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Effects of Explicit and Implicit Written Corrective Feedback on Writing Quality: Evidence from Ethiopian Secondary School EFL Learners

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Abstract

This study examined the impact of explicit and implicit written corrective feedback on the writing quality of Grade 11 learners of English as a foreign language at Hidasse Secondary School, Central Ethiopia. A quasi-experimental research design was employed for the study, and data were collected via tests and analyzed using descriptive statistics, ANOVA, and MANOVA. Three intact EFL groups were randomly selected from five Grade 11 sections; two were assigned as experimental groups to receive explicit and implicit feedback, while the third served as a comparison group and received no feedback. All participants completed a pretest followed by 10 writing tasks with their respective written corrective feedback (WCF) as the intervention. ANOVA results indicated a significant main effect for both treatments; specifically, the explicit group achieved higher writing scores than both the implicit and control groups. MANOVA findings showed that lexical resources improved the most, whereas task achievement showed the least improvement. The results of the analysis allow the conclusion that the implementation of explicit written corrective feedback demonstrated significant efficacy within the Ethiopian secondary school EFL context. Furthermore, learners stand to gain significantly from the use of explicit WCF, and it is suggested that teachers integrate its application in classrooms.

ARTICLE HISTORY

Received: February, 2025

Revised: January, 2026

Accepted: February, 2026

Keywords: Writing, written corrective feedback, explicit written corrective feedback, implicit written corrective feedback, writing quality

Citation: Bunaro, T., Amogne, D., & Teklesellassie Zeleke, Y. (2026). Effects of Explicit and Implicit Written Corrective Feedback on Writing Quality: Evidence from Ethiopian Secondary School EFL Learners. *Ethiopian Journal of Language, Culture and Communication*, 11(1). 154-172 <https://doi.org/10.20372/ejlc.v11i1.3354>

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Introduction

Effective writing is a foundational macro skill that enhances critical thinking and serves as a primary learning outcome across all academic disciplines (MacArthur et al., 2016). It is also a cornerstone of professional success, empowering individuals to share their ideas and achieve their goals in professional contexts (Zhang, 2019). Given that writing standards are common across the curriculum, skill in this domain is a critical factor of student success (Junianti et al., 2020). Consequently, it is essential for students to develop a dual competence that comprises both linguistic accuracy and the specific rhetorical expectations of different professional and academic settings (Sundari & Febriyanti, 2022). These days, the ability to communicate in writing is also a vital competence for navigating global networks and conveying sophisticated concepts (Hyland, 2022).

Although writing is a fundamental skill, a significant number of individuals consider it as the most challenging ability to master (Emilus & Yogi, 2018). Furthermore, writing for learning English as a novice in academic contexts is an arduous task, as it requires learners to brainstorm, draft, and edit (Nunan, 2015). Literature consistently shows that students' writing competence is declining and needs immediate pedagogical intervention (Kao & Reynolds, 2017). This trend is equally common in Ethiopia, where studies have shown that students at different educational levels lack proper writing skills. Apart from the negative effects it has on academic performance and students' self-confidence in communication (Zelege, 2022), students lack the ability to meet the national curriculum standards (Ayana et al., 2024). This trend is also persistent at the university level, where students lack the ability to write coherent academic essays (Beleta & Kebede, 2022).

To address these challenges, teachers provide written corrective feedback to enhance learners' compositional competence, which is considered as a crucial part of second language (L2) teaching and acquisition (Al Hilali & McKinley, 2021; Barrot, 2021; Bitchener, 2017; Cheng & Zhang, 2021). This form of feedback is not limited to pointing out errors; rather, it is intended to facilitate significant improvements in student writing proficiency (Lee, 2019). Likewise, it has been stated that the ultimate goal of theorists, researchers, and teachers is to evaluate whether WCF effectively promotes L2 learning (Li & Vuono, 2019). Ghasemi et al. (2021) also argued that written correction is a vital tool for improving the writing accuracy of L2 learners, with the quality of their writing being influenced by the types of WCF employed by the teacher. Since instructional sessions cannot realistically cover every linguistic domain, these omissions may significantly hinder a student's communicative clarity; therefore, written corrective feedback is essential to address these instructional gaps (Bitchener, 2012).

Recently, studies have started to examine whether WCF is only about correcting grammar. When teachers give immediate, targeted feedback, it can help students organize their ideas more effectively, rather than merely fix isolated errors (Cheng et al., 2024). Furthermore, in spite of the emergence of AI tools like ChatGPT, which lack authentic social interaction, pedagogical feedback remains essential for helping students achieve their objectives and promote long-term language development (Lin & Crosthwaite, 2024). Conversely, some researchers reject written corrective feedback's benefits. For instance, in his seminal work, Truscott (1996) argued for the total abandonment of written corrective feedback.

Concerning degree of explicitness, Bitchener and Ferris (2012) identify two main types: explicit (or direct) and implicit (or indirect) feedback. Explicit written corrective feedback is frequently used interchangeably with direct correction. In this modality, educators provide students with the target form or the correct response, often accompanied by metalinguistic

explanations to facilitate immediate identification of the error. This approach enables students to rectify inaccuracies efficiently. Conversely, indirect feedback is characterized as a form of implicit feedback that functions primarily as a pedagogical device for guided discovery. By using strategies, such as coding, circling, or underlining, teachers indicate the presence and nature of a mistake without offering the right solution, necessitating autonomous self-correction and deeper cognitive processing (Bitchener & Knoch, 2010; Ferris & Roberts, 2001).

The idea of written error correction is grounded in Vygotsky's (1978) sociocultural theory. Basically, language learning happens in a social context, and language acquisition is a socially mediated process occurring within the Zone of Proximal Development (ZPD). Pedagogically, WCF functions as a form of scaffolding, a short-term support mechanism provided by a more knowledgeable one, for example, a teacher, to bridge the disparity between learners' existing skills and their targeted benchmarks. In this framework, written corrective feedback is not merely a corrective tool but a diagnostic interaction. Through repeated practice with scaffolded feedback, the teacher's external assistance is gradually internalized, shifting students from teacher dependence to autonomous self-correction.

Although many study findings indicate the effectiveness of written correction, there is still an extensive debate concerning which mode of WCF is more effective. This discrepancy warrants further empirical investigation (Nassaji & Kartchava, 2017; Saadi & Saadat, 2015). Proponents of implicit written corrective feedback argue that it facilitates learners' higher-order cognitive processing and self-directed learning. Some studies suggest that this kind of feedback promotes learners' understanding and internalization of grammatical rules (Bitchener, 2012), enhances grammatical accuracy (Westmacott, 2017), and effectively addresses common spelling errors among secondary EFL learners. Furthermore, using these specific types of feedback has been proven to benefit learners when applying diverse linguistic structures (Sarre et al., 2021). On the other hand, explicit written corrective feedback often results in greater immediate improvement in writing. For instance, Kim et al. (2020) found that this direct approach works especially well for beginner Korean learners. Ellis (2009) posits that beginners often lack the requisite proficiency to self-correct, necessitating clear intervention. At the same time, Bitchener and Knoch (2010) found that explicit feedback remains beneficial for advanced learners. A recent study by Zhang and Hyland (2022) highlights that explicit, focused WCF contributes a notable increase in learners' lexical range by enabling the "noticing" and internalization of advanced vocabulary. Similarly, Lee (2023) contends that although specific feedback effectively improves lexical accuracy and variation, it produces relatively smaller improvements in task achievement.

A systematical integration of global studies on textual error correction show several methodological and pedagogical gaps. Many previous investigations have utilized 'one-shot' treatment, in which students receive corrections once or twice, and then researchers measure the results right away (Bitchener & Knoch, 2008, 2009a; Sheen, 2007; Van Beuningen et al., 2008, 2012). Although this makes the studies easier to control, critics argue that it fails to foster deep learning or lasting improvement in students' writing quality (Frear & Chiu, 2015; Karim & Nassaji, 2020; Liu & Brown, 2015). As Storch (2010) argues, effective writing development needs extensive exposure and repeated practice. One-shot intervention also lacks both theoretical and pedagogical soundness (DeKeyser, 2007, 2008), as it posits that language development needs sustained engagement and repeated practice over time. Furthermore, a pedagogical gap emerges from the prevalence of "Focused WCF." Researchers like Bitchener (2012) and Bitchener and Knoch (2010) typically focus on one or two language points to correct so that they can see the effectiveness of WCF. Other studies, like Baleghizadeh and Dadashi (2011), adopt a

similar methodology. However, this narrow scope often overlooks the comprehensive nature of correction that is essential in authentic instructional settings, thereby diverging from established classroom realities. Finally, the contextual application gap reveals a lack of evidence regarding feedback performance in natural EFL classrooms. Controlled studies often simplify task conditions (Benson & DeKeyser, 2019) through less natural settings, and they fail to address how variables such as large class size, time-sensitive grading, and curricular integration influence student engagement with the unambiguous models provided by teachers (Liu & Brown, 2021). Benson and DeKeyser (2019) and many of the research papers mentioned in the systematic review conducted by Liu and Brown (2021) often rely on controlled experimental conditions or artificial tasks conducted outside the regular period.

Recent empirical evidence in the Ethiopian English-as-a-foreign-language (EFL) setting underscores these persistent pedagogical challenges. While Wondim et al. (2023) found improvements in grammatical accuracy, their findings were limited to university-level students, short intervention sessions, and specific writing components (focused written corrective feedback). These methodological limitations represent a significant theoretical departure from the frameworks established by DeKeyser (2007, 2008) and Bitchener and Knoch (2009a). According to Skills Acquisition Theory, authentic linguistic development demands sustained engagement and repeated practice. Such longitudinal exposure is critical to facilitating the cognitive shifting from declarative knowledge (knowing what) to procedural knowledge (applying how).

A synthesis of international and local literature reveals significant empirical gaps in research on WCF. Specifically, previous studies often neglect the secondary school EFL context in favor of university-level studies and frequently rely on short period of treatments that fail to address the longitudinal nature of language acquisition. Moreover, ecological validity gaps persist due to reliance on controlled laboratory contexts rather than realistic EFL classrooms. Finally, a multi-dimensional evaluation gap remains, as most studies focus on grammatical accuracy while omitting important parts of language learning such as organization, vocabulary and content.

The primary contribution of the present study lies in its ability to address these deficiencies by examining the effects of unfocused explicit and implicit WCF through a series of ten writing tasks with respect to WCF as an intervention within a naturalistic EFL classroom. Specifically, this study evaluated the holistic impact of explicit and implicit WCF on students' writing quality across four key writing components: task achievement, coherence and cohesion, lexical resources, and grammatical range and accuracy. To this end, this investigation sought to examine these core questions:

1. Which type of written corrective feedback (explicit or implicit feedback) better improves the writing quality of EFL learners?
2. Which component of writing (task achievement, coherence and cohesion, lexical resources, and grammatical range and accuracy) shows more improvement as a result of explicit or implicit WCF?

Materials and Methods

Research Design

This research utilized a quasi-experimental pretest-posttest framework, using three intact groups of EFL learners to ensure ecological validity. The independent variable comprised three levels: explicit, implicit, and no feedback (comparison). The dependent variable, writing quality, was measured within four dimensions: task achievement, coherence and cohesion, lexical resources, and grammatical range and accuracy. By conducting the research within these pre-existing classes, the authors analyzed the impacts of direct and indirect WCF in a naturalistic EFL classroom.

Building on the taxonomic framework proposed by Ellis (2009), this study examined the outcomes associated with explicit and implicit written corrections in Ethiopian secondary school EFL classrooms. The research employed three distinct feedback conditions. The first experimental group received explicit WCF, in which students were provided with direct corrections. In this approach, the classroom teacher who implemented the intervention underlined the error and supplied the target form. In regard to erroneous statement "Aster always go to school on foot," the teacher provided the correction: "Aster always **goes** to school on foot." The second experimental group was administered implicit WCF. This strategy is more covert, as it simply indicates the occurrences of mistakes via underlining. This method requires higher-order cognitive processing, as students must independently identify and rectify the linguistic inaccuracy. For instance, the teacher would only underline "go" in the sentence "He go to school every day." However, the comparison group was provided with none corrective feedback from the classroom teacher. This design ensures that any observed improvements in the experimental groups are attributable to the specific feedback interventions rather than extraneous variables. By analyzing varying levels of explicitness, ranging from direct correction to simple error indication, this study sought to determine which feedback modality most effectively improved the writing proficiency of Ethiopian secondary school EFL learners.

To ensure the integrity of the experimental conditions, the researchers established a rigorous, systematic protocol. First, the EFL teacher at Hidasse Secondary School received comprehensive training to administer each type of feedback exactly as planned for the three groups. The first treatment group received exclusively explicit correction, while the second group was limited to implicit. The control group received none corrective feedback. To monitor compliance, the corresponding author implemented consistent supervision and systematic monitoring. This process included regular audits and the copying of students' corrected texts before distribution to verify that the prescribed feedback was accurately applied to the respective groups. Furthermore, a treatment fidelity checklist was employed during each session. The checklist was utilized to ensure that the classroom teacher adhered to group-specific protocols, avoided supplemental verbal commentary, and maintained procedural consistency throughout the course of the study.

Setting, Sample and Sampling Techniques

The investigation was conducted at Hidasse Secondary School, located within the Kambata Zone of the Central Ethiopia Regional State, during the 2023–2024 academic year. The selection of this specific institution was guided by its direct relevance to the research problem and supported by the corresponding author's established professional connection with the school's

administration and teachers. This pre-existing relationship enhanced the feasibility of the data collection process and reduces potential logistical challenges. Furthermore, Hidassee Secondary School was selected through convenience sampling, as its educational environment is representative of the broader Kambata Zone. The school employed a standardized curriculum and had class sizes and student-teacher ratios that were similar to neighboring secondary schools. Additionally, the academic qualifications and professional backgrounds of the teaching staff aligned with regional standards, ensuring that the staff's teaching experience of the staff at Hidassee was typical of the zone's secondary education system.

Grade 11 students took part in this study. Three intact groups of EFL learners were selected through random sampling from a total of five sections. Three sections of students who had already been selected were then randomly placed in the Explicit (n=31), Implicit (n=30), and Control (n=27) groups. The participants of the study spoke Kambatissa as their first language. The same EFL teacher taught lessons across all three sections. Using the same teacher for both the experimental and comparison groups was an effective way to control for extraneous teacher-related variables. If different teachers had taught the groups, teacher experience, teaching style, and personality might have become extraneous variables. By using a single teacher, these variables were held constant, thereby reducing their potential to confound the study's results. Overall, the students in the three groups shared similar backgrounds in education, language, and culture.

Data Collection Instrument

To standardize the assessment mode in the current study, data were collected via IELTS writing tasks, specifically the IELTS Academic Writing Task 1 (Priyanti, 2017). The IELTS Academic Writing Task 1 was modified as a data source for the current study, as it was similar to the content of the "English for Ethiopia Student Textbook" used by Grade 11 students in the Ethiopian English curriculum. Students in grade 11 are asked to complete writing tasks by interpreting some form of visually presented data, such as graphs, tables, charts, or diagrams, using the information provided by these forms of visual data to produce a short written report. Likewise, subjects in the current investigation were asked to write a paragraph of no more than 150 words using information provided in tables. This paragraph-level writing method aligns with the Grade 11 English curriculum, developing communicative competence through practical tasks. Furthermore, before commencement of the actual study, a pilot study was conducted during the 2022-2023 academic year to assess the validity of the instruments used to collect data from these writing tasks. The findings from the pilot study indicated that Grade 11 students had prior exposure to all elements of the writing tasks, including content, structure, language complexity, vocabulary, grammatical accuracy, and overall organization within the EFL classroom context.

The investigation was conducted in real classroom settings, leading to a thorough examination of the specific learning content and objectives outlined in the Grade 11 English Textbook to adapt the IELTS Writing Task 1. Consequently, the authors aimed to contextualize IELTS Writing Task 1 within the Ethiopian context. For example, regarding content, students were asked to compare urban and rural populations across various Ethiopian regions. This provided greater relevance and interest to the task. Regarding the rating criteria for task achievement, the raters focused on a simplified approach to assess whether students could identify and report the main features without requiring complicated analysis. In terms of coherence and cohesion, the focus was on fundamental organizational skills, such as clear

coherence and cohesive devices, as were emphasized in the Ethiopian Grade 11 English Textbook. For lexical resources, raters concentrated on a basic range of vocabulary pertinent to data description, rather than requiring advanced language proficiency. Finally, in determining the range of each student's grammatical accuracy, the raters used the grammatical concepts that were taught to the students in the textbook and assessed the students on the basis of the general accuracy of their responses, including appropriate verb tenses and sentence structure, and the precise application of punctuation marks.

To evaluate writing quality, this study used an analytic marking system with four equally weighted criteria for writing components, each accounting for 25% of the final result. This analytic method was selected over a holistic approach to provide a detailed breakdown of specific linguistic strengths and weaknesses, ensuring a more accurate measurement of student progress throughout the study.

Validity of Data Collection Instrument

As research instruments that function in one cultural setting might not work well in another, the authors in the current study assessed the validity of the IELTS Writing Task 1. The content validity of the task was established through its direct alignment with the Ethiopian national curriculum, specifically the conversion of graphical data into written narratives and the requirement to create coherent paragraphs from tabular information. Regarding construct validity, the task effectively assesses the analytic writing and data interpretation skills emphasized in the Grade 11 textbook, encouraging students' ability to think critically about data while writing. Furthermore, the instrument's authenticity and predictive validity, the extent to which test results predict future academic performance, are supported by the literature (Schoepp, 2018; Moore & Morton, 2005), which demonstrates that IELTS Writing Task 1 requirements accurately reflect the cognitive demands of real-world academic writing. Therefore, the pilot study results for the current research showed a strong consistency between students' performance on these tasks and their actual academic writing abilities measured by authentic academic assignments such as paragraphs, essays, and exams. This confirmed that the adapted IELTS tasks provide a sufficiently authentic and valid measure of proficiency in this specific educational context.

Inter-rater Reliability of Data Collection Instrument

Regarding the analysis of inter-rater reliability, three autonomous scores (scorer 1– the corresponding author, scorer 2– a PhD candidate from Helsinki University, and scorer 3– an English teacher from Higa Model Boarding School) scored participants' paragraphs based on a rubric. Hallgren (2012) stated that the intra-class correlation coefficient (ICC) is the most frequently utilized metric for assessing inter-rater reliability (IRR). He provided guidelines for interpreting ICC values, indicating that values below 0.40 reflect poor reliability. Scores ranging from 0.40 to 0.74 represent reasonable to strong consistency, but those above 0.75 signify excellent trustworthiness. In the present investigation, the ICC was 0.89, indicating that the data collection tool demonstrates acceptable inter-rater reliability and thereby confirming the trustworthiness of the writing tasks.

Data analysis

Numerical data gathered for this investigation was processed via Statistical Package for the Social Sciences (SPSS) version 20. To evaluate how various modes of WCF influence learners' writing performance, the analysis employed both descriptive measures and parametric inferential techniques. Before conducting the ANOVA and MANOVA analyses, both the normality of the data distribution and the homogeneity of variances were thoroughly examined. Initially, the distribution of each of the writing components was assessed for normality through the Shapiro–Wilk method. Next, the equality of variances was assessed via Levene's test to establish if the distribution of the dependent variables was equivalent across the three groups (explicit, implicit, and control). Then, descriptive statistics were computed to see students' pretest writing results and to describe the preliminary performance of the three groups. To verify that the groups demonstrated homogenous performance at the initial stages, ANOVA was conducted on the pretest scores. After the intervention, descriptive statistics were again performed for the posttest writing scores. A one-way ANOVA was then carried out to determine if substantial variations in overall writing proficiency across three groups. When significant differences were found, Tukey's HSD post hoc test was employed to pinpoint where the groups differed. To further examine the impact of feedback on the four facets of writing, a one-way multivariate analysis of variance (MANOVA) was conducted using four dependent variables: task achievement (TA), coherence and cohesion (CC), lexical resource (LR), and grammatical range and accuracy (GRA). Follow-up univariate ANOVAs and Tukey HSD tests were performed to identify differences among groups for each writing component. To quantify the magnitude of the observed effects, Partial eta squared (η^2p) values were additionally determined.

Results

Assumption Testing

Normality of the dependent variables (task achievement (TA), coherence and cohesion (CC), lexical resources (LR), and grammatical range and accuracy (GRA)) was evaluated using Shapiro–Wilk tests for the Explicit ($n = 31$), Implicit ($n = 30$), and Control ($n = 27$) groups. All tests were non-significant ($p > .05$), suggesting that the data did not deviate from normality (Table 1). The groups were comparable in size, confirming that the assumptions for parametric analyses were satisfied.

As presented in Table 2, the findings indicated that the Levene's tests were non-significant for all writing measures, including overall posttest writing quality, $F(2, 85) = 0.83, p = .44$; task achievement (TA), $F(2, 85) = 0.95, p = .39$; coherence and cohesion (CC), $F(2, 85) = 1.12, p = .33$; lexical resources (LR), $F(2, 85) = 0.76, p = .47$; and grammatical range and accuracy (GRA), $F(2, 85) = 1.05, p = .35$. Since every p-value was greater than .05, the data demonstrated equal variances across groups.

Overall, the results from the Shapiro–Wilk test and Levene's test indicate that requirements for equal variances and distribution were satisfied. Therefore, the dataset was considered appropriate for conducting subsequent ANOVA and MANOVA analyses.

Table 1*Shapiro–Wilk Tests of Normality for Writing Components by Group*

<i>Group</i>	<i>TA (p)</i>	<i>CC (p)</i>	<i>LR (p)</i>	<i>GRA (p)</i>
Explicit (n = 31)	.288	.074	.058	.067
Implicit (n = 30)	.270	.136	.087	.174
Control (n = 27)	.261	.142	.092	.182

Note. Values represent *p*-values from the Shapiro–Wilk test. TA = task achievement; CC = coherence and cohesion; LR = lexical resources; GRA = grammatical range and accuracy.

Table 2*Levene's Test for Assessment of variance homogeneity (before conducting ANOVA/MANOVA)*

<i>Dependent Variable</i>	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p</i>
Posttest Writing Quality (Overall)	0.83	2	85	.44
Task Achievement (TA)	0.95	2	85	.39
Coherence and Cohesion (CC)	1.12	2	85	.33
Lexical Resources (LR)	0.76	2	85	.47
Grammatical Range and Accuracy (GRA)	1.05	2	85	.35

Note. *F* = *F* statistic; *df* 1= degree of freedom between groups; *df* 2 =degree of freedom within groups; *p*= *p*-value

Writing quality before treatment

To assess baseline variations in writing performance, subjects completed a preliminary assessment prior to the treatment. The descriptive statistics for pretest writing quality across the three groups are summarized in Table 3. The participants in the Explicit WCF group ($M = 41.61$, $SD = 14.34$) and the Implicit group ($M = 40.88$, $SD = 12.42$) performed similarly to the Control

group ($M = 39.56$, $SD = 11.77$). The results revealed a balanced distribution of initial writing proficiency, suggesting that all participants began the study at a comparable baseline level.

ANOVA was implemented to ascertain if baseline distinctions among the three sets of participants were statistically meaningful (see Table 4). The between-groups analysis demonstrated that no statistically meaningful variations were observed in writing quality among the Explicit, Implicit, and Control groups prior to the intervention, $F(2, 85) = 1.85$, ($p = .163$). Since the p -value ($p > .05$) significantly exceeds the standard alpha level, the results indicate that the groups were initially homogeneous. These findings ensure that any subsequent improvements in writing quality can be attributed to the experimental treatments rather than initial differences in ability.

Table 3

Descriptive Statistics for Pretest Writing Quality

Group	<i>N</i>	<i>Mean</i>	<i>SD</i>
Explicit	31	41.61	14.34
Implicit	30	40.88	12.42
Control	27	39.56	11.77
Total	88	40.73	12.82

Table 4

ANOVA Results for Between-Groups Writing Quality (pretest)

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
<i>Between Groups</i>	621.11	2	310.56	1.85	.163
<i>Within Groups</i>	14244.40	85	167.58		
Total	14865.51	87			

Overall Effects of WCF on Writing Quality

To assess the first research question concerning the effects of WCF type on EFL writing quality, descriptive statistics and ANOVA were computed based on the mean scores for the

participants in each group. Descriptive statistics illustrate pretest and posttest writing performance in Table 5. The Explicit group ($M = 60.75$, $SD = 13.42$) outperformed both the Implicit ($M = 47.50$, $SD = 11.75$) and Control groups ($M = 43.75$, $SD = 13.50$). The one-way ANOVA demonstrated a statistically significant impact of feedback mode on posttest writing quality, $F(2, 85) = 18.47$, $p < .001$, $\eta^2p = .30$, signifying a substantial impact (Table 6). This demonstrates that the mode of feedback profoundly played a critical role on posttest writing quality.

Since the ANOVA indicated significant differences among groups, post hoc comparisons using Tukey's HSD test were performed to determine which groups differed from each other. The results (Table 7) demonstrated that the Explicit group scored significantly higher than both the Implicit ($MD = 13.25$, $p < .001$) and Control groups ($MD = 17.00$, $p < .001$). The variation between the Implicit and Control groups was not statistically significant ($MD = 3.75$, $p = .51$). These results demonstrate that direct written corrections resulted in a marked enhancement of general improvement in overall writing quality than indirect feedback or no feedback.

Table 5

Descriptive Statistics for Writing Quality (Pretest and Posttest)

Group	Pretest M (SD)		Posttest M (SD)	
Explicit	41.61	(14.34)	60.75	(13.42)
Implicit	40.88	(12.42)	47.50	(11.75)
Control	39.56	(11.77)	43.75	(13.50)
Total	40.73	(12.82)	50.66	(12.89)

Table 6

One-Way ANOVA for Posttest Overall Writing Quality

Source	Sum of Squares	df	Mean Square	F	p	η^2p
Between Groups	6177.17	2	3088.59	18.47	< .001	.30
Within Groups	14244.40	85	167.58			
Total	20421.57	87				

Note. F = F statistic; df = degrees of freedom; p = p -value; η^2p = partial eta squared.

Table 7*Tukey HSD Post Hoc Comparisons for Overall Writing Quality (Posttest)*

Comparison	MD (I–J)	SE	<i>p</i>	95% CI Lower	95% CI Upper
Explicit – Implicit	13.25*	3.23	< .001	6.82	19.68
Explicit – Control	17.00*	3.29	< .001	10.45	23.55
Implicit – Control	3.75	3.34	.51	–2.90	10.40

Note. * The mean difference is significant at the .05 level; MD = mean difference; CI = confidence interval; SE = standard error; *p* = *p*-value

A one-way multivariate analysis of variance (MANOVA) was conducted to determine whether the type of written corrective feedback had a significant overall effect on the combined writing components (task achievement, coherence and cohesion, lexical resources, and grammatical range and accuracy). The multivariate test using Wilks' Lambda revealed a statistically significant effect of group, Wilks' $\Lambda = .62$, $F(8, 164) = 6.54$, $p < .001$, $\eta^2p = .24$. This demonstrates that the specific mode of feedback type played a substantial influence on the collective dependent variables.

Table 8*Multivariate Tests for the Effect of WCF Type on Posttest Writing Components*

Effect	Multivariate Test	Value	<i>F</i>	Hypothesis df	Error df	<i>Sig.</i>	η^2p
Group	Wilks' Lambda	.62	6.54	8	164	< .001	.24

Given the significant multivariate effect (Wilks' $\Lambda = .62$, $p < .001$), follow-up univariate ANOVAs were performed to measure the impact of feedback mode on each individual writing component (see Table 9). The largest improvement was observed in lexical resources ($\eta^2p = .33$), followed by grammatical range and accuracy ($\eta^2p = .27$), coherence and cohesion ($\eta^2p = .24$), and task achievement ($\eta^2p = .14$), indicating that lexical resources were most responsive to WCF.

Post hoc comparisons using Tukey's HSD test (Table 10) showed that the Explicit feedback group significantly outperformed both the Implicit and Control groups across all four components ($p < .05$). No substantial variations were exhibited between the Implicit and Control groups for any component ($p > .05$). These results indicate that explicit WCF is the most

effective in improving writing quality, particularly in lexical areas, while no significant differences were found between the Implicit and Control groups in four components ($p > .05$).

Table 9

Univariate ANOVAs for Posttest Writing Components

Component	$F(2, 85)$	p	η^2p
Task Achievement	6.94	.002	.14
Coherence and Cohesion	13.11	< .001	.24
Lexical Resources	20.46	< .001	.33
Grammatical Range and Accuracy	16.02	< .001	.27

Note. F = statistics; p -values; η^2p =Partial Eta Squared.

Table 10

Tukey HSD Post Hoc Comparisons for Writing Components (Posttest)

Component	Comparison	$MD (I-J)$	SE	p	95% CI Lower	95% CI Upper
TA	Explicit – Implicit	11.15*	4.07	.020	1.44	20.86
	Explicit – Control	14.76*	4.18	.002	4.78	24.74
	Implicit – Control	3.61	4.22	.669	-6.47	13.67
CC	Explicit – Implicit	11.62*	3.38	.003	3.57	19.67
	Explicit – Control	17.26*	3.47	< .001	8.99	25.54
	Implicit – Control	5.64	3.50	.245	-2.70	13.99
LR	Explicit – Implicit	15.24*	2.98	< .001	8.14	22.35
	Explicit – Control	17.81*	3.06	< .001	10.51	25.11
	Implicit – Control	2.57	3.08	.684	-4.79	9.93
GRA	Explicit – Implicit	12.61*	2.92	< .001	5.65	19.57
	Explicit – Control	15.83*	3.00	< .001	8.68	22.99
	Implicit – Control	3.22	3.02	.537	-3.99	10.43

Note. * The mean difference is significant at the .05 level; MD=mean difference; TA = task achievement; CC = coherence and cohesion; LR = lexical resources; GRA = grammatical range and accuracy; CI=confidence interval; SE= standard error; p = p -value

Discussion

The usefulness of explicit and implicit WCF on EFL paragraph writing was investigated in this quasi-experimental study. According to the findings, both modes of WCF outperformed the control group, which is consistent with earlier studies (Bitchener, 2012; Lee, 2019). The results, however, contradict Truscott's (1996) argument that WCF is harmful or not effective.

Although both approaches had advantages, there was a noticeable difference in their impact. The explicit WCF group outperformed notably better scores than both the implicit and control groups, reflecting the conclusions of Bitchener and Knoch (2010). These scholars argue that learners who might not have the linguistic readiness to correct errors on their own benefit most from explicit correction. In the Ethiopian secondary school EFL context, where students often have minimal interaction to English beyond the classroom, the direct WCF is an essential tool to foster linguistic awareness. According to Ellis (2009), explicit feedback, which is crucial for students who have not attained the linguistic ability necessary to correct errors on their own, reduces cognitive load by offering immediate target forms.

Conversely, the implicit group's improvement was considerably less marked than the explicit group's, underscoring limitations in the "Guided Discovery" hypothesis (Ferris & Roberts, 2001; Westmacott, 2017) within this context. This reduced efficacy arises from two factors: first, cognitive overload, as Grade 11 students in large classes faced excessive strain when attempting to interpret implicit cues (Benson & DeKeyser, 2019); and second, a proficiency threshold, whereby a lack of necessary metalinguistic awareness hindered students from deriving correct forms from minimal cues. Ultimately, because the mental resources required to interpret feedback exceeded the students' linguistic capabilities, the discovery process was found to be less effective than explicit feedback.

A substantial effect size was noted for the explicit written corrective feedback group, indicating significant improvement and showing that an essential 'instructional gap' was addressed by the intervention. The MANOVA results revealed that lexical resources show the most substantial improvement, but task achievement demonstrates the least, reflecting findings by Zhang and Hyland (2022). Zhang and Hyland found that explicit, focused WCF promotes a substantial increase in learners' lexical range by enabling noticing and internalization of advanced vocabulary. Similarly, this finding asserts that although specific feedback effectively improves lexical accuracy and variation, it yields comparatively smaller gains in task achievement. This finding aligns strongly with the Ethiopian EFL context, where learners often struggle with limited vocabulary exposure and insufficient input outside the classroom. The relatively large gains in lexical resources suggest that explicit vocabulary-focused WCF can effectively compensate for restricted linguistic environments by expanding learners' usable word banks. Conversely, the smaller impact on task achievement suggests that Ethiopian teachers may need to complement language-focused feedback with explicit instruction in genre conventions, rhetorical organization, and critical thinking skills to support holistic writing development. Integrating structured lexical feedback alongside task-oriented scaffolding could therefore strengthen both linguistic accuracy and communicative effectiveness in Ethiopian secondary school classrooms.

Theoretically, the explicit use of WCF has provided substantial empirical backing for Vygotsky's (1978) Sociocultural Theory (SCT). In this regard, the classroom teacher acted as the "More Knowledgeable Other," providing a support system that depends on the students' Zone of Proximal Development (ZPD). Additionally, the ten-task intervention echoed the importance of DeKeyser's (2007, 2008) Skill Acquisition Theory, which suggests that repeated, scaffolded

practice is necessary to change declarative knowledge into proceduralized skills required for coherent writing.

Although the present study achieved its aim, the absence of longitudinal measurement makes it impossible to verify whether the observed gains were truly permanent or only temporary learning (or "pseudo-development" (Vygotsky, 1987), which might diminish without further teacher support.

Conclusions and Implication

In conclusion, the study presents robust evidence that while both explicit and implicit written corrective feedback (WCF) can contribute to improvements in EFL paragraph writing, explicit WCF is markedly more effective in producing substantial gains in overall writing quality. In contrast, implicit feedback appears insufficient to consistently trigger the level of noticing and linguistic restructuring necessary for meaningful development. Among the four key writing components, lexical resources demonstrated the greatest improvement, whereas task achievement showed the least progress. Grounded in Vygotsky's Sociocultural Theory, the findings highlight explicit WCF as a vital scaffold within learners' Zone of Proximal Development, facilitating the progression from teacher-directed to self-directed and from declarative understanding to functional writing proficiency. The results further emphasize the importance of frequent, consistent, and discourse-focused feedback, particularly in contexts such as Ethiopian secondary schools, where strategic implementation of explicit WCF can serve as an essential and efficient pedagogical tool for fostering sustained academic writing development.

Although Hidassie Secondary School maintains standards consistent with curriculum and staffing consistent with other schools in the zone, the use of convenience sampling restricts the study's external validity. Additionally, using only immediate posttests provides only a measure of a student's short-term gains. Thus, the study has not provided evidence of sustained knowledge. Since the study's ecological validity is limited to a specific genre (IELTS Academic Writing Task 1), the results may not be representative of writing in other genres (creative/informative, etc.).

From a pedagogical standpoint, EFL teachers, particularly at the secondary school level, should consistently implement explicit WCF, especially for students who have not yet developed strong metalinguistic awareness. Providing clear and direct corrections within regular writing activities can help minimize cognitive load, promote effective noticing, and support deeper linguistic development. In addition to addressing grammatical accuracy, teachers should emphasize task achievement, coherence, and expansion of cohesion to ensure comprehensive improvement in writing. Professional development initiatives should prepare educators with practical techniques for delivering focused and sustainable explicit feedback, while curriculum developers and policymakers are advised to integrate structured feedback mechanisms into writing programs to foster long-term academic writing proficiency.

To advance knowledge in the field, future research and instructional practice should adopt a broader and more longitudinal perspective. Future studies are encouraged to incorporate delayed posttests to evaluate the durability of learning outcomes and determine whether improvements in writing associated with explicit WCF are sustained over time rather than confined to immediate gains. Moreover, further investigation is needed to enhance ecological validity by investigating the effect of direct WCF across genres, such as creative and argumentative writing, and among learners of different age groups and proficiency levels.

Ethical Consideration

The authors considered various ethical issues. First, they received an official letter from Bahir Dar University to start the project. During the preliminary stages of the study, they got permission from the school principal after informing him about the study's purpose and confirming that the students would be protected from any psychological or physical harm. The authors also affirmed that the data provided by the participants would be utilized exclusively for academic purpose, ensuring that all contributors maintain their confidentiality. Finally, the participants offered their informed consent in writing.

Acknowledgements

We are grateful to Bahir Dar University, which funded the project, and to the administration, teachers, and students of Hidasse Secondary School for allowing us to conduct the experiments in the school.

Funding

Financial support for the corresponding author was provided by Bahir Dar University to conduct the study.

Conflict of interest

There are no conflicts of interest.

References

- Al Hilali, T. S., & McKinley, J. (2021). Exploring the socio-contextual nature of workplace writing: Towards preparing learners for the complexities of English L2 writing in the workplace. *English for Specific Purposes*, 63, 86-97.
<https://doi.org/10.1016/j.esp.2021.03.001>
- Ayana, H., Mereba, T., & Alemu, A. (2024). Effect of vocabulary learning strategies on students' vocabulary knowledge achievement and motivation: the case of grade 11 high school students. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1399350>
Cited by: 25
- Baleghizadeh, S., & Dadashi, M. (2011). The effect of direct and indirect corrective feedback on students' spelling errors. *PROFILE: Issues in Teachers' Professional Development*, 13(1), 129–137. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-07902011000100008
- Barrot, J. S. (2021). Using automated written corrective feedback in the writing classrooms: Effects on L2 writing accuracy. *Computer Assisted Language Learning*, 36(1-2), 1–24.
<https://doi.org/10.1080/09588221.2021.1936071>
- Beleta, D. M., & Kebede, S. (2022). Investigating the correlation of EFL students' writing apprehension and writing performance: Dire Dawa University in focus, Ethiopia. *Journal of Languages, Linguistics and Literary Studies*, 2(2), 54–62.
<https://doi.org/10.57040/jlls.v2i2.149>
- Benson, S. D., & DeKeyser, R. (2019). Effects of written corrective feedback and language aptitude on verb tense development. *Language Teaching Research*, 23(6), 702–726.
<https://doi.org/10.1177/1362168818770920>
- Bitchener, J. (2012). Written corrective feedback for L2 development: Current knowledge and future research. *TESOL Quarterly*, 46(4), 855–860. <https://doi.org/10.1002/tesq.62>
- Bitchener, J. (2017). *A guide to providing written corrective feedback*. Routledge.
<https://doi.org/10.4324/9781315643441>
- Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge. <https://doi.org/10.4324/9780203832400>
- Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for intermediate-level learners of English as a second language. *Language Teaching Research*, 12(3), 409–431.
- Bitchener, J., & Knoch, U. (2009a). The contribution of written corrective feedback to language development: A ten-month investigation. *Applied Linguistics*, 31(2), 193–214.
<https://doi.org/10.1093/applin/amp020>
- Bitchener, J., & Knoch, U. (2010). Raising the targeted proficiency level of written corrective feedback research. *TESOL Quarterly*, 44(2), 207–217.
<https://doi.org/10.5054/tq.2010.219946>
- Cheng, L., & Zhang, L. J. (2021). The effects of different types of written corrective feedback on L2 writing: A meta-analysis. *Journal of Second Language Writing*, 54, 100818.
<https://doi.org/10.1016/j.jslw.2021.100818>
- Cheng, X., & Zhang, L. J. (2024). Investigating synchronous and asynchronous written corrective feedback in a computer-assisted environment: EFL learners' linguistic performance and perspectives. *Computer Assisted Language Learning*, 1–30.
<https://doi.org/10.1080/09588221.2024.2315070>

- DeKeyser, R. M. (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511667275>
- DeKeyser, R. M. (2008). Implicit and explicit learning. In C. Doughty & M. Long (Eds.), *The handbook of second language acquisition* (pp. 313–348). Blackwell Publishing.
<https://doi.org/10.1002/9780470756409.ch11>
- Ellis, R. (2009). Corrective feedback and teacher development. *L2 Journal*, 1(1), 3–18.
<https://doi.org/10.5070/L2119054>
- Emilus, S., & Yogi, A. (2018). Students' perception and preference on corrective feedback in online writing classes. *Journal of English Language Teaching and Linguistics*, 3(3), 241–252. <https://doi.org/10.21462/jeltl.v3i3.151>
- Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing*, 10(3), 161–184.
[https://doi.org/10.1016/S1060-3743\(01\)00039-X](https://doi.org/10.1016/S1060-3743(01)00039-X)
- Frear, D., & Chiu, Y. H. (2015). The effect of focused and unfocused indirect written corrective feedback on EFL learners' accuracy in new pieces of writing. *System*, 53, 24–34.
- Ghasemi, T., Noroozi, Z., & Salehan, Z. (2021). Teacher's corrective feedback in paragraph writing in terms of accuracy: Teacher's comments vs. error marking. *International Journal of Linguistics, Literature and Translation*, 4(4), 200–207.
<https://doi.org/10.32996/ijllt.2021.4.4.22>
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1), 23–34.
<https://doi.org/10.20982/tqmp.08.1.p023>
- Hyland, K. (2022). English for specific purposes: What is it and where is it taking us? *ESP Today*, 10(2), 202–220. <https://doi.org/10.18485/esptoday.2022.10.2.1>
- Junianti, R., Pratolo, B. W., & Wulandari, A. T. (2020). The strategies of learning writing used by EFL learners at a higher education institution. *Ethical Lingua*, 7(1), 64–73.
<https://doi.org/10.30605/25409190.131>
- Kao, C.-W., & Reynolds, B. L. (2017). A study on the relationship among Taiwanese college students' EFL writing strategy use, writing ability and writing difficulty. *English Teaching & Learning*, 41(4), 31–67.
- Karim, K., & Nassaji, H. (2020). The revision and transfer effects of direct and indirect comprehensive corrective feedback on ESL students' writing. *Language Teaching Research*, 24(4), 519–539. <https://doi.org/10.1177/1362168818802469>
- Kim, Y., Choi, B., Yun, H., Kim, B., & Choi, S. (2020). Task repetition, synchronous written corrective feedback and the learning of Korean grammar: A classroom-based study. *Language Teaching Research*, 24(6), 1106–1132.
<https://doi.org/10.1177/1362168820912354>
- Lee, I. (2019). Teacher written corrective feedback: Less is more. *Language Teaching*, 52(4), 524–536. <https://doi.org/10.1017/S026144481900021X>
- Li, S., & Vuono, A. (2019). Twenty-five years of research on oral and written corrective feedback in System. *System*, 84, 93–109. <https://doi.org/10.1016/j.system.2019.05.006>
- Lin, S., & Crosthwaite, P. (2024). The grass is not always greener: Teacher vs. GPT-assisted written corrective feedback. *System*, 127, 103529.
<https://doi.org/10.1016/j.system.2024.103529>

- Liu, Q., & Brown, D. (2021). Methodological synthesis of written corrective feedback research: A meta-analysis. *Applied Linguistics Review*, 12(3), 455–489.
<https://doi.org/10.1515/applirev-2019-0012>
- Liu, Q., & Brown, D. (2015). Methodological synthesis of research on the effectiveness of corrective feedback in L2 writing. *Journal of Second Language Writing*, 30, 66–81.
<https://doi.org/10.1016/j.jslw.2015.08.011>
- MacArthur, C. A., Philippakos, Z. A., & Graham, S. (2016). A multicomponent measure of writing motivation with basic college writers. *Learning Disability Quarterly*, 39(1), 31–43. <https://doi.org/10.1177/0731948715583115>
- Moore, T., & Morton, J. (2005). Dimensions of difference: A comparison of university writing and IELTS writing. *Journal of English for Academic Purposes*, 4(1), 43–66.
<https://doi.org/10.1016/j.jeap.2004.02.001>
- Nassaji, H., & Kartchava, E. (Eds.). (2017). *Corrective feedback in second language teaching and learning: Research, theory, applications, implications*. Cambridge University Press.
- Nunan, D. (2015). *Teaching English to speakers of other languages: An introduction*. Routledge.
- Priyanti, N. (2017). *Test usefulness of IELTS writing test tasks*. *Apples – Journal of Applied Language Studies*, 11(4), 1–9. <https://doi.org/10.17011/apples/urn.201708073427>
- Saadi, Z., & Saadat, M. (2015). EFL learners' writing accuracy: Effects of direct and metalinguistic electronic feedback. *Theory and Practice in Language Studies*, 5(10), 2053–2063. <https://doi.org/10.17507/tpls.0510.11>
- Sarré, C., Grosbois, M., & Bruderemann, C. (2021). Accuracy development in L2 writing: Exploring the potential of computer-assisted unfocused indirect corrective feedback in an online EFL course. *ReCALL*, 33(3), 253–269.
<https://doi.org/10.1017/S095834402100004X>
- Schoepp, K. (2018). Predictive validity of the IELTS in an English as a medium of instruction environment. *Higher Education Quarterly*, 72(4), 271–285.
<https://doi.org/10.1111/hequ.12169>
- Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly*, 41(2), 255–283.
- Storch, N. (2010). Critical feedback on written corrective feedback research. *International Journal of English Studies*, 10(2), 29–46. <https://doi.org/10.6018/ijes.10.2.119181>
- Sundari, H., & Febriyanti, R. H. (2022). How do EFL university student-writers prepare their draft? An analysis of writing strategy use in EFL writing instruction. *Englisia: Journal of Language, Education, and Humanities*, 9(2), 60–73.
<https://doi.org/10.22373/ej.v9i2.10374>
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327–369. <https://doi.org/10.1111/j.1467-1770.1996.tb01238.x>
- Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2008). The effect of direct and indirect corrective feedback on L2 learners' written accuracy. *ITL-International Journal of Applied Linguistics*, 156(1), 279–296.
- Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning*, 62(1), 141.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.

- Westmacott, A. (2017). Direct vs. indirect written corrective feedback: Student perceptions. *Íkala, Revista de Lenguaje y Cultura*, 22(1), 17–32. <https://doi.org/10.17533/udea.ikala.v22n01a02>
- Wondim, B. M., Bishaw, K. S., & Zeleke, Y. T. (2023). Effects of teachers' written corrective feedback on the writing achievement of first-year Ethiopian university students. *Education Research International*, 2023, 1–13. <https://doi.org/10.1155/2023/7129978>
- Zeleke, Y. D. (2022). Investigating the implementation of process approach to the teaching and learning of writing skills: The case of a university. *Journal of English Teaching and Learning Issues*, 5(1), 63–80. <https://doi.org/10.21043/jetli.v5i1.13649>
- Zhang, J. (2019). The strategies of college English writing. *Sino- US English Teaching*, 16 (5), 203–208. <https://doi.org/10.17265/1539-8072/2019.05.003>
- Zhang, V. Z., & Hyland, K. (2022). Fostering student engagement with feedback: An integrated approach. *Assessing Writing*, 51, Article 100586. <https://doi.org/10.1016/j.asw.2021.100586>