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Correct every error or let students discover their mistakes? The effects of corrective feedback strategies on EFL learners' grammatical accuracy and retention

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Abstract

The study examined the effect of direct corrective feedback (DCF) and metalinguistic corrective feedback (MCF) on grammatical accuracy and retention of university level English as a Foreign Language (EFL) learners. A quasi-experimental intervention lasting eight weeks was carried out among forty undergraduate students in a public university in Australia. Subjects were grouped into three types of instructions: DCF group (n = 13), MCF group (n = 13) and conventional instruction group (n = 14). Each group was provided instruction focused on similar grammatical forms such as past tense, present perfect, articles, subject-verb agreement, prepositions, conditionals and modal verbs; the main variation was the type of feedback provided during the writing task. Pre-test, post-test, and delayed post-test of grammar test and writing task were conducted among the subjects. Quantitative data analysis made use of ANCOVA and linear mixed effects models. ANCOVA revealed a significant difference of instructional conditions on post-test grammatical accuracy in terms of the effect of pre-test (2, 36) = 3.95, $p = .028$, partial $\eta^2 = .180$. The DCF group had the highest post-test mean score ($M = 30.92$, $SD = 2.10$), followed by the MCF group ($M = 30.62$, $SD = 6.12$), whereas the conventional group had the lowest mean score ($M = 27.36$, $SD = 3.57$).

Introduction

Feedback is one of the key issues that has been explored in studies related to second language (L2) writing research in relation to students achieving grammatical accuracy. Even though grammatical mistakes are common when it comes to students' writing tasks, it is still highly controversial whether students should receive feedback or not, what kind of techniques are better for them, and whether students manage to maintain their success over time as a result of feedback (Chong, 2022; Ferris, 2002, 2003, 2010; Yu et al., 2023). The controversy is especially important considering the fact that grammatical accuracy is associated with students' ability to properly transfer their intended meaning while writing in English. Some researchers have found that grammar correction does not bring significant improvements to L2 development since its results are questionable (Truscott, 1996, 1999, 2004, 2007); however, others have managed to prove that proper feedback helps to improve the accuracy of learners' writing (Bitchener et al., 2005; Ferris, 2006; Hartshorn et al., 2010; Van Beuningen, 2010).

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One major distinction in the corrective-feedback research is related to the amount of information that is provided to learners. In direct corrective feedback (DCF), the target form of language is presented, which means that there are less ambiguity and immediate access to the right model for the learner (Bitchener & Knoch, 2010; Ellis, 2009). However, in metalinguistic corrective feedback (MCF), the grammatical problem is pointed out or explained without giving the answer; thus, the learner needs to find the error him/herself. This difference is important from a theoretical perspective, as DCF can prove more effective when the learner does not have enough grammatical knowledge to fix the mistake himself/herself (Ferris, 2002, 2003; Sarre et al., 2019). Although considerable research has been conducted in this area, it is still uncertain which type of feedback proves more effective. Some investigations prove the effectiveness of some types of feedback as they show some improvement in grammar or writing after receiving corrective feedback, whereas other findings reveal either insignificant results or inconsistency or even specific task benefits from it (Baleghizadeh & Gordani, 2012; Ghoorchaei et al., 2022; Karim & Nassaji, 2020; Rahimi, 2021). Another problem is that short-term positive outcomes cannot be seen as indicators of sustainable learning. It has been shown that learners can correct their mistakes, but they do not use it when they write something new (Khanlarzadeh & Nemati, 2016; Kocaman & Maral, 2022).

The present research attempts to resolve such matters by examining deductive corrective feedback, metalinguistic corrective feedback, and conventional teaching in an eight-week quasi-experimental

study conducted on 40 university-level EFL students. In all the conditions examined, the participants were given lessons with similar grammar rules. The main difference in the procedures used in the groups lied in the feedback provided during the writing activity. In terms of assessment of grammatical accuracy, it was done in three occasions, namely before the intervention period, after the intervention period and delayed post-test, which allowed to investigate not only learning but also the retention of knowledge gained through different procedures. Therefore, instead of raising the question of whether corrective feedback in general can be helpful for learners, this study raises the issue of whether giving the right form to the learners or asking them to make corrections themselves results in better and more persistent grammatical progress.

Literature review

Corrective feedback and grammatical accuracy in L2 writing

Corrections Feedback have become one of the core issues of the academic study of second language writing, particularly its effect on the grammatical accuracy of the learners. Even though there is a significant amount of literature dedicated to this issue, yet no agreement exists with respect to whether it is necessary to correct the grammatical errors, what approaches to it can be used, and how long the CF results will be maintained (Chong, 2022; Ferris, 2002, 2003, 2010; Rahimi, 2009; Yu et al., 2023; Zhang et al., 2022). However, two major positions can be distinguished in this discourse. Critics of grammatical corrections have expressed their doubts regarding their usefulness and, moreover, efficiency (Chandler, 2009; Ghoorchaei et al., 2022; Khanlarzadeh & Nemati, 2016; Tayebipour, 2019; Truscott, 1996, 1999, 2004, 2007, 2010a), In contrast, other researchers have argued that carefully designed CF can assist learners in developing greater accuracy in their written production (D. R. Ferris, 2002, 2003, 2009; Ghoorchaei et al., 2022).

Research has investigated CF in relation to several aspects of L2 writing, including general writing achievement (Crossley et al., 2022; Wondim et al., 2023), writing accuracy (Almasi & Tabrizi, 2016; James, 2008; Miles, 2014; Seiffedin & El-Sakka, 2017; Wang, 2017), grammatical accuracy (Alharrasi, 2019; Baleghizadeh & Gordani, 2012; Chan & Yamashita, 2022; Khanlarzadeh & Nemati, 2016), and rhetorical patterns (AL Harrasi, 2023). Several studies have reported that CF can improve aspects of L2 writing, particularly grammatical accuracy (Baleghizadeh & Gordani, 2012; Karim & Nassaji, 2020; Sarvestani & Pishkar, 2015). Other studies, however, have reported limited or inconsistent

benefits (Alharrasi, 2019; Ghoorchaie et al., 2022; Rahimi, 2021; Razali et al., 2021; Westmacott, 2017). Thus, although there is evidence that CF can assist learners with writing, its contribution to grammatical accuracy remains unresolved. The difficulty of establishing the value of CF is partly related to the complexity of writing itself. L2 writing is a demanding productive skill because learners must simultaneously manage linguistic form, meaning, organisation, audience expectations, and the requirements of the writing task (F. Hyland, 2003; Huisman et al., 2019; Lim & Renandya, 2020; Nicol, 2010; Sanosi, 2022). Grammar is consequently closely connected with writing because grammatical knowledge is required for learners to communicate their intended meanings accurately (Carless & Boud, 2018; J. Chen et al., 2016; Hattie & Timperley, 2007; Sadler, 2010). Grammatical errors can disrupt the flow of communication and, in some cases, make intended meanings difficult to interpret (Ekiert & Gennaro, 2021; Ferguson, 2011). For this reason, grammatical accuracy has remained an important outcome in L2 writing research, and contextualised grammar instruction has been recommended as part of the development of productive writing ability (Baleghizadeh & Gordani, 2012; Zhenga & Yuc, 2018).

The disagreement surrounding CF is also reflected in the findings of intervention studies. Some evidence indicates that CF improves writing accuracy (Hartshorn et al., 2010; Van Beuningen, 2010; Zhang et al., 2022), while other research suggests that its benefits may be restricted to the revision of the text receiving feedback rather than transfer to subsequent writing tasks (Khanlarzadeh & Nemati, 2016; Owais, 2025). Ghoorchaie et al. (2022) similarly found limited evidence of improvement in text revision and raised questions concerning the longer-term effects of CF. These contradictory findings suggest that the important question is not simply whether teachers should correct grammatical errors but whether particular forms of feedback are more effective than others and whether the resulting gains extend beyond the immediate revision process.

Direct and metalinguistic corrective feedback

One of the most important distinctions in CF research concerns the amount of information supplied to learners. CF has commonly been categorised into direct and indirect forms (Banister, 2023; D. R. Ferris, 2003, 2004; Ellis, 2009). Direct corrective feedback (DCF) provides the learner with the correct linguistic form, either by replacing the erroneous form in the text or by supplying the correction in the margin (Bitchener et al., 2005; D. R. Ferris, 2006, 2010; Lee, 2008; S. Ferris et al., 2013; Zou et al., 2023). Indirect feedback, by contrast, signals that an error has occurred without providing the

correction. Teachers may indicate the location or nature of an error through underlining, circling, highlighting, symbols, or codes (Forgie et al., 2022; Ghoorchaie et al., 2022). The distinction is therefore based largely on the degree of responsibility given to learners for identifying and correcting their errors.

The theoretical rationale for DCF is that providing the correct form reduces uncertainty and gives learners immediate access to accurate linguistic information. Ellis (2009) suggested that direct correction can help learners internalise the appropriate form, while Bitchener and Knoch (2010) argued that direct CF supplies the explicit linguistic information necessary for learners to test their developing hypotheses about the target language. This may be particularly relevant when learners lack sufficient grammatical knowledge to identify and correct an error independently. Indeed, previous research has suggested that learners can experience difficulties when they are expected to resolve errors using their existing knowledge during indirect feedback (D. R. Ferris, 2006, 2010; Ellis, 2009; Salami & Khadawardi, 2022; Sheen et al., 2009). Direct CF may therefore be particularly useful for learners who require greater linguistic support. There exists a specific theoretical basis behind indirect feedback. While the former involves giving learners the correct form, the latter makes learners recognise the problem and come up with the correct form on their own. According to D.R. Ferris (2002, 2003), the use of indirect feedback can be associated with several potential advantages since it implies increased involvement of learners in the process of making corrections. Likewise, Sarre et al. (2019) associate indirect feedback with the engagement of learners in analysing the linguistic structure in L2 writing. Thus, the need to detect and correct the mistake can be more effective than the provision of the correct form. At the same time, the effectiveness of indirect standard feedback (CF) may depend on learners' linguistic knowledge before receiving the feedback. According to Kim (2012), McMartin-Miller (2014), and Nel et al. (2020), learners who have higher linguistic skills may be able to benefit more from indirect feedback.

This research is based on DCF and MCF, and more particularly on the differences between these two types of correction techniques. DCF involves the provision of the correct answer, while MCF offers information regarding the type of error without actually giving the solution to the learner. In other words, if a learner said “She go to university every day”, with DCF he or she would be told that “She goes to university every day”. On the other hand, with MCF, the problem of subject-verb agreement would be pointed out, and the learner would have to find the answer. Thus, MCF still has a certain

element of explicit grammatical correction, although learners must take responsibility for the correction process themselves. This feature makes MCF particularly relevant for the main focus of the current research which is the question of whether learners get more benefit from correction by teachers or self-discovery. However, previous research shows mixed support for each of these perspectives. Studies examining the use of corrective feedback (CF) showed positive outcomes for the enhancement of writing accuracy and grammar in L2 (Baleghizadeh & Gordani, 2012; Bitchener & Ferris, 2012; Bitchener, Young, & Watson, 2005; Hartshorn et al., 2010; Van Beuningen, 2010). Nonetheless, existing literature has not shown any consistent advantage of using a certain type of feedback. While some results show the efficiency of the use of explicit correction, there are others suggesting that forcing learners to analyse and solve their mistakes can provide better learning results (Bitchener & Knoch, 2010; Ferris, 2002, 2003; Sarre et al., 2019). Moreover, researchers stress that CF needs to be properly targeted and not necessarily used for every possible mistake (AL Harrasi, 2023; Almasi & Tabrizi, 2016; Elosua, 2022; Jang, 2022; Khodareza & Delvand, 2016). Besides, research points to the necessity to consider the type of feedback that is provided to learners and their responses to it (Carless & Boud, 2018; Ji, 2015; Shrestha, 2022; Troia et al., 2015).

Retention of grammatical gains and the research gap

An important limitation that appears frequently in the CF literature is distinguishing between short-term gains and long-term learning. Researchers have used pre-test/post-test procedures that result in gains right after the intervention without showing if the learners keep the grammatical structures learned (Gebremariam & Hiluf, 2023; Hiluf et al., 2024; Kang & Han, 2015; Wendimu & Gebremariam, 2024; Woreta & Gebremariam, 2023). In their meta-analysis of writing CF literature from 2015, Kang and Han point out several shortcomings of the previous literature in the field, such as a lack of information on the connection between learner proficiency and the types of feedback. These shortcomings matter because immediate gains from feedback can be due to learners fixing their mistakes instead of changing their underlying knowledge of the structures.

The available evidence is still not conclusive about retention of knowledge. For instance, Khanlarzadeh and Nemati (2016) argue that corrective feedback can assist learners in improving their grammar through revision process; however, it was unable to improve the accuracy of grammar in a new writing test. In addition, according to Kocaman and Maral (2022), there was a large reduction in the

number of errors in writing after CF, though the reduction in grammatical errors could not be maintained in a later assessment. Immediate improvement does not always mean retention of grammatical knowledge. On the contrary, some scholars have argued that revision exercises with CF can help in learning and retaining new grammatical structures (Baleghizadeh & Gordani, 2012; Carless & Boud, 2018; Kim, 2012; Khodareza & Delvand, 2016; Rahimi, 2009). Ecological validity is another aspect that should be considered in previous studies. Specifically, Kang and Han (2015) found that many CF studies used relatively limited designs, while Mashhadi et al. (2017) noted the limitations in one-time studies where feedback is provided in one draft. These designs may not sufficiently reflect the circumstances in which CF is applied in L2 classrooms. For example, Hartshorn et al. (2010) found that CF produced significant increases in writing accuracy but its influence on rhetorical skills, fluency, and complexity was relatively small. Additionally, Siekmann et al. (2022) found that learners who received CF had better performance results after the test compared to the control group. Therefore, it is clear that there is a necessity to conduct classroom-based studies that explore the long-term process of grammar development.

It has been suggested by number of studies that research should be conducted in a real-life class setting, including a variety of learners and delayed testing (Al Zahrani & Chaudhary, 2020; Chong, 2022; D. R. Ferris, 2006; Ito, 2023; Wondim et al., 2023). It has also been emphasised that studies should address learners' understanding and reaction to feedback provided by the teacher (Lee, 2008; Nassaji & Kartchava, 2017; Saadi & Saadat, 2015; Zhenga & Yuc, 2018). In the case of MCF, this aspect is especially relevant because the potential benefit of this technique depends on the ability of learners to identify the grammatical problem and produce the appropriate structure. As a result, MCF can become an entirely different learning activity from the perspective of correction feedback compared to DCF even in case of the same grammatical problems. These reasons justify the necessity of this current research. The research compares three treatment conditions: DCF, MCF, and traditional instructions in a sample of 40 EFL university learners. All the groups have been provided instructions that focus on the same grammar points, but the main difference between the groups is in the kind of feedback they receive during the writing task. The grammar points include the use of past tense, present perfect, articles, subject-verb agreement, prepositions, conditionals, and modals. It should be noted that this research utilises a quasi-experimental design that includes pre-test, post-test, and delayed post-test.

This study seeks to explore two related gaps in the existing literature. While past research has involved comparative studies of the effects of different forms of CF, there is little data on the comparison of the effects of DCF and MCF as opposed to traditional learning when all other parameters such as instructional content and grammatical structure are controlled. Moreover, by incorporating a delayed post-test, the study aims to provide an answer to the question whether the gains resulting from CF can be described as a result of an immediate improvement of performance rather than a long-term achievement (Ekiert & Gennaro, 2021; Kang & Han, 2015; Kim, 2012). Thus, the experiment meets the demands for conducting more ecologically sound and longitudinal research into CF (Al Zahrani & Chaudhary, 2020; Chong, 2022; D. R. Ferris, 2006; Ghoorchaei et al., 2022; Wondim et al., 2023). Instead of just determining whether grammatical correction works, the experiment seeks to clarify which method produces better results – correction itself or guiding students to find their own mistakes.

Research questions

RQ1. To what extent do direct corrective feedback and metalinguistic corrective feedback affect EFL learners' grammatical accuracy compared with conventional instruction?

RQ2. To what extent are gains in grammatical accuracy associated with direct and metalinguistic corrective feedback maintained at the delayed post-test?

Methodology

Participants and setting

The experiment was conducted in an Australian public university and involved 40 EFL university students. The participants were divided into three experimental groups: direct corrective feedback group (DCF, n=13), metalinguistic corrective feedback group (MCF, n=13) and control group (CON, n=14) that received standard instruction. All of the participants were non-native speakers of English and were taken from the existing university classes. Because participants were not randomly assigned to experimental conditions but were taken from existing classes, the experiment used a quasi-exper-

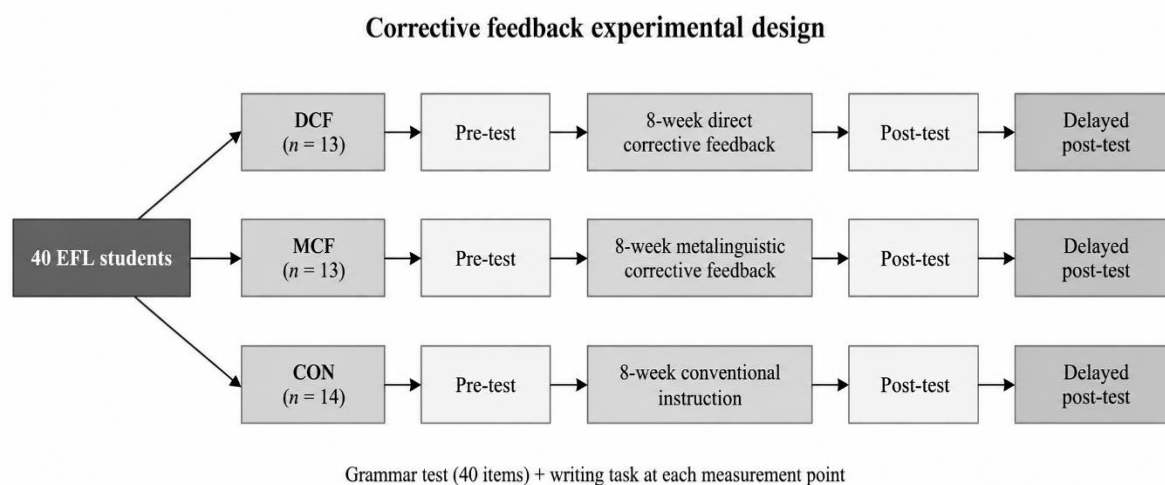
imental research design. Participants completed the same assessment procedures and received instruction addressing the same target grammatical structures. The principal difference between the groups was the type of corrective feedback provided during writing activities. Participation was voluntary, and informed consent was obtained from all participants.

Research design and procedure

A quasi-experimental pre-test–post-test–delayed post-test design was employed to examine the effects of corrective feedback on learners' grammatical accuracy and retention. Data were collected at three time points: pre-test, immediately following the intervention (post-test), and several weeks after the intervention (delayed post-test). The intervention lasted eight weeks, resulting in the following sequence: pre-test → eight-week intervention → post-test → delayed post-test. An overview of the participants, instructional conditions, assessment points, measures, and analytical procedures is presented in Figure 1.

Figure 1

Research design, procedure, and measures



During Weeks 2–9, all groups completed regular grammar and writing activities targeting past tense, present perfect, articles, subject–verb agreement, prepositions, conditionals, and modal verbs. The instructional content, duration, writing activities, and target structures were comparable across

groups; the systematic feedback procedure was the principal distinction between the three conditions. Students in the DCF group received explicit corrections in which the erroneous form was replaced with the correct form. For example, *She go to university every day* was corrected as *She goes to university every day*. Students in the MCF group received a metalinguistic indication of the error without the correct form being supplied (e.g., *subject–verb agreement*), requiring them to identify and correct the error independently. The CON group received conventional grammar and writing instruction without systematic implementation of either corrective feedback strategy.

Measures

Grammar test

Grammatical accuracy was assessed using a 40-item grammar test covering the target structures. Each correct response received one point, producing a maximum score of 40. The test was administered at the pre-test, post-test, and delayed post-test stages. Internal consistency was evaluated using Cronbach's alpha, and item performance was examined before the main analyses.

Writing task

To complement the discrete grammar measure, participants completed a short writing task at each assessment point. The tasks were designed to elicit the target grammatical structures and were assessed using a consistent grammatical-accuracy scoring procedure. Writing scores were recorded for the pre-test, post-test, and delayed post-test, allowing changes in written grammatical accuracy and subsequent retention to be examined.

Data analysis

The quantitative data were analysed using descriptive and inferential statistics. Means, standard deviations, minimum and maximum scores, and score distributions were examined for all outcome measures. The internal consistency of the grammar test was assessed using Cronbach's alpha. A one-way ANOVA was conducted to examine pre-test differences among the three groups. Within-group changes between pre-test and post-test were examined using paired-samples *t*-tests.

Table 1

Tests of Between-Subjects Effects

Dependent Variable: Post_Test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Squared	Eta
Corrected Model	513.625 ^a	3	171.208	23.692	.000	.664	
Intercept	66.494	1	66.494	9.202	.004	.204	
Pre_Test	407.065	1	407.065	56.330	.000	.610	
Group	57.061	2	28.530	3.948	.028	.180	
Error	260.150	36	7.226				
Total	35761.000	40					
Corrected Total	773.775	39					

a. R Squared = .664 (Adjusted R Squared = .636)

The principal analysis of immediate treatment effects employed ANCOVA, with post-test grammatical accuracy as the dependent variable, instructional condition as the fixed factor, and pre-test performance as the covariate. Where significant group differences were identified, adjusted pairwise comparisons were conducted with an appropriate correction for multiple comparisons.

Table 2

Descriptive Statistics

Dependent Variable: Post_Test

Group	Mean	Std. Deviation	N
Control	27.36	3.565	14
Direct	30.92	2.100	13
Metalinguistic	30.62	6.117	13
Total	29.57	4.454	40

To examine retention across the three assessment occasions, a linear mixed-effects model was fitted to the repeated grammar and writing scores. Measurement time, instructional condition, and their interaction were specified as fixed effects, with participant included as a random effect. The time $\times$ group interaction was of particular interest because it indicated whether patterns of change across the assessment occasions differed between instructional conditions. Effect sizes were reported using partial eta squared (η^2) for ANOVA and ANCOVA effects and Cohen's d for relevant pairwise comparisons. Statistical significance was evaluated at $p < .05$, with 95% confidence intervals reported where appropriate.

Ethical considerations

Ethical approval was obtained from the relevant Human Research Ethics Committee of the participating Australian public university before data collection. Participants provided informed consent and were informed that participation was voluntary and unrelated to their course grades. They were free to withdraw without academic penalty. Participant identities were protected through coded identifiers, and research data were stored securely in accordance with institutional research-governance requirements. The data were used solely for the purposes specified in the approved research protocol.

Analysis

A one-way analysis of covariance (ANCOVA) was conducted to examine whether post-test grammatical accuracy differed among the three instructional groups—direct corrective feedback (DCF), metalinguistic corrective feedback (MCF), and conventional instruction—while controlling for participants' pre-test grammatical accuracy. Statistical significance was assessed at $p < .05$, and partial eta squared (η^2) was used to estimate the effect size.

As shown in Table 2, the DCF group achieved the highest post-test mean score ($M = 30.92$, $SD = 2.10$), followed closely by the MCF group ($M = 30.62$, $SD = 6.12$). The conventional-instruction group obtained a lower mean score ($M = 27.36$, $SD = 3.57$). Across all 40 participants, the overall post-test mean was $M = 29.57$ ($SD = 4.45$).

The ANCOVA results presented in Table 1 indicate that there was a statistically significant effect of instructional group on post-test grammatical accuracy after controlling for pre-test performance, $F(2, 36) = 3.95$, $p = .028$, $\eta p^2 = .180$. The effect size indicates that approximately 18% of the variance in post-test grammatical accuracy was associated with group membership after accounting for pre-test scores. Pre-test grammatical accuracy was also a statistically significant covariate, $F(1, 36) = 56.33$, $p < .001$, $\eta p^2 = .610$, indicating a strong association between learners' initial and post-intervention grammatical performance.

The overall corrected model was statistically significant, $F(3, 36) = 23.69$, $p < .001$, $\eta p^2 = .664$, with an adjusted R^2 of .636. Thus, the model accounted for approximately 66.4% of the variance in post-test grammatical accuracy, with 63.6% remaining explained after adjustment for the number of predictors. Overall, the results indicate that, after controlling for pre-test grammatical accuracy, learners' post-test grammatical performance differed significantly according to instructional condition. As indicated by the descriptive statistics in Table 2, both corrective-feedback groups obtained higher post-test scores than the conventional-instruction group, with the DCF group showing the highest observed mean.

Discussion

The aim of this study is to find out if DCF and MCF influence differently the grammatical accuracy of EFL learners and if the improvement obtained through these forms of feedback remains stable even after the end of the instructional phase. By comparing two groups that receive different kinds of corrective feedback with a traditional group and by conducting immediate and delayed post-tests, this study will shed light on two questions raised in the literature on corrective feedback: (a) whether correction has an effect besides the effect of normal teaching, and (b) whether these effects are stable or simply due to improved performance at the testing moment.

Corrective feedback and immediate grammatical development

In the research questions originally posed, the effects of DCF and MCF on grammatical accuracy compared to conventional teaching were being considered. It is especially important to have the conventional group in this experiment, since any increase in ability that occurs as a result of an instructional intervention is not proof in itself of the effect of the feedback on performance. In this

case, all three groups were instructed on the same target structures, such as past tense, present perfect, articles, subject-verb agreement, prepositions, conditionals, and modal verbs, with the only systematic difference being the use of the different feedback processes during writing activities.

The results are consistent with a considerable number of studies showing that written feedback improves L2 grammatical accuracy. Previous studies have revealed that improvements occur after both direct and implicit feedback has been provided (Baleghizadeh & Gordani, 2012; Bitchener et al., 2005; Hartshorn et al., 2010; Van Beuningen, 2010). Similarly, Kang & Han's (2015) meta-analysis presented evidence about the positive role of written corrective feedback in improving L2 writing accuracy. Even more recent evidence exists supporting this broad claim. A Bayesian meta-analysis conducted in 2026 based on 52 controlled studies showed moderate and long-lasting effects of written corrective feedback (Brown et al., 2026).

This paper addresses the continuous debate triggered by Truscott (1996, 1999) regarding whether the provision of grammatical corrections is worthwhile enough to outweigh the effort required for this activity. Instead of calling for an end to all forms of corrections, the current paper aims at answering a more specific question concerning the type of corrections that should be used. This reflects the idea proposed by Ferris (2004, 2010) that instead of discussing whether teachers should give any responses to grammatical errors, the critical question is how to structure the practice in such a way to facilitate learning.

Direct versus metalinguistic feedback

One such matter that is relevant is how the Distributed Correction Feedback and Minimal Correction Feedback techniques compare with each other. What is different between the two techniques is the amount of linguistic input provided to the learner. In DCF, the right linguistic form is given to the learner while in MCF, the problem with the grammar is indicated to the learner. In other words, corrective feedback of the target form DCF can be of great use for students because it eliminates any ambiguity related to the target form. The need to identify the error and recall the grammatical form is not present, and DCF provides learners with an example of how to do it right. According to Ellis (2009) and Bitchener & Knoch (2010), the explicit information can prove to be especially useful for those learners who do not have enough linguistic knowledge to deal with an error independently.

However, MCF works differently. Through identifying the grammatical nature of the mistake without offering a correct response, it requires more mental activity on the part of the learner. Such a method could lead the learner to recall their grammatical knowledge, construct hypotheses, and link the discovered problem to some grammatical principle. Ferris (2002, 2003) claimed that learner involvement makes indirect feedback extremely helpful while Sarre et al. (2019) associated it with linguistic form processing in feedback. Some recent studies have provided further evidence in support of making distinctions between the processing requirements of various types of feedback. For instance, according to results reported in the journal *System*, direct feedback has been found to be related to frequent correction and low processing load, while metalinguistic feedback leads to deeper processing and rule retrieval. This information is extremely important in terms of the current research, as metacognitive feedback implies that the learner not only repeats what he has been told by the teacher, but also interprets and constructs the response.

Meanwhile, enhanced levels of cognitive activity cannot be taken as automatic signs of better learning. The Metalinguistic Focus (MCF) is associated with higher requirements, and its efficiency will depend on the availability of sufficient grammatical knowledge among learners to decode the metalinguistic input. As has been shown in the previous research, learners with less linguistic competence face certain challenges related to the necessity of solving their own errors with the help of feedback (Ferris, 2006, 2010; McMartin-Miller, 2014). Therefore, the results in favour of the efficiency of DCF or MCF can serve as the indicators of the balance between the two variables.

Retention beyond the immediate post-test

The second research question investigated whether the improvement associated with feedback had lasted by the time of the delayed post-test. The importance of this part of the research is in the fact that the fact that a learner immediately corrects his mistake once he receives feedback does not mean that he has acquired enough knowledge for using this structure independently later. This problem has been addressed in previous studies. For example, Khanlarzadeh and Nemati (2016) revealed that corrective feedback may help learners reduce grammar mistakes in the process of revising their writing and that the results achieved are not guaranteed to be repeated in a second writing task. Likewise,

Kocaman and Maral (2022) observed lower levels of writing mistakes after corrective feedback; however, there was less proof that the improvement will persist at a delayed test.

A three-part design, which involves administering pre-test, immediate post-test, and delayed post-test, is considered a major methodological advantage of this research. The three-part design allows drawing the distinction between the effects of immediate improvement and retention of grammatical learning. The validity of the claim is confirmed by recent meta-analytic results. According to Brown et al. (2026), there is some level of influence of written corrective feedback in short, medium, and long term assessment periods, which means that corrective feedback may have some long-term effects not confined to immediate correction only. The comparison between diagnostic corrective feedback and metacognitive corrective feedback becomes relevant in this situation. The persistence of benefits resulting from MCF on the delayed post-test will mean that the assumption that involving students in diagnosing and solving problems will help promote more sustainable learning holds true. This result will be coherent with theories that stress the importance of learners' involvement and cognitive processing. On the other hand, should DCF prove to have more persistent results, it will be evidence that the direct correction of students with the right linguistic forms is another way of promoting sustainable development in students.

Relationship with previous empirical research

The implications of the findings from this study need to be considered in light of existing literature on corrective feedback that shows a variety of impacts. It has been found that feedback is effective in improving writing accuracy, yet at the same time there have been studies showing its inefficacy (Ghoorchaei et al., 2022; Rahimi, 2021; Razali et al., 2021; Westmacott, 2017). Thus, corrective feedback cannot be considered a single instructional tool. The efficiency of such feedback depends on certain variables including the type of the focused structure, type of feedback, and so forth.

Current research seeks to address these problems by providing equal instructional material to all groups as well as by consistently focusing on a certain number of grammatical forms. This is an advantage over other studies that provide feedback for writing problems of a broad nature while not controlling for the target forms. This type of feedback can be considered advantageous because it

reduces the cognitive load associated with processing multiple unconnected items and enables learners to pay attention to linguistic elements (Sheen et al., 2009). The results can also be linked to previous research that highlights the significance of uptake of feedback. Feedback is more than information provided by teachers – it only becomes educationally significant when learners interpret, process, and use it (Carless & Boud, 2018; Chong, 2022). This aspect is especially relevant in relation to MCF, since the success of this type of feedback depends on the ability of learners to correctly interpret metalinguistic information and produce a proper correction. Thus, some differences in results obtained for DCF and MCF may be explained by different responsibility levels of learners.

Pedagogical implications

The findings have several implications for university EFL instruction. First, they suggest that teachers should not view corrective feedback as a single instructional practice. Instead, the form of feedback should be selected according to the learning objective and learners' linguistic resources. DCF may be particularly appropriate when the primary objective is to provide clear and immediate information about an unfamiliar grammatical form. MCF may be more appropriate when learners possess sufficient grammatical knowledge and the teacher wishes to encourage analysis, retrieval, and self-correction.

Second, the findings suggest that feedback should be integrated into writing instruction rather than treated as an isolated correction activity. The intervention in the present study incorporated feedback within regular grammar and writing activities over eight weeks. This is important because sustained engagement with grammatical forms is likely to provide greater opportunities for learners to notice recurring problems, revise them, and encounter the forms again. Third, the results reinforce the value of delayed assessment when evaluating corrective-feedback practices. Teachers should not necessarily interpret successful immediate revision as evidence that learning has occurred. Where possible, learners should be given opportunities to produce language after a period without direct access to the original corrections. Such assessment can reveal whether grammatical knowledge has become sufficiently stable to be retrieved independently.

Limitations and future research

Some limitations need to be noted. The study involved only 40 EFL learners enrolled at university in three different groups: 13 learners for DCF condition, 13 learners for MCF condition, and 14 learners for the control group. The small number of participants may affect the generalisability of the findings, as well as reduce the power of statistical tests in identifying differences between the conditions under investigation. Another limitation is that the participants belonged to existing classes, not being randomly assigned to any of the experimental conditions. The eight-week intervention and the grammatical structures selected set the boundaries for the results that were achieved. Possible future studies could include greater sample sizes and diversities, longer periods for the interventions, and varying proficiencies of participants. Another area of possible research is the investigation into the effects that differ when using DCF and MCF depending on the grammatical complexity or the kind of errors made by students.

Conclusion

In general, the study makes a contribution to the continuing debate on the role and nature of corrective feedback in L2 writing. Instead of viewing correction as a good or non-necessary thing in itself, the present findings show the need for consideration of the way correction is carried out and sustained. The analysis of DCF, MCF, and traditional instruction in connection with both immediate and delayed assessment provides the grounds for a deeper evaluation of L2 grammar improvement than merely comparing scores before and after some treatment. Thus, the present study advocates the idea of corrective feedback as a differential teaching approach, in which the effectiveness of feedback does not only depend on the information given by teachers but also on its processing and maintenance by students. This perspective seems to be consistent with some latest findings showing the effect of written corrective feedback on the long-term accuracy in L2 writing.

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Conflict of interest

The authors declare that there is no conflict of interest related to the research, authorship, or publication of this study.

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