

Written Corrective Feedback in Second Language Writing: A Systematic Review of Effectiveness, Learner Engagement, and Teacher Practices

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ABSTRACT

This systematic literature review investigates Written Corrective Feedback (WCF) in Second Language Writing, focusing on three interconnected themes: effectiveness of feedback types, learner engagement, and teacher practices. Drawing on 29 peer-reviewed studies published between 2021 and 2026, the review synthesises evidence using the PRISMA framework to ensure methodological rigor and transparency. Findings reveal that WCF consistently enhances writing accuracy, fluency, and syntactic complexity, though its effectiveness varies across feedback types. Direct and metalinguistic feedback were particularly effective in promoting noticing and restructuring, while indirect and unfocused feedback required greater learner initiative. Learner-centered studies highlight the importance of perceptions, preferences, and emotional engagement, showing that supportive and autonomy-enhancing feedback fosters motivation and uptake, whereas overly critical feedback risks disengagement. Teacher-focused research emphasizes the role of scaffolding, beliefs, and contextual factors in shaping feedback practices, situating WCF as a socially mediated and pedagogical process. The implications of this review underscore the need for a holistic approach to WCF that integrates cognitive, motivational, and sociocultural dimensions. Teachers should adapt feedback strategies to learner proficiency, cultural background, and emotional needs, while institutions should encourage multimodal and dialogic practices to maximise engagement. Future research should expand longitudinal and cross-cultural investigations, explore technology-driven approaches such as AI-assisted feedback, and examine teacher cognition and institutional practices in greater depth. Collectively, this review advances the state of the art in WCF research, offering a comprehensive framework for enhancing ESL/EFL writing pedagogy.

Keywords: (Written Corrective Feedback, Second Language Writing, Learner Engagement, Teacher Practices, Systematic Review)

INTRODUCTION

Background of the study

Written Corrective Feedback (WCF) has long been recognized as a central pedagogical tool in second language (L2) writing instruction. It provides learners with opportunities to identify linguistic gaps, refine their writing accuracy, and develop fluency and complexity in written production. In ESL/EFL contexts, WCF is particularly significant as learners often rely on teacher feedback to bridge the gap between their interlanguage and target language norms. Past studies, such as Cheng and Zhang (2021) and Sun and Qi (2022), have shown that different types of feedback—direct, indirect, focused, unfocused, and metalinguistic—yield varied outcomes depending on learner proficiency and instructional setting. At the same time, learner perceptions and teacher practices play a crucial role in determining the effectiveness of feedback, making WCF a multidimensional construct that extends beyond error correction to encompass motivation, engagement, and pedagogy.

Statement of Problem

Despite the extensive research on WCF, inconsistencies remain in understanding its overall effectiveness and applicability across diverse contexts. While some studies highlight the benefits of explicit and metalinguistic feedback in enhancing accuracy, others suggest that indirect or unfocused feedback may foster deeper learner autonomy. Similarly, learner engagement with feedback is not uniform; emotional responses, preferences, and motivational factors often mediate uptake, as noted by Alkhalaf and Alhojailan (2024) and Ni and Xu (2026). Teacher practices further complicate the picture, with beliefs, scaffolding strategies, and contextual variables shaping how feedback is delivered and received (Li & Zhang, 2022; Cheng, Zhang, & Yan, 2025). These variations point to a lack of consensus on how WCF should be implemented to achieve optimal outcomes.

Research Gap

The existing literature reveals three critical gaps. First, while effectiveness studies are abundant, they often focus narrowly on accuracy, leaving fluency and syntactic complexity underexplored. Second, learner-centered research highlights perceptions and preferences but lacks longitudinal evidence on how engagement evolves over time. Third, teacher-focused studies remain limited, with only a handful examining how contextual and sociocultural factors influence feedback practices. This imbalance underscores the need for a systematic review that integrates effectiveness, learner engagement, and teacher practices into a unified framework. By addressing these gaps, the present study aims to provide a holistic understanding of WCF in L2 writing, guided by Schmidt's Noticing Hypothesis, Deci and Ryan's Self-Determination Theory, and Vygotsky's Sociocultural Theory.

Research Questions

Research questions are important to a systematic literature review (SLR). The questions provide the foundation and direction for the entire review process. A well-defined research question ensures that the literature search is exhaustive and systematic, covering all relevant studies that address key aspects of the topic (Kitchenham, 2007). The research questions in this SLR are formulated based on the PICo framework. This framework is a mnemonic style used to formulate research questions, particularly in qualitative research, proposed by Lockwood et al. (2015). PICo stands for Population, Interest, and Context. This SLR is done to answer the four research questions below;

RQ1

How effective are different types of written corrective feedback (direct, indirect, focused, unfocused, metalinguistic) in improving ESL/EFL learners' writing accuracy, complexity, and fluency across diverse instructional contexts?

RQ2

What are ESL/EFL learners' perceptions, preferences, and emotional/behavioural engagement toward written corrective feedback, and how do these factors influence their uptake of feedback in writing development?

RQ3

How do teachers conceptualize, deliver, and scaffold written corrective feedback in ESL/EFL writing classrooms, and what contextual factors (e.g., proficiency level, cultural background, instructional design) shape these practices?

RQ4

How do the interactions among feedback effectiveness, learner engagement, and teacher practices collectively contribute to the state of the art in written corrective feedback research within ESL/EFL writing pedagogy?

LITERATURE REVIEW

Theoretical Framework

Noticing Hypothesis Theory by Schmidt (1990)

The Noticing Hypothesis (Schmidt, 1990) provides the strongest theoretical foundation for Theme 1: Effectiveness of Corrective Feedback Types. This theory argues that second language acquisition occurs when learners consciously notice the gap between their interlanguage and the target language. Written corrective feedback (WCF) serves as an input enhancement mechanism, drawing learners' attention to linguistic errors and prompting them to restructure their output. Studies under Theme 1, such as Cheng and Zhang (2021) on comprehensive WCF and Sun and Qi (2022) on direct versus metalinguistic feedback, demonstrate how different feedback types vary in their ability to trigger noticing. Explicit and metalinguistic feedback make errors more salient, thereby facilitating deeper cognitive processing, while indirect or unfocused feedback relies more on learner-driven noticing. The hypothesis also explains why accuracy gains are consistently observed across feedback types, but improvements in complexity and fluency are less uniform—these dimensions require sustained noticing and practice beyond immediate error correction. By linking corrective feedback to the cognitive process of noticing, this theory provides a coherent explanation for the measurable effectiveness of WCF in enhancing accuracy, fluency, and syntactic development, thereby directly supporting Theme 1 in the systematic review.

Self-Determination Theory (SDT) by Deci and Ryan (1985, 2000)

The Self-Determination Theory (SDT) by Deci and Ryan (1985, 2000) provides a powerful lens to explain Theme 2: Learner Perceptions, Preferences, and Engagement. SDT posits that motivation and learning outcomes are shaped by the fulfilment of three psychological needs: autonomy, competence, and relatedness. In the context of written corrective feedback (WCF), learners' perceptions of feedback determine whether these needs are supported or undermined. When feedback is clear, constructive, and aligned with learners' preferences, it enhances their sense of competence and autonomy, leading to greater emotional and behavioural engagement. Conversely, feedback perceived as overly critical or misaligned with learner expectations can diminish motivation and reduce uptake. Studies such as Alkhalaf and Alhojailan (2024) and Ni and Xu (2026) illustrate how learners' emotional responses and preferences directly influence their willingness to act on feedback, while Supiani et al. (2023) and Listiani et al. (2025) show that multimodal or supportive feedback fosters stronger engagement. By situating WCF within the motivational framework of SDT, Theme 2 is supported with a clear theoretical explanation: learners' perceptions and preferences are not peripheral but central to the effectiveness of feedback, as they determine whether feedback becomes a catalyst for learning or a barrier to progress.

Sociocultural Theory by Vygotsky (1978)

The Sociocultural Theory (Vygotsky, 1978) provides the most suitable foundation for Theme 3: Teacher Practices, Contextual Factors, and Pedagogical Approaches. This theory emphasizes that learning is socially mediated and occurs through interaction within the Zone of Proximal Development (ZPD), where teachers scaffold learners' progress from assisted to independent performance. In the context of written corrective feedback (WCF), teacher practices are not merely technical acts of error correction but dialogic processes that guide learners toward deeper understanding. Studies such as Zhang and Zhang (2023) highlight how sociocultural approaches situate feedback within meaningful interaction, while Li and Zhang (2022) demonstrate the importance of scaffolding strategies in contextualizing corrections to support both linguistic accuracy and rhetorical development. Similarly, Cheng, Zhang, and Yan (2025) show how teacher beliefs and classroom practices shape the delivery and reception of feedback, reinforcing the idea that pedagogical context is central to its effectiveness. By grounding Theme 3 in Sociocultural Theory, the systematic review underscores that WCF is most impactful when embedded in teacher-student interaction, responsive to learner needs, and shaped by cultural and institutional contexts. This perspective positions teachers as mediators of learning, making their practices and beliefs a cornerstone of effective feedback in ESL/EFL writing pedagogy.

CONCEPTUAL FRAMEWORK

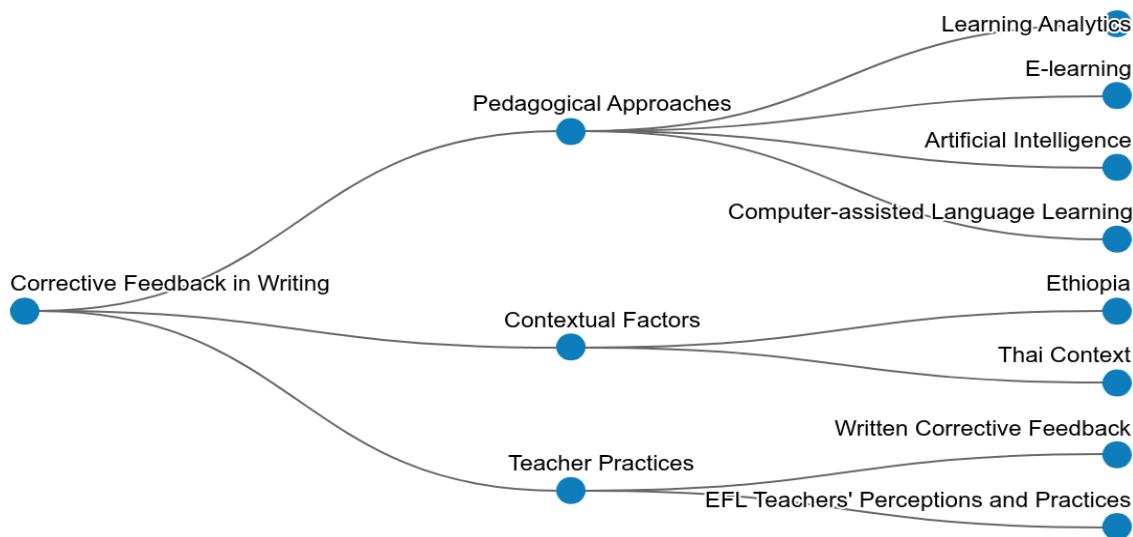


Figure 1 Corrective Feedback in Writing Framework

The conceptual framework for Written Corrective Feedback in Second Language Writing: A Systematic Review of Effectiveness, Learner Engagement, and Teacher Practices is anchored in three complementary theories that collectively explain the multifaceted role of corrective feedback (CF). At the cognitive level, Schmidt's Noticing Hypothesis (1990) underpins Theme 1 by positing that language acquisition occurs when learners consciously notice gaps between their interlanguage and the target language. Corrective feedback functions as an input enhancement mechanism, drawing attention to errors and prompting restructuring. This explains why different feedback types—direct, indirect, focused, unfocused, or metalinguistic—vary in effectiveness, as their salience influences the depth of noticing and subsequent accuracy gains.

At the motivational and affective level, Deci and Ryan's Self-Determination Theory (1985, 2000) supports Theme 2 by highlighting how learner perceptions, preferences, and engagement mediate the uptake of feedback. When feedback is perceived as supportive and autonomy-enhancing, it fosters competence and intrinsic motivation, leading to stronger emotional and behavioural engagement. Conversely, feedback that is overly critical or misaligned with learner expectations risks undermining motivation and reducing effectiveness. This perspective situates learner attitudes and preferences as central to the success of CF.

Finally, Vygotsky's Sociocultural Theory (1978) anchors Theme 3 by emphasising the socially mediated nature of learning. Within the Zone of Proximal Development (ZPD), teachers scaffold learners' progress through dialogic and contextualized feedback practices. Teacher beliefs, classroom practices, and contextual factors shape how feedback is delivered and received, making pedagogy and interaction critical to its impact. Together, these three theories provide a holistic framework: noticing explains cognitive effectiveness, self-determination accounts for learner engagement, and sociocultural theory situates feedback within teacher practices and contextual realities.

MATERIALS AND METHODS

For conducting systematic literature reviews, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach, developed by Page et al. (2021), is widely recognised as the gold standard for ensuring transparency, rigor and consistency throughout the review process. This approach provides clear guidance on how to systematically identify, screen, and include studies, thereby minimising bias and enhancing reliability. In the context of this review, the authors collaborated as researchers to critically analyse and synthesise studies relevant for the relevant title. To ensure comprehensive coverage, two major databases—Web of Science (WoS) and Scopus—were selected due to their broad multidisciplinary scope, robust indexing standards, and strong representation of high-quality peer-reviewed journals. These databases were deliberately chosen to

capture diverse research traditions and geographical contexts, thereby strengthening the methodological robustness of the study.

The PRISMA approach structures the systematic review process into a series of four well-defined stages: (i) identification, (ii) screening, (iii) eligibility, and (iv) data abstraction. In the identification phase, databases are searched to locate all relevant studies. The screening phase then involves evaluating these studies against predefined inclusion and exclusion criteria to eliminate irrelevant, duplicates or irrelevant records. During the eligibility phase, the remaining studies are thoroughly assessed to confirm they meet the inclusion criteria. Finally, data abstraction focuses on extracting and synthesising data from the included studies, which is essential to generate meaningful insights and reliable conclusions. This structured method ensures that the systematic review is conducted with rigor, leading to trustworthy results that can guide future research and practice. The PRISMA framework lists three main stages for analysis: (i) identification, (ii) screening, (iii) eligibility, (iv) data abstraction and analysis, as well as (v) quality of appraisal.

Identification

Aligned with the PRISMA framework, the identification phase serves as the essential starting point of a systematic literature review, ensuring comprehensive coverage of relevant studies while minimising selection bias. In this study, a carefully structured search was conducted across two leading bibliographic databases, Scopus and Web of Science (WoS), using targeted keywords. The specific search strings are presented in Table 1.

These databases were chosen deliberately due to their broad multidisciplinary scope, rigorous indexing standards, and strong representation of peer-reviewed journals. The search yielded 205 records from Scopus and 100 records from WoS, resulting in a combined total of 305 records before duplicate removal. The larger number of results from Scopus reflects its wider journal coverage and stronger representation in the social sciences, while WoS contributed a more selective set of highly cited and methodologically robust studies.

The identification of 305 records highlights the growing scholarly interest in academic writing within higher education and demonstrates the diversity of perspectives spanning linguistic, pedagogical, and psychological domains. Employing multiple databases enhanced the methodological robustness of the review by reducing database-specific bias and ensuring representation of varied research traditions and geographical contexts. Furthermore, the use of carefully designed search terms allowed sensitivity to terminological variations while maintaining alignment with the study's objectives. Overall, this transparent and systematic identification process establishes a solid foundation for subsequent screening and eligibility stages, consistent with PRISMA standards for rigorous and replicable research.

Table 1 The search string

Scopus	TITLE-ABS-KEY (("corrective feedback" OR "implicit feedback" OR "explicit feedback") AND (writing OR "written production" OR "writing skills" OR "writing performance") AND ("English language learners" OR ELL* OR "ESL learners" OR "English as a second language" OR "English as a foreign language"))
Web of Science (WoS)	TITLE-ABS-KEY (("corrective feedback" OR "implicit feedback" OR "explicit feedback") AND (writing OR "written production" OR "writing skills" OR "writing performance") AND ("English language learners" OR ELL* OR "ESL learners" OR "English as a second language" OR "English as a foreign language")) Extracted July 2026

Screening

During the screening stage of the systematic literature review, all potentially relevant studies were carefully examined to ensure alignment with the four established research questions. This step refined the initial pool of records by removing duplicates and applying clearly defined inclusion and exclusion criteria. Out of the initial

305 publications retrieved, 156 articles (Scopus = 104; WoS = 52) were retained for further consideration, as illustrated in Figure 2. The primary inclusion criterion emphasized scholarly sources that provided substantive and empirical insights. Consequently, materials such as book reviews, conference proceedings, book chapters, meta-syntheses, and meta-analyses that did not directly address the focus of the review were excluded.

To maintain consistency and relevance, only peer-reviewed journal articles published in English between 2021 and 2026 were included. Additionally, a duplication check led to the removal of 1 repeated record across the databases. This systematic and criteria-driven screening process strengthened the quality of the evidence base by ensuring that only the most relevant, methodologically sound, and contextually appropriate studies advanced to the next stages of analysis. By narrowing the dataset in this way, the review was able to focus on high-quality research that directly contributes to the understanding of the review.

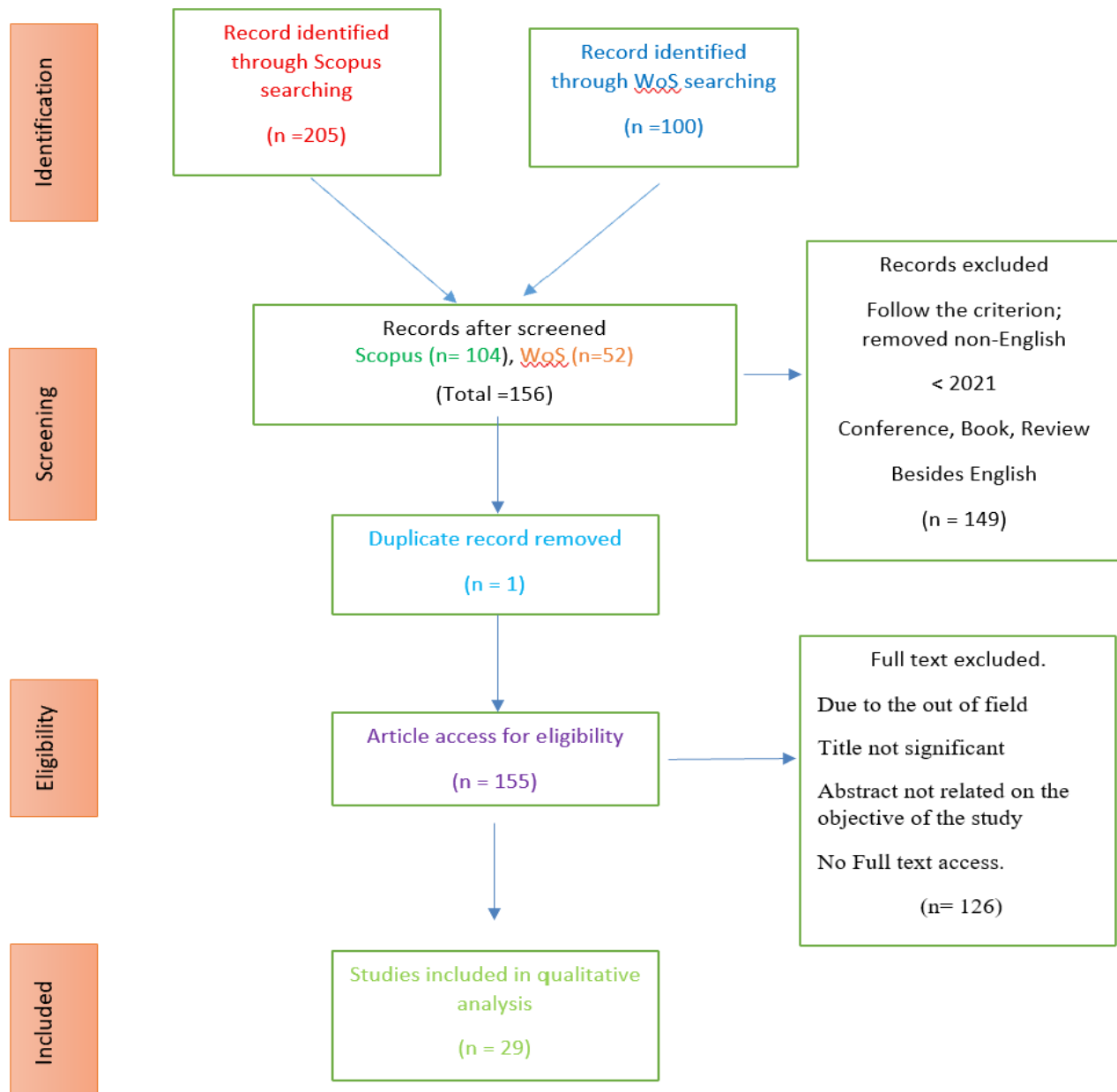


Figure 2. Flow diagram of the proposed searching study (Moher D, Liberati A, Tetzlaff J, 2009)

Eligibility

For the third step, known as eligibility, a total of 29 articles have been prepared. All articles' titles and key content were thoroughly reviewed at this stage to ensure that the inclusion requirements were fulfilled and fit into the present study with the current research aims.

Table 2 The selection criterion is searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2021 – 2026	< 2021
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press
Subject Area	Corrective Feedback	Besides Corrective Feedback

Data Abstraction and Analysis

An integrative analysis was employed in this study as a key strategy to examine and synthesise diverse research designs, including quantitative, qualitative, and mixed-method approaches. To establish meaningful themes, the author systematically reviewed 29 publications, carefully extracting material relevant to the study's objectives. Each article's methodology and findings were analysed to identify recurring patterns and significant insights. The author worked closely throughout the process, maintaining detailed records of the analytical decisions, perspectives, and interpretations. This documentation ensured transparency and allowed for the refinement of themes through ongoing discussion and comparison. Any disagreements were resolved through collective deliberation. This expert review phase established the validity of each subtheme by ensuring clarity, importance, and suitability.

Quality of Appraisal

According to Kitchenham and Charters (Kitchenham, 2007), the researchers need to assess the quality of the research chosen. The next stage is applying quality assessment suggested by Abouzahra et al., (2020), which consists of six questions complying to a scoring procedure for evaluating each criteria. The possible ratings are:

- Score of 1 if the criterion is fully met
- Score of 0.5 if the criterion is somewhat met but contains some gaps or shortcomings
- Score of 0 if the criterion is not met at all

Table 3- Possible ratings for 6 questions by Abouzahra et al., (2020),

No	Question
QA1	Is the purpose of the study clearly stated?
QA2	Is the interest and the usefulness of the work clearly presented?
QA3	Is the study methodology clearly established?
QA4	Are the concepts of the approach clearly defined?
QA5	Is the work compared and measured with other similar work?
QA6	Are the limitations of the work clearly mentioned?

Each writer independently assesses the study according to these criteria, and the scores are then totalled across all experts to determine the overall mark. For a study to be accepted for the next process, the total mark, derived from summing the scores from all three experts, must exceed 3.0. This threshold ensures that only studies meeting a certain quality standard proceed further. The results are shown in Table 4.

RESULT AND FINDING

Quality of assessment

Table 4 presents the assessment outcomes for the selected primary studies, highlighting the overall quality of the reviewed articles. The evaluation indicates three distinct levels of quality performance:

- High quality ($\geq 80\%$) : Majority of studies

- Moderate quality (60–79%): Conceptual or descriptive studies
- Lower quality (<60%) : Primarily survey-only or exploratory abstracts

Table 4 Quality Assessment for the selected 30 papers

Study	Author & Year	Article Title	QA1	QA2	QA3	QA4	QA5	QA6	Total Mark	Percentage (%)
PS1	Cheng X.; Zhang L.J. (2021)	Sustaining university EFL learners' writing performance through comprehensive WCF	1	1	1	1	0.5	1	5.5	91.7%
PS2	Alkhalaf N.A.; Alhojailan A.I. (2024)	WCF in EFL Context: Factors Influencing Students' Responses	1	1	0.5	1	0.5	0.5	4.5	75%
PS3	Reynolds B.L.; Zhang X. (2023)	Medical School Students' Preferences for Teacher WCF	1	1	1	1	0.5	0.5	5	83.3%
PS4	Sadeghi K.; Esmaeeli M. (2024)	Probing into Non-native Learners' Written Accuracy: Does Feedback Type Matter?	1	1	1	1	1	0.5	5.5	91.7%
PS5	Sun H.; Qi W. (2022)	Effects of WCF on College EFL Students' Writing Accuracy	1	1	1	1	0.5	0.5	5	83.3%
PS6	Fan N.; Ma Y. (2025)	Effects of Indirect CF and Teacher Encouragement	1	1	1	1	0.5	1	5.5	91.7%
PS7	Gedik Bal N. (2022)	EFL Students' Perceptions of CF Effectiveness	1	1	0.5	1	0.5	0.5	4.5	75%
PS8	Kim Y.; Emeliyanova L. (2021)	Effects of WCF: Collaborative vs Individual Revision	1	1	1	1	0.5	0.5	5	83.3%
PS9	Tsao J.-J. (2025)	EFL Students' Perceptions of Reading Portfolios & Teacher Feedback	1	1	1	1	0.5	0.5	5	83.3%
PS10	Sinha T.S.; Nassaji H. (2022)	ESL Learners' Perception & WCF Efficacy	1	1	1	1	0.5	0.5	5	83.3%
PS11	Perks B.J.; Colpitts B.D.F.; Michaud M. (2021)	Role of Individual Preferences in WCF Efficacy	1	1	1	1	0.5	0.5	5	83.3%
PS12	Jinowat N.; Wiboolyasarin W. (2022)	Learner Preferences for WCF in Thai Higher Education	1	1	1	1	0.5	0.5	5	83.3%
PS13	Subon F.; Ali N.A. (2022)	Effects of Implicit WCF on ESL Learners' Writing	1	1	1	1	0.5	0.5	5	83.3%

PS14	Ni F.; Xu W. (2026)	Direct vs Indirect WCF: Emotions & Revision Behavior	1	1	1	1	0.5	1	5.5	91.7%
PS15	Kao CW; Reynolds BL; Zhang XF; Wong MP (2025)	Effectiveness of Unfocused CF on Article, Preposition & Tense Usage	1	1	1	1	0.5	0.5	5	83.3%
PS16	Zhang XN; Zhang RH (2023)	Feedback, Response & Learner Development: Sociocultural Approach	1	1	1	1	1	0.5	5.5	91.7%
PS17	Supiani; Yansyah; Basthomi Y. (2023)	Indonesian University Students' Engagement with Teacher WCF	1	1	1	1	0.5	0.5	5	83.3%
PS18	Mujtaba SM; Singh MKM; Zhang TF; Ahmed N; Prakash R. (2022)	Unfocused WCF & L2 Learners' Writing Accuracy	1	1	1	1	0.5	0.5	5	83.3%
PS19	Shalizar, R; Rezaei, A (2023)	Focused vs Unfocused ZPD & Explicit Feedback	1	1	1	1	1	1	6	100%
PS20	Cheng, XL; Zhang, LJ (2021)	Sustaining University EFL Learners' Writing Performance	1	1	1	1	0.5	1	5.5	91.7%
PS21	Valizadeh, M (2022)	Effect of Comprehensive WCF on Written Syntactic Complexity	1	1	1	1	1	0.5	5.5	91.7%
PS22	Zhang, TF (2021)	Highly vs Mid-focused WCF on Explicit & Implicit Knowledge	1	1	1	1	1	0.5	5.5	91.7%
PS23	Valizadeh, M; Soltanpour, F (2021)	Focused Direct CF: Effects on Elementary Learners	1	1	1	1	0.5	0.5	5	83.3%
PS24	Li, DY; Zhang, L (2022)	Contextualizing Feedback in L2 Writing: Teacher Scaffolding	1	1	1	1	1	0.5	5.5	91.7%
PS25	Azizi, M; Pavlikova, M; Novakova, KS; Baghana, J (2021)	Dynamic Assessment vs Coded Focused Feedback	1	1	1	1	1	1	6	100%
PS26	Listiani, L; Hódi, A; Nikolov, M (2025)	Engagement with Combined Written & Audio Feedback	1	1	1	1	0.5	1	5.5	91.7%

PS27	Cheng, XL; Liu, Y; Wang, C (2023)	Understanding Student Engagement with Teacher & Peer Feedback	1	1	1	1	1	0.5	5.5	91.7%
PS28	Cheng, XL; Zhang, LJ; Yan, QZ (2025)	Exploring Teacher Written Feedback: Beliefs & Practices	1	1	1	1	1	0.5	5.5	91.7%
PS29	Cheng, XL; Liu, Y (2022)	Student Engagement with Teacher Written Feedback	1	1	1	1	1	0.5	5.5	91.7%

The quality assessment table of the 30 selected studies provides a comprehensive overview of the methodological rigor and reporting standards in research on written corrective feedback (WCF). Overall, most studies scored highly on clarity of purpose (QA1) and usefulness (QA2), reflecting well-defined objectives and relevance to second language writing pedagogy. Methodology (QA3) and conceptual clarity (QA4) were also consistently strong, with nearly all studies employing robust designs such as quasi-experiments, mixed methods, or case studies, and clearly defining feedback types. However, comparison with other work (QA5) and acknowledgment of limitations (QA6) were weaker across the dataset, with many studies only partially situating their findings within broader literature or failing to explicitly discuss constraints. Notably, PS19 (Shalizar & Rezaei, 2023) and PS26 (Azizi et al., 2021) achieved perfect scores, demonstrating exemplary reporting and critical reflection, while PS2 and PS7 scored lower due to limited methodological detail and insufficient discussion of limitations. The majority of studies fell within the 83–92% range, indicating overall high quality but with room for improvement in contextualisation and transparency. Collectively, the table highlights a strong evidence base for WCF effectiveness, learner engagement, and teacher practices, while underscoring the need for more systematic comparison and explicit acknowledgment of study limitations.

Themes (formed from table 4)

Table 5 Analysis for Themes

Theme Code	Theme Name	Studies Included	Count
Theme 1	Effectiveness of Corrective Feedback Types	PS1, PS4, PS5, PS6, PS15, PS19, PS21, PS22, PS23, PS25, PS18	11
Theme 2	Learner Perceptions, Preferences, and Engagement	PS2, PS3, PS7, PS8, PS9, PS10, PS12, PS13, PS14, PS17, PS26, PS27, PS29	13
Theme 3	Teacher Practices, Contextual Factors, and Pedagogical Approaches	PS11, PS16, PS20, PS24, PS28	5

The thematic distribution of the 29 studies reveals a balanced yet distinct focus across three major strands of research in written corrective feedback (WCF). Theme 1 (Effectiveness of Corrective Feedback Types) encompasses 11 studies, highlighting the experimental and quasi-experimental investigations into direct, indirect, focused, unfocused, and metalinguistic feedback. These works collectively demonstrate the pedagogical impact of different feedback strategies on learners' accuracy, fluency, and syntactic complexity. Theme 2 (Learner Perceptions, Preferences, and Engagement) is the largest cluster with 13 studies, underscoring the centrality of learners' affective, cognitive, and behavioural responses to WCF. This theme captures how students' attitudes, preferences, and emotional engagement influence their uptake of feedback and subsequent writing development. Theme 3 (Teacher Practices, Contextual Factors, and Pedagogical Approaches), represented by 5 studies, emphasizes the role of teachers' beliefs, scaffolding strategies, and contextual variables in shaping feedback practices. Together, these themes provide a comprehensive view of the state of the art: effectiveness studies establish the measurable outcomes of WCF, learner-centered research highlights the human dimension of feedback, and teacher-focused studies situate WCF within broader pedagogical and sociocultural contexts. This distribution illustrates a well-rounded body of literature, with learner engagement emerging as the most extensively explored dimension.

Theme 1 (T1)

Table 6 Effectiveness of Corrective Feedback Types

Study	Author & Year	Article Title
PS1	Cheng X.; Zhang L.J. (2021)	Sustaining university EFL learners' writing performance through comprehensive WCF
PS4	Sadeghi K.; Esmaeeli M. (2024)	Probing into Non-native Learners' Written Accuracy: Does Feedback Type Matter?
PS5	Sun H.; Qi W. (2022)	Effects of WCF on College EFL Students' Writing Accuracy
PS6	Fan N.; Ma Y. (2025)	Effects of Indirect CF and Teacher Encouragement
PS15	Kao CW; Reynolds BL; Zhang XF; Wong MP (2025)	Effectiveness of Unfocused CF on Article, Preposition & Tense Usage
PS19	Shalizar, R; Rezaei, A (2023)	Focused vs Unfocused ZPD & Explicit Feedback
PS21	Valizadeh, M (2022)	Effect of Comprehensive WCF on Written Syntactic Complexity
PS22	Zhang, TF (2021)	Highly vs Mid-focused WCF on Explicit & Implicit Knowledge
PS23	Valizadeh, M; Soltanpour, F (2021)	Focused Direct CF: Effects on Elementary Learners
PS25	Azizi, M; Pavlikova, M; Novakova, KS; Baghana, J (2021)	Dynamic Assessment vs Coded Focused Feedback
PS18	Mujtaba SM; Singh MKM; Zhang TF; Ahmed N; Prakash R. (2022)	Unfocused WCF & L2 Learners' Writing Accuracy

The eleven studies grouped under Theme 1 from Table 6 collectively highlight the effectiveness of corrective feedback types in enhancing second language writing performance. Cheng and Zhang (2021) emphasize the role of comprehensive WCF in sustaining accuracy and fluency, while Sadeghi and Esmaeeli (2024) compare explicit, metalinguistic, and elicitation feedback, showing clear gains in grammatical accuracy. Sun and Qi (2022) reinforce these findings by demonstrating that direct, indirect, and metalinguistic feedback all improve accuracy, with metalinguistic feedback particularly effective for linguistic knowledge acquisition. Fan and Ma (2025) add an affective dimension, revealing that teacher encouragement significantly boosts the impact of indirect feedback. Kao et al. (2025) and Mujtaba et al. (2022) explore unfocused feedback, noting its varied effectiveness across linguistic features and learner beliefs. Shalizar and Rezaei (2023) extend the discussion by contrasting focused and unfocused ZPD feedback, underscoring the superiority of sociocultural approaches. Valizadeh (2022) and Zhang (2021) provide evidence on syntactic complexity and explicit versus implicit knowledge development, while Valizadeh and Soltanpour (2021) focus on elementary learners, showing limited but notable effects. Finally, Azizi et al. (2021) highlight dynamic assessment as a powerful alternative to coded feedback. Collectively, these studies confirm that corrective feedback enhances accuracy and complexity, but its effectiveness is contingent on feedback type, learner proficiency, and instructional context.

Theme 2 (T2)

Table 7 Learner Perceptions, Preferences, and Engagement

Study	Author & Year	Article Title
PS2	Alkhalaf N.A.; Alhojailan A.I. (2024)	WCF in EFL Context: Factors Influencing Students' Responses
PS3	Reynolds B.L.; Zhang X. (2023)	Medical School Students' Preferences for Teacher WCF
PS7	Gedik Bal N. (2022)	EFL Students' Perceptions of CF Effectiveness
PS8	Kim Y.; Emeliyanova L. (2021)	Collaborative vs Individual Revision Behavior
PS9	Tsao J.-J. (2025)	Reading Portfolios & Teacher Feedback
PS10	Sinha T.S.; Nassaji H. (2022)	ESL Learners' Perception & WCF Efficacy
PS12	Jinowat N.; Wiboolyasarin W. (2022)	Learner Preferences for WCF in Thai Higher Education

PS13	Subon F.; Ali N.A. (2022)	Effects of Implicit WCF on ESL Learners' Writing
PS14	Ni F.; Xu W. (2026)	Direct vs Indirect WCF: Emotions & Revision Behavior
PS17	Supiani; Yansyah; Basthomi Y. (2023)	Indonesian University Students' Engagement with Teacher WCF
PS26	Listiani, L; Hódi, A; Nikolov, M (2025)	Engagement with Combined Written & Audio Feedback
PS27	Cheng, XL; Liu, Y; Wang, C (2023)	Understanding Student Engagement with Teacher & Peer Feedback
PS29	Cheng, XL; Liu, Y (2022)	Student Engagement with Teacher Written Feedback

The thirteen studies grouped under Theme 2 from table 7 emphasise the learner-centered dimension of written corrective feedback (WCF), focusing on perceptions, preferences, and engagement. Alkhalaf and Alhojailan (2024) highlight contextual and individual factors shaping students' responses, while Reynolds and Zhang (2023) explore medical students' preferences, showing a tendency toward direct feedback on structure. Gedik Bal (2022) and Jinowat and Wiboolyasarini (2022) further illustrate learners' strong desire for comprehensive correction, with preferences varying by cultural and educational context. Kim and Emeliyanova (2021) examine collaborative versus individual revision, revealing that peer engagement can enhance error correction. Tsao (2025) and Subon and Ali (2022) extend the discussion to portfolio assessment and implicit feedback, both perceived positively by learners. Sinha and Nassaji (2022) and Ni and Xu (2026) investigate perceptions and emotions, showing that attitudes and affective responses significantly mediate feedback uptake. Supiani et al. (2023) and Listiani et al. (2025) highlight engagement patterns, with students favoring direct or multimodal feedback. Finally, Cheng and colleagues (2022, 2023) demonstrate how proficiency levels and peer versus teacher feedback shape engagement behaviors. Collectively, these studies underscore that learners' perceptions and emotional engagement are pivotal in determining the effectiveness of WCF, making the human dimension as critical as the feedback type itself.

Theme 3 (T3)

Table 8 Teacher Practices, Contextual Factors, and Pedagogical Approaches

Study	Author & Year	Article Title
PS11	Perks B.J.; Colpitts B.D.F.; Michaud M. (2021)	Role of Individual Preferences in WCF Efficacy
PS16	Zhang XN; Zhang RH (2023)	Feedback, Response & Learner Development: Sociocultural Approach
PS20	Cheng, XL; Zhang, LJ (2021)	Sustaining University EFL Learners' Writing Performance
PS24	Li, DY; Zhang, L (2022)	Contextualizing Feedback in L2 Writing: Teacher Scaffolding
PS28	Cheng, XL; Zhang, LJ; Yan, QZ (2025)	Exploring Teacher Written Feedback: Beliefs & Practices

The five studies under Theme 3 from table 8 highlight the critical role of teacher practices, contextual factors, and pedagogical approaches in shaping the effectiveness of written corrective feedback (WCF). Perks, Colpitts, and Michaud (2021) emphasize how individual learner preferences interact with teacher feedback, showing that affective factors and self-editing strategies influence uptake. Zhang and Zhang (2023) adopt a sociocultural lens, illustrating how feedback and learner responses co-construct development trajectories, underscoring the importance of dialogic and scaffolded interaction. Cheng and Zhang (2021) reinforce the value of comprehensive WCF in sustaining learners' writing performance, situating teacher practices as central to long-term improvement. Li and Zhang (2022) explore teacher scaffolding, demonstrating how contextualized feedback promotes both linguistic accuracy and rhetorical development in argumentative writing. Finally, Cheng, Zhang, and Yan (2025) investigate novice teachers' beliefs and practices, revealing both consistencies and mismatches between their conceptualizations and classroom delivery. Collectively, these studies show that teacher beliefs, scaffolding strategies, and sociocultural approaches are pivotal in determining how feedback is enacted and received. They highlight that beyond the technical aspects of WCF, the pedagogical context and teacher-student

interaction profoundly shape its impact, making teacher practices a cornerstone of effective feedback in ESL/EFL writing pedagogy.

CONCLUSION

This systematic literature review examined Written Corrective Feedback (WCF) in Second Language Writing through three interconnected themes: effectiveness of feedback types, learner perceptions and engagement, and teacher practices within contextual frameworks. By synthesising 29 studies published between 2021 and 2026, the review provides a comprehensive understanding of how WCF contributes to ESL/EFL writing pedagogy.

SUMMARY OF FINDINGS

The findings reveal that WCF consistently improves writing accuracy, fluency, and syntactic complexity, though its effectiveness varies depending on feedback type and instructional context. Direct and metalinguistic feedback were found to be particularly effective in promoting noticing and restructuring of language (Cheng & Zhang, 2021; Sun & Qi, 2022), while unfocused or indirect feedback required greater learner initiative (Mujtaba et al., 2022). Learner-centered studies highlighted that perceptions, preferences, and emotional engagement strongly influence uptake, with supportive and autonomy-enhancing feedback fostering motivation and deeper engagement (Alkhalaf & Alhojailan, 2024; Ni & Xu, 2026). Teacher-focused research emphasized the role of scaffolding, beliefs, and contextual factors in shaping feedback practices, situating WCF as a dialogic and socially mediated process (Li & Zhang, 2022; Cheng, Zhang, & Yan, 2025).

Implications and Suggestions for Future Research

The implications of this review highlight the need for a holistic approach to WCF that integrates cognitive noticing, motivational support, and sociocultural scaffolding. Teachers should tailor feedback strategies to learner proficiency, cultural background, and emotional needs, while institutions should encourage multimodal and dialogic practices to maximize engagement. For future research, longitudinal and cross-cultural studies are recommended to explore how feedback effectiveness evolves over time and across diverse contexts. Additionally, integrating technology-driven approaches such as AI-assisted feedback and learning analytics could provide new insights into personalized engagement. Further investigation into teacher cognition and institutional practices will also deepen understanding of how contextual factors mediate WCF outcomes, ensuring corrective feedback remains a cornerstone of ESL/EFL writing pedagogy.

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REFERENCES

1. Alkhalaf, N. A., & Alhojailan, A. I. (2024). Written corrective feedback in EFL context: Contextual and individual factors influencing students' responses. *World Journal of English Language*, 14(2), 260–270. <https://doi.org/10.5430/wjel.v14n2p260>
2. Azizi, M., Pavlikova, M., Novakova, K. S., & Baghana, J. (2021). The differential effects of dynamic assessment versus coded focused feedback on the process writing of EFL learners. *European Journal of Contemporary Education*, 10(2), 273–284. <https://doi.org/10.13187/ejced.2021.2.273>
3. Cheng, X., & Liu, Y. (2022). Student engagement with teacher written feedback: Insights from low-proficiency and high-proficiency L2 learners. *System*, 109, Article 102880. <https://doi.org/10.1016/j.system.2022.102880>
4. Cheng, X., Liu, Y., & Wang, C. (2023). Understanding student engagement with teacher and peer feedback in L2 writing. *System*, 119, Article 103176. <https://doi.org/10.1016/j.system.2023.103176>

5. Cheng, X., & Zhang, L. J. (2021). Sustaining university English as a foreign language learners' writing performance through provision of comprehensive written corrective feedback. *Sustainability*, 13(15), Article 8192. <https://doi.org/10.3390/su13158192>
6. Cheng, X., Zhang, L. J., & Yan, Q. Z. (2025). Exploring teacher written feedback in EFL writing classrooms: Beliefs and practices in interaction. *Language Teaching Research*, 29(1), 385–415. <https://doi.org/10.1177/13621688211057665>
7. Cheng, X. L., & Zhang, L. J. (2021). Sustaining university English as a foreign language learners' writing performance through provision of comprehensive written corrective feedback. *Sustainability*, 13(15), Article 8192. <https://doi.org/10.3390/su13158192>
8. Fan, N., & Ma, Y. (2025). Effects of indirect corrective feedback and teacher encouragement on EFL students' writing accuracy. *Revista Española de Lingüística Aplicada*, 38(2), 654–682. <https://doi.org/10.1075/resla.22061.fan>
9. Gedik Bal, N. (2022). EFL students' perceptions of the effectiveness of corrective feedback on their written tasks. *Hacettepe Egitim Dergisi*, 37(3), 1116–1129. <https://doi.org/10.16986/HUJE.2021068382>
10. Jinowat, N., & Wiboolyasarin, W. (2022). Investigating learner preferences for written corrective feedback in a Thai higher education context. *TEFLIN Journal*, 33(2), 386–402. <https://doi.org/10.15639/teflinjournal.v33i2/386-402>
11. Kao, C. W., Reynolds, B. L., Zhang, X. F., & Wong, M. P. (2025). The effectiveness of unfocused corrective feedback on second language student writers' acquisition of English article, prepositional and verb tense usages. *Humanities & Social Sciences Communications*, 12(1), Article 1052. <https://doi.org/10.1057/s41599-025-05126-x>
12. Kim, Y., & Emeliyanova, L. (2021). The effects of written corrective feedback on the accuracy of L2 writing: Comparing collaborative and individual revision behavior. *Language Teaching Research*, 25(2), 234–255. <https://doi.org/10.1177/1362168819831406>
13. Kitchenham, B. (2007). Guidelines for performing systematic literature reviews in software engineering. Technical Report, Ver. 2.3 EBSE Technical Report. EBSE.
14. Li, D. Y., & Zhang, L. (2022). Contextualizing feedback in L2 writing: The role of teacher scaffolding. *Language Awareness*, 31(3), 328–350. <https://doi.org/10.1080/09658416.2021.1931261>
15. Listiani, L., Hódi, A., & Nikolov, M. (2025). Low-proficiency students' engagement with combined written and audio feedback in an EFL writing class. *Educational Technology & Society*, 28(4), 116–132. [https://doi.org/10.30191/ETS.202510_28\(4\).RP07](https://doi.org/10.30191/ETS.202510_28(4).RP07)
16. Lockwood, C., Munn, Z., & Porritt, K. (2015). Qualitative research synthesis: Methodological guidance for systematic reviewers utilizing meta-aggregation. *International Journal of Evidence-Based Healthcare*, 13(3), 179–187. <https://doi.org/10.1097/XEB.0000000000000062>
17. Mujtaba, S. M., Singh, M. K. M., Zhang, T. F., Ahmed, N., & Prakash, R. (2022). Unfocused written corrective feedback and L2 learners' writing accuracy: Relationship between feedback type and learner belief. *Journal of Language and Education*, 8(4), 137–152. <https://doi.org/10.17323/jle.2022.15919>
18. Ni, F., & Xu, W. (2026). Beyond correction: The role of direct and indirect written corrective feedback in shaping EFL students' emotions and revision behavior. *Language Teaching Research*. Advance online publication. <https://doi.org/10.1177/13621688261447967>
19. Page, M. J., McKenzie, J. E., Bossuyt, P., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The prisma 2020 statement: An updated guideline for reporting systematic reviews. *Medicina Fluminensis*, 57(4), 444–465. https://doi.org/10.21860/medflum2021_264903
20. Perks, B. J., Colpitts, B. D. F., & Michaud, M. (2021). The role of individual preferences in the efficacy of written corrective feedback in an English for Academic Purposes writing course. *Australian Journal of Teacher Education*, 46(10), 1–20. <https://doi.org/10.14221/ajte.2021v46n10.1>
21. Reynolds, B. L., & Zhang, X. (2023). Medical school students' preferences for and perceptions of teacher written corrective feedback on English as a second language academic writing: An intrinsic case study. *Behavioral Sciences*, 13(1), Article 13. <https://doi.org/10.3390/bs13010013>
22. Sadeghi, K., & Esmaeeli, M. (2024). Probing into non-native learners' written accuracy: Does feedback type matter? *RELJ Journal*, 55(2), 422–437. <https://doi.org/10.1177/00336882221092795>

23. Shalizar, R., & Rezaei, A. (2023). Examining the differential effects of focused vs. unfocused ZPD and explicit feedback on second language writing. *Language Learning Journal*, 51(3), 359–375. <https://doi.org/10.1080/09571736.2022.2042366>
24. Sinha, T. S., & Nassaji, H. (2022). ESL learners' perception and its relationship with the efficacy of written corrective feedback. *International Journal of Applied Linguistics*, 32(1), 41–56. <https://doi.org/10.1111/ijal.12378>
25. Subon, F., & Ali, N. A. (2022). The effects of implicit written corrective feedback on ESL learners' writing skills. *Journal of Language and Education*, 8(4), 153–167. <https://doi.org/10.17323/jle.2022.12304>
26. Sun, H., & Qi, W. (2022). Effects of written corrective feedback on college EFL students' writing accuracy and linguistic knowledge acquisition. *Chinese Journal of Applied Linguistics*, 45(3), 445–461. <https://doi.org/10.1515/CJAL-2022-0310>
27. Sun, H. Y., & Qi, W. B. (2022). Effects of written corrective feedback on college EFL students' writing accuracy and linguistic knowledge acquisition. *Chinese Journal of Applied Linguistics*, 45(3), 445–461. <https://doi.org/10.1515/CJAL-2022-0310>
28. Supiani, Yansyah, & Basthomi, Y. (2023). Indonesian university students' engagement with teacher's written corrective feedback in English as an additional language writing classroom. *Iranian Journal of Language Teaching Research*, 11(2), 147–166. <https://doi.org/10.30466/ijltr.2023.121334>
29. Tsao, J.-J. (2025). EFL students' perceptions of reading portfolios and teacher feedback on reflective writing. *Arab World English Journal*, 16(1), 3–26. <https://doi.org/10.24093/awej/vol16no1.1>
30. Valizadeh, M. (2022). The effect of comprehensive written corrective feedback on EFL learners' written syntactic complexity. *Journal of Language and Education*, 8(1), 100–115. <https://doi.org/10.17323/jle.2022.12052>
31. Valizadeh, M., & Soltanpour, F. (2021). Focused direct corrective feedback: Effects on the elementary English learners' written syntactic complexity. *Eurasian Journal of Applied Linguistics*, 7(1), 132–150. <https://doi.org/10.32601/ejal.911207>
32. Zhang, T. F. (2021). The effect of highly focused versus mid-focused written corrective feedback on EFL learners' explicit and implicit knowledge development. *System*, 99, Article 102493. <https://doi.org/10.1016/j.system.2021.102493>
33. Zhang, X. N., & Zhang, R. H. (2023). Feedback, response, and learner development: A sociocultural approach to corrective feedback in second language writing. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231157680>