Students' Uptake of Written Corrective Feedback Using Error Correction Codes in EFL Writing

Talal M. Amara

Sabratha University, Libya

DOI: https://dx.doi.org/10.47772/IJRISS.2026.100300241

Received: 16 March 2026; Accepted: 21 March 2026; Published: 02 April 2026

ABSTRACT

This study investigates how English as a Foreign Language (EFL) students respond to Written Corrective Feedback (WCF), particularly when it is provided in the form of coded error feedback in their writing. Written corrective feedback is widely used in second language writing instruction to help learners identify and correct linguistic errors, yet students' ability to interpret and effectively apply such feedback varies considerably. Understanding how learners engage with coded feedback can provide valuable insights into the role of feedback in supporting language development.

Using a qualitative research design, data were collected from 10 university-level EFL students who were asked to revise their written drafts after receiving coded feedback from their instructor. The feedback consisted of standardized error codes indicating specific grammatical or language-related issues. The study analyzes the students' original and revised drafts in order to examine how they interpreted the feedback and to what extent they were able to successfully revise their errors.

The findings indicate that when students clearly understand the meaning of the feedback codes, they are generally able to make accurate revisions, suggesting active engagement with language rules and the development of self-editing strategies. However, cases of partial or incorrect revisions reveal that some learners experience difficulty interpreting the codes or applying them appropriately. In addition, uncorrected errors in the revised drafts may reflect factors such as limited motivation, lack of confidence, or unclear feedback. These findings support previous research (e.g., Hyland & Hyland, 2006) highlighting the importance of context-sensitive feedback practices. The study recommends combining focused WCF with opportunities for teacher guidance, discussion, or peer collaboration to improve learners' understanding and uptake. Overall, the study emphasizes the pedagogical value of WCF in EFL writing instruction and calls for more interactive feedback practices and further research on its long-term effects and learner-related variables.

Keywords: Engagement, Autonomous learning, Scaffolding, Awareness

INTRODUCTION

Written corrective feedback (WCF) plays a crucial role in second language acquisition (SLA), particularly in improving writing accuracy. Although WCF is widely used in language teaching, its effectiveness has been debated (Van Beuningen, 2010; Truscott, 1996). Nevertheless, most researchers agree that form-focused feedback generally supports learners' writing development (Bitchener & Knoch, 2010; Ferris, 1999). Various WCF types exist such as indirect versus direct, focused versus unfocused, and coded versus verbal each serving different pedagogical functions. Selecting the most suitable feedback for specific learners and contexts remains a challenge for L2 instructors (Bitchener & Storch, 2016; Ferris, 2011). Among these types, metalinguistic feedback, where teachers provide error codes to prompt self-correction, has received comparatively less attention. Compared to direct corrections or explicit explanations, error-coded feedback requires greater learner engagement and cognitive effort. Due to learners' difficulties in interpreting these codes, metalinguistic feedback remains underexplored, leaving a gap in understanding its effects on L2 writing development.

This study aims to fill this gap by investigating how university-level EFL students in Libya interpret and apply error-coded WCF within a process-based writing approach. It explores the extent to which learners successfully

incorporate coded feedback into their revisions and identifies challenges they face in using such feedback effectively. By examining these aspects, the research contributes both theoretically by clarifying the mechanisms by which metalinguistic feedback supports language acquisition and practically by providing actionable guidance for teachers on integrating error codes into writing instruction. Given writing's importance as a lifelong skill in academic and professional contexts, optimizing feedback strategies like error codes has significant pedagogical value.

LITERATURE REVIEW

Written Feedback

Providing effective written feedback is a crucial responsibility for English writing teachers (Hyland, 1998; Hyland & Hyland, 2001). Brookhart (2010) distinguishes positive feedback as reinforcement and negative feedback as a form of punishment, emphasizing the importance of delivering feedback in a polite and constructive manner to support learners' cognitive and writing development. Responding to student writing is thus a complex task with potential impacts on learners' motivation and progress. Students generally prefer teacher-written feedback due to its significant role in enhancing their writing proficiency. To maximize feedback effectiveness, teachers should consider learner needs and preferences when deciding whether and how to offer corrective feedback (Ferris, 2006; Hyland, 1998; Hyland & Hyland, 2006). Encouraging learners to engage actively with feedback by discussing, analyzing, and reflecting on teacher comments can promote deeper understanding and improvement. Tools such as revision checklists further support students in developing self-correction and editing skills (Hyland, 1998; Hyland & Hyland, 2001). Written feedback strategies vary widely, including distinctions such as direct vs. indirect, explicit vs. implicit, focused vs. unfocused, form-focused vs. content-focused, and metalinguistic feedback. Research suggests that feedback focusing on language form, which improves writing accuracy, is more commonly employed and generally more effective than content-based feedback (Ferris, 2006; Lee, 2008; Magno & Amarles, 2011). However, selecting the most appropriate feedback method requires sensitivity to learner proficiency, context, and instructional goals.

Written Corrective Feedback in the EFL Classroom

Written corrective feedback is a central concern in second language acquisition research and pedagogy, particularly in EFL writing classrooms. It refers to teachers' written responses aimed at correcting linguistic errors to improve grammatical accuracy and writing quality (Bitchener & Storch, 2016). WCF research broadly distinguishes between direct feedback, which provides explicit corrections, and indirect feedback, which signals errors but leaves correction to the learner.

Indirect feedback includes metalinguistic feedback, where teachers provide comments or codes indicating error types, encouraging learners to identify and correct mistakes independently. This approach is theorized to enhance learner autonomy and engagement, promoting conscious noticing of linguistic forms (Ferris, 2011). The theoretical foundations of WCF include Schmidt's (1990) Noticing Hypothesis, which argues that conscious attention to errors is essential for acquisition, and Swain's (2005) Output Hypothesis, which highlights feedback as a stimulus for language modification and internalization. Research comparing direct and indirect WCF reveals mixed results. Some studies (e.g., Bitchener & Knoch, 2010) show direct feedback yields stronger short-term gains in grammatical accuracy, while others (Lee, 2022) suggest that indirect feedback with error codes may foster deeper processing and longer-term retention. Learner factors such as proficiency, motivation, and feedback literacy crucially mediate these effects (Rasool, Qian, & Aslam, 2024). In resource-limited EFL settings with large classes, error-coded feedback provides a pragmatic balance, enabling teachers to deliver individualized guidance without excessive workload. However, the effectiveness of this method depends on learners' ability to decode the feedback accurately, highlighting the need for proper training in error code interpretation.

Error Correction Codes in EFL Writing Classrooms

Error correction codes are a specific form of metalinguistic feedback characterized by symbolic abbreviations placed in student texts to indicate error types (Ellis, 2009). Examples include 'VT' for verb tense, 'SP' for spelling, and 'Art' for article errors (Bitchener, Young, & Cameron, 2005). These codes serve as implicit cues,

allowing teachers to highlight errors without providing direct corrections, thus encouraging learner reflection and autonomy (Hyland, 1998). The literature reveals several thematic findings regarding error correction codes:

- Learner Proficiency and Decoding Ability: The success of error codes depends heavily on learners' familiarity with grammatical terminology and meta-grammatical knowledge. Intermediate and advanced learners typically benefit more, as they can interpret codes and apply corrections independently (Bitchener & Knoch, 2010; Ferdouse, 2011). Less proficient learners often require additional explanations or more explicit feedback forms (Rasool, Qian, & Aslam, 2024; Khah & Farahian, 2016).

- Learner Autonomy and Cognitive Engagement: Error-coded feedback fosters learner autonomy by shifting responsibility for correction onto students, which may deepen cognitive processing and long-term learning (Lee, 2022; Sampson, 2012). However, this approach presumes a certain level of learner engagement and feedback literacy.

- Teacher Efficiency: Correction codes provide an efficient method for teachers to deliver detailed feedback without rewriting texts extensively, particularly valuable in large classes or time-constrained environments (Bitchener & Knoch, 2010).

- Effectiveness Compared to Other Feedback Types: Studies report mixed results on whether coded feedback outperforms direct correction. Van Beuningen, De Jong, and Kuiken (2012) found both direct and coded WCF improved writing accuracy, without a clear advantage for either. Meanwhile, Ferris and Roberts (2001) and Lee (1998) underscore that more explicit clues often help learners detect and correct errors more successfully, especially when their grammatical knowledge is limited.

In sum, while error correction codes represent a promising feedback strategy that balances teacher workload and learner involvement, their success hinges on learner proficiency and adequate support in code interpretation. Building on these insights, the present study examines how learners in a Libyan university EFL context respond to written corrective feedback provided through the use of error correction codes. In particular, the study seeks to understand the ways in which learners interpret these codes and apply them when revising their written drafts. It also explores the challenges learners encounter while responding to such coded feedback, including potential difficulties in understanding the codes or using them effectively during the revision process. By addressing these issues, the study aims to contribute to the theoretical understanding of the mechanisms underlying WCF, while also offering practical insights for teachers who wish to implement effective feedback strategies in similar EFL learning environments.

RESEARCH METHOD

Research Design

This study adopted a qualitative research design to explore how EFL students respond to written corrective feedback provided in the form of error correction codes. The aim was to gain in-depth insights into students' revision behaviors, interpretive strategies, and engagement with teacher feedback within an authentic academic writing context. A qualitative approach was used as it allows for a rich, contextualized analysis of learner responses, focusing on how meaning is constructed and interpreted during the writing and revision process.

Participants

Ten EFL students from the Department of English at Sabratha University participated in the study. The sample included both male and female students, ranging from the fifth to the eighth semester. Participants were selected using convenience sampling, as they were readily accessible to the researcher and willing to participate. While this method has limitations, it is widely used in qualitative research where the goal is depth over breadth and where rich, context-specific data are prioritized over generalizability (Merriam, 2009).

The selection of participants from different academic semesters was intentional. It allowed the study to capture a range of developmental stages in academic writing competence, providing a broader understanding of how

learners with varied experience levels interpret and respond to coded feedback. Despite this variation, all participants had completed foundational writing courses and demonstrated sufficient language proficiency to understand the coding system used in feedback. They had intermediate to upper-intermediate English proficiency, based on their placement scores and instructor evaluations. The small sample size was deemed sufficient due to the exploratory nature of the study and the depth of analysis conducted for each case. Data saturation was approached when no new patterns emerged in students' revision behaviors and feedback engagement. Participation was voluntary, and all ethical protocols such as informed consent, anonymity, and secure data storage were strictly observed.

Data Collection Procedures

Instructors typically begin writing sessions with topic-based instruction, followed by student writing practice. These sessions, approximately two hours long, often emphasize grammar-focused feedback due to the strong grammar-oriented nature of local English instruction. Prior to data collection, the researcher coordinated with the course instructor. Each participant submitted an initial writing sample (Draft 1), which was marked using a consistent set of error correction codes (e.g., VT = verb tense, WW = wrong word, SP = spelling). Students were then instructed to revise their texts (Draft 2) based solely on the coded feedback. To maintain consistency, only coded feedback was provided, without direct corrections or explanations. A standardized error code sheet was shared with students beforehand to ensure understanding. Both drafts were collected for analysis, enabling a close examination of how students interpreted and responded to the feedback in their revisions.

Data Analysis

The revised drafts (Draft 2) were analyzed using document analysis, a qualitative method that involves examining textual data to identify patterns, themes, and behaviors. The analysis focused on the types of errors students attempted to correct, the accuracy of those corrections, and the revision strategies employed. Each revision was categorized into one of four themes:

- Successful Correction: Error fully identified and accurately corrected.
- Partial Correction: An attempt is made, but the correction is only partly accurate.
- Incorrect Correction: The correction introduces a new error or shows misunderstanding.
- No Correction: The feedback is ignored or not acted upon.

This framework was developed based on previous research in SLA and written feedback (e.g., Ellis, 2009; Ferris, 2010; (Sheen, Wright and Moldawa., 2009), allowing for nuanced insight into students' uptake and processing of teacher feedback.

RESULTS AND DISCUSSION

Before presenting the thematic results, it is important to briefly revisit participant demographics to help contextualize the results. The participants included ten EFL students enrolled in English department across semesters [5th and 8th]. The age range was approximately [e.g., 18–23 years]. Most participants had intermediate to upper-intermediate English proficiency. This mix of proficiency levels and academic experience likely influenced the way learners processed and responded to coded corrective feedback in writing. This section presents four major themes that emerged from the analysis of student revisions: *Successful Correction*, *Partial Correction*, *Incorrect Correction*, and *No Correction*. These themes provide insight into how learners interpret coded feedback, how accurately they apply it, and what their responses reveal about their metalinguistic awareness and writing development. The four categories provided a practical and analytically useful framework because they:

- Captured a range of correction outcomes, from full resolution to complete misunderstanding.
- Reflected cognitive engagement with errors (e.g., recognizing the errors vs. ignoring corrections).

- Enabled systematic coding of responses based on observable features.
- Supported deeper insights into error-handling patterns, feedback impact, and intervention strategies.

1. Successful Correction Theme

This theme captures instances where students accurately responded to teachers' coded corrective feedback by revising their sentences to eliminate errors. The corrections made by the students demonstrate not only their ability to recognize mistakes but also their understanding of grammatical rules and vocabulary usage necessary for producing more accurate and fluent writing. As shown in the examples, coded feedback serves as a scaffold that enables learners to self-correct and refine their linguistic output, a process supported by prior research (Ferris, 2006; Bitchener & Knoch, 2010). In this theme, students accurately understood and applied the teacher's error codes, successfully revising their original sentences. This suggests that when learners comprehend coded feedback, they can make precise and meaningful improvements in their writing. According to Hyland and Hyland (2006), coded feedback enhances students' ability to self-monitor and fosters a deeper understanding of language structures. Similarly, Chandler (2003) found that students who received coded feedback produced significantly more accurate revisions than those who received no feedback or only direct corrections.

These instances of successful correction demonstrate that error codes, when properly interpreted, can effectively guide students to self-correct. This aligns with the view that coded corrective feedback promotes learner autonomy by encouraging students to take responsibility for identifying and addressing their own errors (Lee, 2017). Moreover, successful revisions reflect a level of linguistic awareness and the ability to engage in metalinguistic processing, which are critical for long-term language development (Sheen, 2007). The diversity of corrected errors also highlights variation in students' grammatical competence, suggesting that while some learners have a stronger grasp of particular language forms, others may need further scaffolding. Nevertheless, the students' ability to revise accurately in response to coded feedback indicates not only noticing of the feedback but also a functional understanding of the underlying linguistic rules (Schmidt, 1990). This reinforces the effectiveness of error codes in facilitating both autonomy and linguistic accuracy in EFL writing contexts.

Table: 1. Analysis of Successful Correction

Student ID	Error Code	Original sentence	Revised sentence
S01	Art + Prep	Positive side video games can be improving children's thinking skills.	*The* positive side *of* video games can be improving children's thinking skills.
S01	WF + Sp + #	However, watch or playing many video game can be harful.	However, *watching* or playing many video *games* can be *harmful*.
S01	# + Sp	I believe that video game can be helful.	I believe that video *games* can be *helpful*.
S01	Art	… if children play them for a short time and choose right games.	… if children play them for a short time and choose *the* right games.
S02	Vf + Sp	Video games has beniffits and dengers …	Video games *have* *benefits* and *dangers*
S03	#	Playing video game can enjoyable.	Playing video *games* can enjoyable.
S03	Art	But for children under age of five it might cause a bad effect.	But for children under *the* age of five it might cause a bad effect.
S03	WW	The children won't be able to invent any inspiration ideas.	The children won't be able to *create* any inspiration ideas.

S03	WF	… which may decrease their self confident in the future.	… which may decrease their self *confidence* in the future.
S04	WF	Playing video games effects negatively ….	Playing video games *affects* negatively
S04	WW	In my opinion, children whow play video games …	In my opinion, children *who* play video games …
S05	Vf	It cames with some risks.	It *comes* with some risks.
S06	WC	your cousin died.	your cousin *passed away*.
S06	WF	I was in shock	I was *shocked*
S06	WF	I watched my dad run out of the house	I watched my dad *running* out of the house
S06	VT	I managed to go home, get changed	I managed to go home, *got* changed
S06	VT	and head to the exam	and *headed* to the exam
S08	VT	The questions were so long and need a lot of time.	The questions were so long and *needed* a lot of time.
S08	VT	I felt that the exam will not be like the other exams.	I felt that the exam *was not* like the other exams.
S08	VT	I want to answer all of the questions in a perfect way	I *wanted* to answer all of the questions in a perfect way
S08	VF + # + VT	I kept writing and thinking and using my dictionary to found the new word that I do not know.	I kept writing and thinking and using my dictionary to *find* the new *words* that I *did* not know.
S08	VT	the time is over and I still did not finish	the time *was* over and I still did not finish
S08	#	I still had many thing to say	I still had many *things* to say
S08	WC	Translation is a subject that I care about	Translation *was* a subject that I *cared about*
S08	VT + Sp + VT	I am between two thing, giving the paper or keep writing.	I *was* between two *things*, giving the paper or *keeping* writing.
S08	VT	I could feel that my hands shaking and my ideas are gone.	I could feel that my hands *were shaking* and my ideas *were* gone
S09	VT	Although I really love writing, this time was …	Although I really *loved* writing, this time was ….
S09	WF	the teacher's unfairness	and the teacher's *unfair treatment*
S09	WC	it became my worst exam experience this year.	it *turned out to be* my worst exam experience this year.

S10	WF	to learn new vocabularies…..	to learn new vocabulary
S10	WC	When you think of Google dictionary	When you think about Google dictionary
S10	WC	In the other hand,…..	On the other hand,…..

The examples in the above table reveal that coded corrective feedback effectively helps students identify and amend a wide range of linguistic errors. Students' ability to correct issues related to articles, verb forms**,** tense consistency, spelling, plural, and word choice demonstrates growing linguistic competence and metalinguistic awareness which are key indicators of language development (Ellis, 2009; Ferris, 2010). This aligns with findings from Sheen (2007), who reported that learners receiving focused corrective feedback showed improvements in grammatical accuracy and rule application over time. Such outcomes are encouraging for EFL pedagogy, as they support the cognitive engagement model of written feedback, where students actively process and respond to error codes (Van Beuningen, De Jong, & Kuiken, 2012). The successful revisions involving collocation (e.g., "*create ideas*" vs. "*invent ideas*"), substitutes ("*passed away*" vs. "*died*"), and phrase refinement also indicate that learners are moving beyond surface-level corrections to develop a deeper understanding of English usage and styles (Hyland & Hyland, 2006; Lee, 2013). These results affirm the pedagogical value of error codes in guiding student revisions and fostering autonomous learning. The effectiveness of such feedback, however, appears closely linked to students' prior knowledge**,** motivation, and ability to interpret the codes meaningfully highlighting the importance of teacher scaffolding and explicit instruction (Bitchener & Ferris, 2012; Lee, 2008). As shown across the examples, students' successful engagement with coded feedback reflects development in metalinguistic awareness, self-monitoring, and revision strategies, which are critical for long-term writing improvement and learner autonomy (Chandler, 2003; Ferris, 2006). Overall, this theme provides strong evidence that students who interact meaningfully with error codes improve not only their immediate writing quality but also their capacity to become more reflective and self-directed writers.

1.1 Key Insights from the 'Successful Correction' Theme

a. Students can accurately interpret error codes: Many students demonstrated the ability to understand the teacher's coded corrective feedback, identifying the nature of their errors and applying appropriate corrections. This indicates that error codes are generally effective in guiding self-correction when students are familiar with their meanings. According to Ferris (2006), when learners are introduced to the interpretion of feedback codes, they can respond with greater accuracy, reinforcing the value of indirect corrective feedback in promoting self-editing skills.
b. High linguistic engagement: The successful corrections reveal a high level of linguistic engagement. Students revised a wide range of errors (e.g. grammatical, lexical, and mechanical) demonstrating that they were not merely addressing feedback at a surface level. Instead, they engaged in deeper metalinguistic reflection, thinking critically about language choices and grammatical structures (Ellis, 2009; Sheen, 2007). This reflects active cognitive processing, which is essential for internalizing target language forms.
c. Evidence of learning transfer: In many cases, students corrected errors involving more than one issue such as grammar, spelling, and vocabulary in the same sentence. This suggests that students were not responding mechanically to one code at a time but were instead applying broader language knowledge and integrating different aspects of language learning. For example:

Original: "*However, watch or playing many video game can be harful*."
Revised: "*However, watching or playing many video games can be harmful*."

This revision involved verb form '*watch'* into *'watching*', plural form '*game'* into *'games*', and spelling '*harful'* into *'harmful'*, demonstrating multilayered processing. Research by Van Beuningen, De Jong, and Kuiken (2012) shows that such integrative revisions are indicative of deeper language competence and learning transfer.

d. Improved fluency and readability: Many revisions enhanced sentence fluency and readability, moving beyond mere error correction. For example:

Original: "*it became my worst exam experience*"
Revised: "*it turned out to be my worst exam experience*"

Original: "*When you think of Google dictionary*"

Revised: "*When you think about Google dictionary"*

Such changes reflect not only grammatical improvement but also idiomatic and appropriate language use, which is particularly valuable for higher-level EFL learners. Hyland and Hyland (2006) note that meaningful feedback can promote more natural and fluent expression when students are encouraged to reflect on usage and phrasing.

e. Coded feedback promotes autonomy: The success of these revisions supports the idea that coded corrective feedback fosters learner autonomy. Rather than being given the correct answers, students had to analyze their own work, interpret the feedback codes, and apply appropriate changes. This process supports critical thinking, grammatical awareness, and a sense of ownership over their learning (Lee, 2017; Bitchener & Ferris, 2012). As learners become more adept at responding to feedback, they develop the confidence and skills needed for independent learning.

2. Partial Correction Theme

The partial correction theme includes instances where students attempted to respond to the teacher's error codes but corrected only some aspects of the original sentence, leaving other errors either unaddressed or only partially resolved. This pattern suggests that while students may have understood certain parts of the feedback, they either struggled to fully apply it or were uncertain about the correct form in more complex cases (Ellis, 2009; Lee, 2013). Such outcomes are common in second language acquisition, where learners' interlanguage systems are still developing, and metalinguistic competence may be uneven across different grammatical categories (Ferris, 2010). For example, student S01 received the error codes WF + Art on the following sentence:

Original: "… *parents should always guide their childrens and make sure they have balance between games* …"

Revised: "… *parents should always guide their children and make sure they have balance between games* …"

In this case, the student successfully applied the WF (word form) code, changing "childrens" to "children", which reflects a correct understanding of the plural form. However, the phrase *"have balance between games"* remained uncorrected, despite the missing article (i.e., *a balance*) or a possible prepositional error, indicating incomplete application of the feedback. This kind of response highlights what Sheen (2007) describes as partial uptake (i.e. when learners respond correctly to some aspects of feedback but not others, often due to limited grammatical knowledge). These partial responses provide useful diagnostic information. They may reveal areas where students require additional scaffolding or explicit instruction, especially in cases where feedback involves multiple overlapping codes (Hyland & Hyland, 2006). They also underscored the need for follow-up support and clarification, since students may misinterpret some codes or prioritize correcting what they understand best.

The following table includes other examples where students responded to some but not all elements of coded feedback within the same sentence. These cases reflect a transitional stage of learning, where students are developing metalinguistic awareness but may not yet be able to apply it consistently (Lyster & Ranta, 1997).

Table: 2. Analysis of Partial Correction

Student ID	Error Code	Original sentence	Revised sentence
S01	WF + Art	… parents should always guide their childrens and make sure they have balance between games …	… parents should always guide their *children* and make sure they have balance between games …

S04	Sp + VF	… start to emagen things that neve happened.	… start to *imagine* things that *never happen*.
S04	Pre + V + Sp	Playing video games to the children who under 5 it's the wores thing ever.	Playing video games the children who *are* under 5 *is* the *worest* thing ever.
S09	WW	I got nervous and my mind went blank	I got nervous was *unable to think clearly*
S09	VT	What made it worse was that our teacher …	What made it worse *was* that our teacher …
S09	Pro + VT	he just said, I gave everyone what they deserve.	he said that, he *had given* everyone what they *deserved*.

The partial corrections theme reflects that students are actively engaging with coded feedback but continue to face challenges in fully decoding or applying it. This partial uptake often arises from limited grammatical knowledge, uncertainty about language rules, or cognitive overload when multiple error types appear within a single sentence (Sheen, 2007; Ferris, 2010). Such outcomes are consistent with research in SLA that identifies processing constraints and uneven interlanguage development as factors affecting learners' ability to revise accurately (Van Beuningen, De Jong, & Kuiken, 2012).

Partial correction suggests that students are in a transitional stage of learning, in which they recognize the presence of an error but cannot yet revise all aspects of it confidently or accurately (Ellis, 2009; Lyster & Ranta, 1997). This developmental phase is important because it signals metalinguistic awareness and movement toward greater control over language forms, even if performance is inconsistent. This theme also highlights the need for more explicit instruction on error codes and guided scaffolding in self-correction strategies. Students may benefit from targeted practice and feedback training that focuses on decoding feedback and applying corrections systematically (Lee, 2013; Bitchener & Ferris, 2012). Without such support, learners may struggle to bridge the gap between awareness and accurate production, especially when feedback involves multi-layered or abstract grammatical features.

Furthermore, the results suggest that error types involving complex or abstract structures such as tense, pronoun usage, and multi-clause constructions pose greater difficulty for learners and require focused pedagogical intervention. As Ferris (2006) and Hyland & Hyland (2006) argue, teachers need to distinguish between errors that are developmentally appropriate and those that may require more explicit grammar instruction or modeling. Ultimately, partial corrections represent both challenge and potential: they show learners are processing feedback, but they also expose areas where instructional refinement is needed to help students move from emerging awareness to consistent linguistic accuracy.

2.1 Key Insights from the 'Partial Correction' Theme

a. This theme highlights cases where learners address some error types but leave others unresolved, offering insights into their developing linguistic awareness and the cognitive demands of processing corrective feedback. Research indicates that learners tend to more confidently correct surface-level errors, such as spelling and verb forms, while grappling with more abstract or structural issues like prepositions and article use (Bitchener & Ferris, 2023). For example, students often revise plural forms correctly but neglect prepositional phrases or article usage, reflecting error salience and cognitive load in error processing.

b. Multiple error codes in a single sentence can overwhelm learners, resulting in partial revisions that prioritize the most obvious errors (Lee, 2022). This aligns with cognitive load theory, which posits that complex feedback can exceed learners' processing capacity without adequate scaffolding. Moreover, learners tend to focus on one error type at a time which is consistent with focused feedback approaches (Truscott & Hsu, 2018) which explains partial correction patterns.

c. Even when errors are clearly coded, some remain uncorrected due to learner uncertainty or incomplete understanding of feedback codes (Hyland & Hyland, 2021). Partial corrections often improve readability but not grammatical accuracy, underscoring the need for ongoing instruction to bridge gaps between error recognition and full correction (Bitchener & Knoch, 2019). Research also shows that learners sometimes prioritize communicative clarity over grammatical accuracy, reflecting a strategic choice in their revision process (Ellis, Loewen, & Erlam 2006).

d. Importantly, partial corrections reveal emerging metalinguistic awareness, where learners identify problems and attempt revisions despite incomplete success, signaling transitional stages in their language development (Ferris, 2018). Such findings emphasize the importance of providing scaffolding and explicit code clarification to support learners toward full and accurate revisions (Polio & Shea, 2020).

3. **Incorrect Correction Theme**

Incorrect correction occurs when learners attempt to revise their writing draft based on error codes but introduce new errors or fail to fix original ones, suggesting recognition of the need to revise but gaps in knowledge or misinterpretation of feedback (Sheen, 2020). For example, verb form and spelling errors persist despite corrective feedback, illustrating challenges in applying grammatical knowledge accurately (Bitchener & Ferris, 2023). Tense misuse remains a common issue, where learners revert to ungrammatical forms, indicating incomplete understanding of temporal marking despite feedback (Ellis, Loewen, & Erlam 2006). Similarly, inaccurate semantic shifts in revision, such as replacing "*felt lost*" with "*had lost*" show that learners may misunderstand the pragmatic or emotional context of expressions, leading to inappropriate corrections (Lyster & Saito, 2018).

Table:3. Analysis of Incorrect Correction

Student ID	Error Code	Original sentence	Revised sentence
S04	VF + Sp	For example, it going to heart his eyes …	For example, it go to hert his eyes …
S05	VT	It became widely used around the world	It *become* widely used around the world
S05	Sp	Online shopping offers serval advantages such as …	Online shopping offers *several* advantages such as …
S09	VF	I felt lost	I *had* lost
S09	#	he gave me lower grades than them	he gave me lower *score* than them

Incorrect corrections demonstrate that although students engage with corrective feedback, gaps in grammatical knowledge or confusion about error codes often lead to new errors or unresolved original mistakes. This underscores the limitations of error-coded feedback when learners lack sufficient linguistic competence or explicit instruction to interpret and apply feedback effectively (Bitchener & Ferris, 2023; Sheen, 2020).

These results align with previous research indicating that error codes alone may be ambiguous or misleading for some learners, who may misinterpret them or apply incomplete grammatical knowledge, resulting in flawed revisions (Hyland & Hyland, 2021). For example, in S04, the student responded to verb form (VF) and spelling (Sp) feedback by producing an ungrammatical verb form ("*go*" instead of "*is going*") and a misspelled word ("*hert*" instead of "*hurt*"), illustrating difficulties with tense and auxiliary verb structures (Ellis, Loewen, & Erlam 2006). Overcorrection or misreading of feedback may lead to students changing correct forms into incorrect ones, as seen in S05, where the correct past tense verb "*became*" was incorrectly replaced by "*become*" following a verb tense (VT) code. Such errors reflect confusion about tense concepts and highlight that coded feedback without explicit guidance can sometimes be counterproductive (Lyster & Saito, 2018). Some students

exhibit partial understanding of grammatical rules, attempting revisions that alter meaning or produce ungrammatical sentences. For example, in S09, changing "*I felt lost*" to "*I had lost*" reflects an attempt to correct verb form (VF) but results in a semantic and grammatical mismatch, suggesting incomplete grasp of tense (Ferris, 2018).

Importantly, incorrect corrections may reinforce existing errors or introduce new ones if left unaddressed, potentially hindering language development (Polio & Shea, 2020). For instance, awkward collocations like "*lower score*" instead of "*lower grades*" reflect fossilized errors emerging from misguided revisions. This theme emphasizes that while error-coded feedback can initiate student reflection and engagement, it is insufficient as a standalone tool. Additional instructional support—including explicit explanations, modeling, and classroom discussions—is essential to ensure learners accurately interpret feedback and apply corrections effectively (Bitchener & Knoch, 2019; Sheen, 2020).

3.1 Key Insights from the 'Incorrect Correction' theme:

a. Engagement with feedback, but limited effectiveness: Learners show willingness to revise based on error codes, indicating engagement with the feedback. However, their revisions often lead to new errors or fail to correct original ones.

b. Gaps in linguistic knowledge: Incorrect error corrections reveal insufficient grammatical understanding, particularly in verb forms, tenses, and spelling. Learners misapply rules or make semantic errors, as seen in examples like "*it go to hert*" and "*I had lost,"* showing a lack knowledge to revise accurately.

c. Misinterpretation of error codes: Error codes alone can be ambiguous or misleading, especially for students without strong grammatical foundations. Misreading codes like VT (verb tense) or VF (verb form) leads to inappropriate changes—such as replacing "*became*" with "*become*"—and even the transformation of correct language into incorrect forms.

4. No Correction theme:

In this category, students received teacher error correction codes but did not make any changes to their original sentences. Such instances may reflect several underlying issues including lack of understanding of the coded feedback, low confidence in making corrections, or a perception that the original sentence was acceptable (Bitchener & Ferris, 2023; Hyland & Hyland, 2021).For example, S01 received the pronoun error code ('Pro') but did not correct the sentence:

- **Original***:* "*Children may spend less time with your family*."
- **Revised***:* No correction.

The incorrect pronoun *"your"* should have been *"their"* to agree with the third-person plural subject *"children"*. The student's failure to revise despite feedback could indicate an incomplete understanding of pronoun reference rules or uncertainty about how to apply the correction (Ellis, Loewen, & Erlam 2006). Low learner confidence in grammatical revision has been linked to avoidance of correction, especially when the feedback requires abstract grammatical knowledge (Bitchener & Knoch, 2019). Similarly, S02 received two error codes ('Pro' and 'Prep') but also made no revision:

- **Original***:* "In my opinion, should not use video games to children under age of 5."
- **Revised***:* No correction.

This sentence contains a missing subject and a prepositional error, as the phrase *"to children" should be* corrected to *"for children"* or rephrased for clarity. The absence of revision despite clear error-coded feedback suggests that the student either did not comprehend the feedback codes fully or did not recognize the significance

of the errors (Lee, 2022). Research shows that without explicit explanations or scaffolded support, learners often overlook or misinterpret coded feedback, particularly for more complex syntactic errors (Swain & Lapkin, 2020). The no correction pattern underscores the importance of combining error-coded feedback with supplementary instructional strategies, such as explicit teaching of error types, examples, and in-class discussions, to enhance learner understanding and confidence in revision (Polio & Shea, 2020). Learners' perceptions of their errors and feedback effectiveness also influence engagement with correction, highlighting the need for affective support alongside cognitive guidance (Hyland & Hyland, 2021).

Table: 4. Analysis of No Correction

Student ID	Error Code	Original sentence	Revised sentence
S01	Pro	Children may spend less time with your family.	No correction
S02	Pro + Prep	In my opinion, should not use video games to children under age of 5.	No correction

4.1 Key Insights from the 'No correction' theme:

a. Failure to recognize or act on feedback: In both cases, the students did not make any changes despite receiving feedback. This could indicate a disconnect between the feedback given and the students' ability or willingness to act on it. According to Bitchener and Ferris (2012), students often struggle to transfer feedback into revisions, which can be due to difficulties in interpreting the feedback or insufficient motivation to implement changes.

b. Understanding of feedback: The most likely reason for 'no correction' is a lack of understanding. If students do not understand why something is wrong (e.g., why "*your*" is incorrect when talking about children, or why "*to*" is the wrong preposition), they may not feel confident enough to make the changes. This is especially true when the issues are related to more subtle aspects of language use (like pronouns and prepositions), which are often tricky for EFL learners. Hyland and Hyland (2006) emphasize that effective feedback must be comprehensible to students; otherwise, it will not lead to meaningful revision.

c. Feedback overload: It is also possible that students are feeling overwhelmed by the feedback, especially if they are working with multiple types of errors. If there are too many corrections to make at once, students might prioritize some errors while leaving others, especially if they don't feel confident in their ability to address the more complex ones. Evans, Hartshorn, and Strong-Krause (2010) found that excessive or unfocused feedback can overwhelm learners, leading them to selectively ignore some corrections. This supports the idea that feedback needs to be manageable and prioritized to be effective.

d. Lack of engagement with feedback: Another possibility is that students might not be fully engaged with the feedback process. They may not see the value in making revisions or feel that their sentences are already acceptable as written. This could suggest a need for more explicit or targeted feedback, perhaps with clearer explanations for why certain corrections need to be made. Nicol and Macfarlane-Dick (2006) argue that feedback is most effective when students are actively involved in understanding and applying it, highlighting the role of engagement in successful revision.

e. Lack of motivation or confidence: The lack of correction could indicate a lack of motivation to make changes, either because the students do not see the feedback as useful or because they feel uncertain about their ability to apply it. It may also reflect a lack of confidence in their language skills, which prevents them from making revisions, even when they receive feedback. According to Oxford and Shearin (1994), learner motivation and self-efficacy are key predictors of how well feedback is acted upon; low confidence can hinder engagement with corrective suggestions.

Taken together, the four themes reveal a spectrum of learner responses to coded corrective feedback from successful revisions to partial uptake, misapplications, and complete inaction. While many students demonstrated strong engagement and improved linguistic accuracy, others struggled to apply codes correctly. This inconsistency suggests that the effectiveness of coded feedback is not solely dependent on exposure or explanation but is mediated by individual learner differences such as grammatical knowledge, cognitive processing ability, confidence, and motivation. For some learners, even well-intentioned feedback may be too abstract or cognitively taxing, leading to errors in interpretation or complete avoidance. Additionally, the complexity of some error types particularly tense, prepositions, and syntax appears to exceed what some students can manage independently. These results underscore the need to move beyond a one-size-fits-all feedback model and toward differentiated support, where coded feedback is accompanied by explicit instruction, modeling, and opportunities for guided practice. Ultimately, the mixed results highlight both the promise and the limitations of coded feedback in EFL writing, suggesting that for it to be truly effective, it must be embedded within a broader pedagogical framework that accounts for learners' developmental readiness and individual needs.

CONCLUSION

This study aimed to explore students' responses to WCF using error correction codes in the context of EFL writing. By analyzing students' responses to feedback, the research identified four main patterns: successful correction, partial correction, incorrect correction, and no correction. These themes reflect the varied ways in which students engage with feedback and highlight the complexity of the feedback process in EFL writing instruction. The analysis revealed four distinct patterns in how students responded to coded corrective feedback: successful corrections, partial corrections, incorrect corrections, and no corrections. Many learners were able to accurately interpret and apply feedback codes, demonstrating improvements in grammatical accuracy, metalinguistic awareness, and autonomous revision strategies. However, a significant portion of students exhibited only partial uptake, correcting surface-level errors while leaving more complex issues unresolved, often due to limited linguistic knowledge or cognitive overload. Others misapplied the codes entirely, introducing new errors or failing to correct existing ones indicating confusion, gaps in understanding, or insufficient feedback interpretation skills. Some students made no revisions at all, suggesting challenges such as low confidence, feedback overload, or a lack of motivation or comprehension. These varied outcomes highlight the complexity of learner engagement with coded feedback and point to the need for tailored pedagogical support that considers individual differences and developmental readiness.

The results suggest that written corrective feedback, particularly using error codes, can be an effective tool in guiding students towards language improvement. Students who successfully corrected their errors were able to internalize the rules and apply the feedback appropriately, reinforcing the idea that explicit, targeted feedback can promote meaningful revisions. However, challenges arose when students made partial or incorrect corrections, which pointed to the need for more scaffolded support and clear explanations accompanying the feedback. The instances of no correction revealed potential issues with student engagement, suggesting that feedback may be ineffective if students lack the confidence or motivation to apply it.

These results are consistent with existing literature on corrective feedback (e.g., Hyland & Hyland, 2006), which highlights the importance of clear and contextually relevant feedback in improving learners' writing. However, this study also emphasizes the need for a personalized approach to error correction, as students' individual learning needs and language proficiency levels may influence their ability to effectively apply feedback. The results have important implications for language teaching. Teachers should focus on providing clear, focused feedback that addresses specific error types, and where possible, offer explanations alongside error codes. In addition, fostering a growth mindset and promoting student engagement through dialogue or peer feedback can help build students' confidence and improve their ability to use corrective feedback effectively. Furthermore, repeated practice and targeted feedback over time can facilitate long-term language improvement, helping students internalize corrections and avoid recurring errors. Although this study contributes valuable insights into the effectiveness of written corrective feedback in EFL contexts, it also opens up avenues for future research. Further studies could explore the impact of different feedback types (e.g., direct vs. indirect feedback) or student characteristics (e.g., learning style, proficiency level) on feedback efficacy. Additionally, longitudinal research

could track how students' responses to feedback evolve over time, providing a deeper understanding of the long-term effects of error correction on writing development.

In conclusion, this research underscores the critical role of written corrective feedback in language learning. By carefully tailoring feedback to meet students' individual needs and ensuring clarity in the correction process, educators can help students develop their writing skills more effectively. As we continue to explore and refine our understanding of feedback practices, it is clear that personalization, clarity, and student engagement are key components for successful language learning and writing development.

REFERENCES

1. Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge.
2. Bitchener, J., & Ferris, D. R. (2023). *Written corrective feedback for L2 development: Current perspectives and new directions*. Routledge.
3. Bitchener, J., & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing, 19*(4), 207-217.
4. Bitchener, J., & Knoch, U. (2019). *Written corrective feedback: What does it promise?* Cambridge: Cambridge University Press.
5. Bitchener, J., & Storch, N. (2016). Written Corrective Feedback for L2 Development**.** *Second Language Acquisition*, Vol. 96. Multilingual Matters.
6. Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing, 14*(3), 191-205.
7. Brookhart, S. M. (2010). *How to give effective feedback to your students*. ASCD.
8. Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing, 12*(3), 267-296.
9. Ellis, R. (2009). A typology of written corrective feedback types. ELT Journal*, 63*(2), 97-107.
10. Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in second language acquisition*, *28*(2), 339-368.
11. Evans, C., Hartshorn, K. J., & Strong-Krause, D. (2010). The efficacy of dynamic written corrective feedback for university-matriculated ESL learners. *System*, 38(3), 329-343.
12. Ferdouse, F. (2011). *Use of error codes as a device of written feedback: Students' perspectives* (Master's thesis, Stamford University, Bangladesh).
13. Ferris, D. R. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing, 8*(1), 1-11.
14. Ferris, D. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81-104). Cambridge University Press.
15. Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, 32(2), 181-201.
16. Ferris, D. R. (2011). *Treatment of error in second language student writing* (2nd ed.). University of Michigan Press.
17. Ferris, D. R. (2018). *Response to student writing: Implications for second language students* (2nd ed.). Routledge.
18. Ferris, D. R., & 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.
19. Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of Second Language Writing, 7*(3), 255-286.
20. Hyland, K., & Hyland, F. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing, 10*(3), 185-212.
21. Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39(2), 83-101.
22. Hyland, K., & Hyland, F. (2021). Written corrective feedback: The story continues. *Language Teaching*, 54(1), 1-24.

23. Khah, Y. A., & Farahian, M. (2016). A comparative study of the impact of metalinguistic feedback and explicit correction on the writing performance of Iranian EFL learners. *Journal of Studies in Education, 6*(2).
24. Lee, I. (1998). The Effectiveness of Written Corrective Feedback in Second Language Acquisition. *TESOL Quarterly*, *32*(2), 255-278.
25. Lee, I. (2008). Understanding teachers' written feedback practices in Hong Kong secondary classrooms. *Journal of Second Language Writing*, 17(2), 69-85.
26. Lee, I. (2013). *Second language writing*. Oxford: Oxford University Press.
27. Lee, I. (2017). *Classroom writing assessment and feedback in L2 school contexts*. Springer.
28. Lee, I. (2022). Student perceptions of written corrective feedback: Does multiple feedback overwhelm? *Language Teaching Research, 26*(4), 559-577.
29. Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 19(1), 37-66.
30. Lyster, R., & Saito, K. (2018). Written corrective feedback in second language acquisition. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching* (pp. 1-7). Wiley.
31. Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
32. Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *Modern Language Journal*, 78(1), 12–28.
33. Polio, C., & Shea, M. (2020). L2 writing and feedback: Multiple perspectives and goals. *TESOL Quarterly*, 54(1), 5-31.
34. Rasool, S., Qian, X., & Aslam, M. (2024). Learner perceptions of focused written corrective feedback in EFL contexts. *Journal of Language Teaching and Learning.*
35. Sampson, A. (2012). Coded and uncoded error feedback: Effects on error frequencies in adult Colombian EFL learners' writing. *System, 40*(4), 494–504.
36. Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-158.
37. 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.
38. Sheen, Y. (2020). Written corrective feedback and learner engagement: A case study. In R. Ellis & S. Loewen (Eds.), *The Routledge handbook of second language acquisition* (pp. 345-357). Routledge.
39. Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, 37(4), 556-569.
40. Swain, M. (2005). *The output hypothesis: Theory and research*. In E. Tarone & T. Candlin (Eds.), *Handbook of research in second language teaching and learning* (pp. 471-483). Lawrence Erlbaum Associates.
41. Swain, M., & Lapkin, S. (2020). *Focus on form through collaborative dialogue: Exploring task effects*. In A. Mackey & E. Marsden (Eds.), *Advancing methodology and practice: The IRIS repository of instruments for research into second languages* (pp. 209-221). Routledge.
42. Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning, 46*(2), 327-369.
43. Truscott, J., & Hsu, A. Y. (2018). Error correction, revision, and learning. *Journal of Second Language Writing*, 41, 63-72.
44. 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), 1-41.
45. Van Beuningen, C. G. (2010). Corrective Feedback in L2 Writing: Theoretical Perspectives, Empirical Insights, and Future Directions. International Journal of English Studies, 10(2), 1-27.