction tools (Ranalli, 2018; Strobl et al., 2019; Zhang & Hyland, 2018). Therefore, future studies should examine not only whether such tools improve writing scores, but also how learners interpret feedback, how teachers mediate tool use, and how ethical concerns such as authorship, academic integrity, and learner dependence are addressed.

Second, the dominance of genre-based and process-oriented approaches indicates that future EFL writing instruction should continue to combine explicit rhetorical guidance with opportunities for drafting, feedback, revision, and reflection. Genre-based pedagogy can help learners understand audience, purpose, text organization, and disciplinary conventions. At the same time, process-oriented instruction can support writing development through recursive engagement with planning, composing, revising, and editing. These approaches should not be treated as competing models; rather, they may be integrated to support both rhetorical awareness and developmental writing processes. This implication is consistent with previous scholarship emphasizing that effective writing instruction requires both explicit attention to textual conventions and sustained opportunities for learners to develop writing through feedback, practice, and revision (Hyland, 2019; Graham, 2019; Manchón, 2018). Third, the presence of strategy-based, self-regulated, learning-oriented instruction indicates the need to support learners' metacognitive control over writing. Future instructional designs may benefit from integrating planning, monitoring, evaluating, and revising strategies into genre-based and process-oriented writing tasks. Such integration can help learners move beyond completing assigned writing products toward developing greater control over their writing processes. Research on self-regulated writing has shown that learners' strategic awareness, motivational regulation, planning, monitoring, and self-evaluation are closely related to writing development and learner autonomy (Teng & Zhang, 2020; Bai & Wang, 2021; Teng et al., 2022). In this sense, learner autonomy in writing should be understood not only as independent task completion but also as the ability to set goals, choose strategies, evaluate progress, respond to feedback, and revise texts purposefully.

Finally, the findings point to the need for more longitudinal, contextual, and classroom-based research. The growth of EFL writing instruction research over the last decade shows that the field is expanding. However, more evidence is needed to determine how instructional approaches develop over time and how they function across different educational settings. Longitudinal studies can clarify whether gains from genre-based, process-oriented, self-regulated, or technology-enhanced instruction are sustained beyond short-term interventions. Contextually diverse studies are also needed because writing instruction is shaped by learners' proficiency levels, educational levels, curriculum expectations, institutional resources, and teacher expertise. Teacher-focused studies are especially important because the successful implementation of writing pedagogy depends not only on instructional models and digital tools but also on teachers' feedback literacy, pedagogical decision-making, technological readiness, and ability to adapt instructional approaches to classroom realities (Hyland & Hyland, 2019; Yu & Lee, 2016). Thus, future research should move beyond documenting trends toward examining how EFL writing instruction can be implemented sustainably, ethically, and contextually.

4. Conclusion

This study examined the development of EFL writing instruction research from 2015 to 2024 by integrating bibliometric analysis of 1,030 Scopus-indexed journal articles and systematic synthesis of 82 empirical studies. The findings show that research on EFL writing instruction has grown steadily over the past decade, with more pronounced growth in the later years of the review period. The bibliometric evidence indicates that the field has developed from established concerns such as feedback, genre, process writing, and writing strategies toward more learner-centered, collaborative, technology-enhanced, and AI-assisted directions. The analysis also shows that scholarly influence is unevenly distributed, with a small number of authors having higher local impact within the dataset. At the same time, the broader field remains thematically diverse and increasingly dynamic. In terms of pedagogical approaches, genre-based instruction emerged as the most dominant approach, followed by process-oriented writing, strategy-based or self-regulated learning-oriented instruction, and technology-enhanced or AI-assisted writing. These findings

suggest that contemporary EFL writing instruction research has moved beyond product-oriented views of writing and increasingly emphasizes explicit rhetorical guidance, recursive writing processes, learner strategy development, feedback use, and digital mediation. The study contributes to EFL writing research by providing an evidence-based map of publication trends, influential contributors, thematic patterns, and dominant pedagogical approaches over ten years. Pedagogically, the findings suggest the need for more integrated writing instruction that combines genre awareness, process writing, self-regulated learning, meaningful feedback, and critically mediated use of digital and AI-supported tools. Since this study relied on Scopus-indexed journal articles and focused on evidence available from bibliometric indicators and selected empirical studies, future research may expand the database coverage, include additional indexing sources, examine underrepresented educational contexts, and investigate how emerging approaches, particularly AI-assisted writing, are implemented in actual EFL classrooms.

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6. Declaration of AI Use

During the preparation of this manuscript, the authors used ChatGPT to support language refinement, academic editing, structural clarity, and coherence and readability. ChatGPT was not used to generate research data, conduct bibliometric analysis, perform systematic screening, or replace the authors' scholarly judgment. All AI-assisted revisions were reviewed, verified, and approved by the authors, who take full responsibility for the integrity, accuracy, analysis, findings, and final version of the manuscript.

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