

The Efficacy of Written Corrective Feedback in ESL/EFL Context: A Synthesis of Present and Past Studies¹

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Abstract

The current study provides literature review on research conducted over the past four decades focused on written corrective feedback (WCF). This metanalysis reveals that, although the field of WCF has matured, there is still considerable debate among research scholars over its efficacy. This article provides a synthesis of the literature on WCF in five areas the efficacy: (1) of WCF, in general; (2) of different forms of WCF; (3) of focused versus unfocused WCF; (4) of WCF on revised and new pieces of writing; and (5) of the results of WCF studies and the instructional context. Research has thus shown the general usefulness of WCF and examined a host of variables that influence it, such as the focus of the WCF, the nature of the target grammatical structure, forms of WCF, and instructional teaching context.

Resumen

El estudio actual proporciona una revisión de la literatura sobre la investigación realizada durante las últimas cuatro décadas centradas en la retroalimentación correctiva escrita (WCF). Este metanálisis revela que, aunque el campo de WCF ha madurado, todavía existe un debate considerable entre los investigadores sobre su eficacia. Este artículo proporciona una síntesis de la literatura sobre WCF en cinco áreas de eficacia: (1) de WCF, en general; (2) de diferentes formas de WCF; (3) de WCF enfocado versus no enfocado; (4) de WCF sobre escritos nuevos y revisados; y (5) de los resultados de los estudios WCF y el contexto educativo. Por lo tanto, la investigación ha demostrado la utilidad general de WCF y examinado una serie de variables que influyen en ella, como el enfoque de WCF, la naturaleza de la estructura gramatical objetivo, las formas de WCF y el contexto de enseñanza de instrucción.

Introduction

Written Corrective Feedback (WCF) is input given to learners, which affects their written output (Bitchener & Storch, 2016). WCF can be provided in-text as a correction where an error has been made, or as an explanation of the errors at the bottom of the text (Ellis, 2009). Hyland (2003) stated that WCF is a regular pedagogical practice of L2 teachers in writing classes, and it is central in learning a second language writing, which significantly increases its value. Nassaji and Kartchava (2017) defined WCF as a teacher's input on the learners' erroneous output to improve the accuracy of the targeted form. Feedback provided on learners' writing is considered information about a learner's performance, and it can be identified and described as: (a) grammatical form, where teachers provide students with the correct form; (b) location in the text, where teachers highlight the errors by underlining or circling; or (c) pragmatic functions of the language, where teachers provide a metalinguistic explanation(s) (ME) on the use of the language. Most L2 researchers worldwide seem to value WCF as an important teaching tool that helps learners improve accuracy in L2 writing (Mao & Crosthwaite, 2019). Correcting and commenting on learners' errors is considered to be one of the prime responsibilities of L2 teachers (Chen et al., 2016). Some contend that failing to provide learners with negative evidence in the form of WCF may lead to the fossilization of errors. Quinn (2014) emphasized the importance of negative evidence in the form of teacher feedback and learners' expectations:

When language teachers are silent about learners' inaccurate language use, learners naturally assume that teachers' silence indicates that they have made no errors. There is no negative evidence to lead learners to believe otherwise. In second language (L2) education, teachers' knowledge of the L2, their teaching experience, and their positions of power in the classroom make them the ones who are expected to present that negative evidence, to correct errors, to speak when they should. (p.1)

Teachers provide different types of WCF (Ellis et al., 2008; Leki, 1990). Many researchers and practitioners believe that WCF is a straightforward and unambiguous means of assisting learners to understand their mistakes and prevent them from repeating them (Arrad et al., 2014). WCF from teachers has been shown to aid students in new and revised drafts in terms of mastering different target structures of grammar (Bitchener, 2008; Ferris, 1999; Karim & Nassaji, 2018; Suzuki et al., 2019).

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Indeed, the role of WCF in second language writing was heightened (Karim & Nassaji, 2019) after Truscott's (1996) article asserting that WCF is ineffective and wastes teachers' time and energy. Ferris (2006), in a rebuttal statement, argued that substantial evidence is needed before it can be concluded that WCF is ineffective. Since the Truscott (1996) article about the ineffectiveness of WCF, L2 research scholars have examined its relative efficacy (Kang & Han). They have investigated which type of WCF is most effective, when and how WCF works, and what factors influence its efficacy (Kang & Han, 2015). However, the results yielded by these studies have been inconclusive and have not provided sufficient support for the efficacy of WCF in helping learners improve grammatical accuracy (Gad et al., 2016).

The current analysis of the research aimed to accumulate and critically synthesize past studies on WCF to understand the existing gaps in research and give direction for future studies. To that end, prior studies in WCF were included in this study based on four criteria: (1) the WCF was provided by the teachers, not by computers or peers; (2) research published in 1980 or later⁴, as followed in the previous meta-analysis studies (Kang & Han, 2015); (3) a quasi-experimental or experimental research design having a control group; and (4) contrast treatment and control group performance to ensure scholars ascertained an absolute effect of WCF (Ferris, 1999, 2004; Truscott, 1996); and (5) reported in English.

The efficacy of feedback in general

A primary strand of research has examined the efficacy of WCF. These studies, conducted between 1982 and 2004, investigated the effects of WCF versus no WCF. While some of these studies demonstrated no effect of WCF (Kepner, 1991; Polio et al., 1998; Semke, 1984, Robb et al., 1986), others showed that WCF had a positive effect (Fathman & Whalley, 1990; Ferris & Roberts, 2001; Lalande, 1982; Sheppard, 1992). However, studies that demonstrated that WCF was effective in improving students' writing accuracy were not without methodological limitations. For instance, one limitation in these studies (Fathman & Whalley, 1990; Ferris & Roberts, 2001; Storch, 2010) was the focus on learners' revised drafts (Ferris, 2010). In other words, these studies examined the effectiveness of WCF on revising the same text (on which the writers had already received WCF), rather than demonstrating the effectiveness of WCF on new writing (Ferris, 2010; Karim & Nassaji, 2019). Fathman and Whalley (1990) and Ferris (2001) examined the effectiveness of WCF in the revised draft and found that learners who received WCF performed better on the revised draft than those who did not receive it. Ashwell (2000) reported similar results, in which learners who received WCF had increased accuracy in revised drafts when compared to those who did not receive it. The result of the study provided a rebuttal against the idea that error correction is ineffective (Chandler, 2003). Although editing or revising a text is essential for developing L2 writing, they cannot indicate that learning has occurred unless learners demonstrate that they can retain the accuracy of linguistic items in new pieces of writing (Truscott, 2007). Summing up, past studies on WCF have demonstrated efficacy in the revising of subsequent drafts. However, whether the effects of WCF could be retained by the learners in new writing drafts is open for further deliberation.

In addition to examining the efficacy of WCF on learners' revised writing, many past studies have examined unfocused WCF, meaning WCF on every error made by the learners (Karim & Nassaji, 2019). However, Ellis (2009) argued that it becomes difficult for learners to process the information in the case of unfocused WCF as they have to pay attention to a large number of errors. Focused WCF, on the other hand, has been reported to be more beneficial for learners (Bitchener & Ferris, 2012; Ellis, 2009; Sheen et al., 2009) as they have to process a limited number of errors, ensuring that they reflect upon their errors and understand why what they wrote was wrong and how that could be improved. With focused WCF teachers target a limited number of errors to help learners notice and monitor their own errors in writing to develop explicit knowledge of grammar (Sheen et al., 2009) and enhance the learning experience. Unfocused WCF, in contrast, overburdens and confuses learners as they have to process a number of errors simultaneously (Sheen et al., 2009).

Addressing the above limitations, such as investigating the efficacy of WCF on revised drafts or unfocused WCF, studies from 2004 until 2020 have endeavored to address these limitations. For instance, current studies (Karim & Nassaji, 2018; Guo & Barrot, 2019; Mujtaba et al., 2020; Zhang, 2021) have tested the efficacy of WCF on learners' new production. Other studies have also gone beyond examining the effect of WCF in general to examining the effectiveness of different forms of WCF (Karim & Nassaji, 2018; Guo & Barrot, 2019). Current research has also investigated the efficacy of focused vs. unfocused WCF. This critical

⁴ The cutoff date for the present study was December 2020.

review has synthesized WCF research in three ways by examining how WCF studies have demonstrated the efficacy of (1) its different forms; (2) focused vs. unfocused approaches; (3) and on revised and new writing.

The efficacy of different forms of WCF

A number of studies have investigated the differential effects of WCF with an aim to finding which type of WCF is most effective in helping learners improve their L2 writing. In this regard, direct and indirect feedback have garnered significant attention (Ferris, 2006; Ferris & Roberts, 2001). Direct corrective feedback (DCF) is when teachers correct learners' errors by providing a correct form of the erroneous output (Ellis et al., 2008). In contrast, indirect corrective feedback (ICF) is when teachers indicate errors by underlining, circling, or highlighting (Ellis et al., 2008). ICF is believed to be preferred over DCF on the assumption that ICF facilitates the achievement of accuracy in the long-term and also builds problem-solving skills in learners (Bitchener & Knoch, 2008; Ferris & Roberts, 2001; Hyland & Hyland, 2006; Lalande, 1982), which is considered to be important in second language acquisition (Leow, 1997; Robinson 1995). Indirect corrective feedback can be provided in four ways:

1. *Circling or underlining the errors by directly pointing out the error Teachers using this type of ICF underline or circle the errors in the line where the error has been made (Ellis, 2009);*
2. *Stating the number of errors in the given line to inform the learner that an error has taken place (Bitchener & Storch, 2016);*
3. *Using metalinguistic feedback in which teachers give learners explanation about what has caused the error. This can be done using an error code, such as (art = article; pre = preposition) which is inserted near the error (Ellis, 2009);*
4. *Giving learners grammatical rules or explanations related to the specific error. Teachers adopting this approach give a number to a particular error in the student's draft. After this, at the bottom of the text, teachers provide ME and relevant examples beside the given number.*

While there tends to be agreement among researchers on the general efficacy of WCF, there is still debate as to which form of WCF is more beneficial (Nassaji, 2016). Some scholars argue in favor of DCF, as it points the learners to the errors and provides them with a correct form (Bitchener, 2008; Bitchener et al., 2005; Ellis et al., 2008; Nassaji, 2016; Sheen, 2007), while others have reported that ICF was more effective (see; Eslami, 2014; Ferris, 2003, 2006; Lalande, 1982), as it involves learners in solving a problem and promotes autonomous learning (Ferris, 2003; Ferris, 2006; Lalande, 1982). Despite the mixed findings related to ICF and DCF, research has stressed that different forms of WCF contribute differently to language learning. Therefore, these forms should not be taken as a sign that one is always better than another, but rather as a matter of suitability for different circumstances (Al-Rubai'ey & Nassaji 2013; Chen et al., 2016). For example, ICF provides opportunities for "guided-learning and problem-solving" (Lalande, 1982, p.143), while DCF is deemed more suitable when learners fail to correct their errors (Shintani et al., 2014). Researchers who have assessed the efficacy of different forms of WCF have reported mixed findings. For instance, Ferris and Roberts (2001) reported no significant effects of two forms of ICF (underlining and underlining with codes) on learners' accuracy. In a contrasting result, Chandler (2003) reported a significant positive effect of ICF. Similarly, Sheen (2007) conducted a study to examine the effects of DCF and DCF + ME⁵ on English articles. The result demonstrated that both treatment groups outperformed the control group on the immediate post-test and the delayed post-test. The results also suggested the DCF+ME group fared better than the DCF group on the delayed post-test. The studies above have shown that WCF seems to have a differential effect in supporting language learning. However, these studies have not investigated the other forms of WCF, such as DCF+Revision, ICF+Revision, DCF+ME and ICF+ME.

Continuing this line of WCF research, Suzuki et al. (2019) conducted a study to examine the differential effects of four types of WCF (i.e., ICF, DCF, DCF+ME, and ICF+ME) on English indefinite articles and past perfect tense. The results of the study unveiled that DCF+ME and DCF outperformed the ICF+ME and ICF groups with the DCF group exhibiting the highest level of improvement. Similarly, Stefanou and Revesz (2015) conducted a study to examine the differential effectiveness of two types of WCF (i.e., DCF and DCF+ME) on English articles two functional usages: specific and general plural referent. The findings of the study reported that both types of WCF helped learners improve accuracy. However, no difference in the types of WCF was found. DCF+ME was no more than useful than DCF in improving English article grammatical accuracy. Eslami (2014) reported the superiority of ICF over DCF in aiding Iranian EFL learners

⁵ Direct Corrective Feedback + Metalinguistic Explanation

of low-intermediate level to improve their grammatical accuracy of simple past tense. The study concluded that the ICF group was more effective in immediate and delayed posttests than the DCF group. Recently, Guo and Barrot (2019) conducted a study to assess the differential effectiveness of two types of WCF (i.e., direct and meta-linguistic explanation) on Chinese EFL learners' accurate use of regular and irregular past tense and prepositions indicating space. The study reported the superiority of DCF over metalinguistic explanation in treating rule-based regular past tense. Karim and Nassaji (2018) conducted a study to examine the effectiveness of DCF and ICF on revision and new writing pieces. The study concluded that the DCF group outperformed the other groups in error reduction in all revision tasks.

To sum up, the mixed findings reported in the aforementioned studies are not an indication that WCF is ineffective; instead, they should be conceived as an indication of the complexity of WCF and the host of factors that seem to influence its effectiveness (Nassaji & Kartchava, 2017). Kang and Han (2015), in their meta-analysis, reported that the effectiveness of WCF seems to be affected largely by factors such as learners' proficiency level and teaching context. In addition to this, the mixed findings related to different forms of WCF may also be attributed to the nature of errors (Ferris & Roberts, 2001). For instance, Shintani et al. (2014) found that WCF was effective for one target structure hypothetical conditional but not for indefinite article. Reaffirming these findings, Suzuki et al. (2019) reported the effectiveness of WCF for only one target structure past perfect tense. Commenting on these varied results, Bitchener and Storch (2016) and Suzuki et al. (2019) stated that the nature of grammar structure can influence WCF's effectiveness since it tends to work better for rule-based errors (Bitchener & Ferris, 2012; Guo, 2015) than for idiosyncratic errors. Ferris (2011) asserted that "an untreatable error is idiosyncratic" (p. 36). She further stated that "untreatable errors include most word choice errors, with the possible exception of some pronoun and preposition usage, and unidiomatic sentence structure (e.g., problems with word order or with missing or unnecessary words)" (p. 36).

The effectiveness of focused vs. unfocused feedback

Some research scholars believe that focused WCF is considered to be more beneficial in helping learners improve accuracy than unfocused WCF (Bitchener & Storch, 2016; Ellis et al., 2008; Harrasi, 2019; Lee, 2019; Sheen, 2007; Sheen et al., 2009; Van Beuningen et al., 2012). It is because focused WCF does not overburden the attentional capacity of the learners, thereby allowing them to respond to WCF in a better manner (Frear & Chiu, 2015; Bitchener & Storch, 2016). Frear and Chiu (2015) also asserted that unfocused WCF needs greater concentration and control. This overburdens the attentional load while processing the L2 information given by WCF, thereby reducing the chances of learners' awareness. Besides, unfocused WCF may not work effectively for low proficiency level learners because learners might not respond to excessive WCF and not understand the difference between what needs to be produced and what they have produced (Gass, 1997; Schmidt, 2001; Schmidt & Frota, 1986). Only four studies to date have compared focused and unfocused WCF (Ellis et al., 2008; Frear & Chiu, 2015; Rahimi, 2019; Sheen et al., 2009). First, Ellis et al. (2008) provided unfocused and focused WCF in their study. The focused group was given direct correction while the unfocused group was provided correction on articles and other errors. Although the study reported no superiority of unfocused over focused WCF, the focused group participants maintained their accuracy in the delayed post-test. In a similar vein, Sheen et al. (2009) examined the differential effects of focused and unfocused WCF. To this end, four groups, from six intact classes, in total 80 participants were formed into: (1) a focused group (n=22) receiving WCF on English articles only; (2) an unfocused group (n=23) receiving WCF on verb tense, articles, regular past tense, prepositions, and irregular past tense; (3) a writing group (n=16) receiving two writing tasks; and (4) a control group (n=19) not receiving any WCF. The results of the study indicated the superiority of focused WCF over unfocused as illustrated by higher accuracy gain scores. In a similar vein, Frear and Chiu (2015) investigated whether focused or unfocused indirect WCF with underlining is better. The focused group learners were given written CF on weak verbs (regular past tense verbs) while unfocused group learners were given WCF on all errors. The results showed no difference between unfocused and focused WCF. More recently, Rahimi (2019) investigated the effects of focused vs. unfocused WCF, and revision on 78 intermediate French ESL learners' writing accuracy. The respondents were randomly assigned to four treatment groups: two focused WCF groups and two unfocused/comprehensive WCF groups. The respondents in the focused group were given WCF on word and sentence error categories. In contrast, the unfocused/comprehensive group respondents were provided with WCF on all the errors. Furthermore, one group from focused and unfocused/comprehensive were asked to revise their essays while the remaining groups were not required to revise. The comparison of the error means of the four groups on the three essays they wrote: during

Week 1 (T1), Week 8 (T2), and Week 14 (T3). The findings suggested that focused groups outperformed the comprehensive groups participants on word errors at T2; however, no significant effect was found for revision. Similarly, the focused group + revision performed better than comprehensive groups (with and without revision) at T2 and T3 with respect to sentence errors. In contrast, the comprehensive revision group performed better compared to other groups in terms of writing accuracy. The study also seemed to show that the focused + revision group produced more improved written drafts at T3 than the other groups. To sum up, although Kang and Han (2015) in their meta-analysis reported no significant difference between focused and unfocused WCF, the above studies, although limited in number, supported the supremacy of focused WCF over unfocused. Considering the limited number of studies that have compared the effectiveness of focused vs. unfocused WCF, more studies are needed in this area to accumulate more solid research evidence.

The effects of WCF on revised versus new writing

Some L2 scholars have endeavored to assess the effectiveness of WCF on revision and new writing (Bitchener & Knoch, 2008; Ellis et al., 2008; Truscott & Hsu, 2008; Karim & Nassaji, 2018; Liu, 2008; López et al., 2018; Sheen et al., 2009; Suzuki et al., 2019; Truscott, 2010; Van Beuningen et al., 2008; 2010, 2012;). Some of these studies seemed to demonstrate that the effects of WCF were retained in new pieces of writing. For instance, Truscott and Hsu (2008) and Liu (2008), the first scholars to examine the impact of WCF on new pieces of writing, noted its positive effects. Reporting similar results, Van Beuningen et al. (2012) showed that their learners' accuracy level was the same in both revised and new drafts; no dilution in the effect of WCF was noted. Likewise, Van Beuningen et al. (2008) concluded that the experimental groups (direct error correction and error code) improved their revising text accuracy. However, the direct error correction could only exhibit improved accuracy in a new writing a week later. While these studies have demonstrated the positive effects of WCF on a new piece of writing, some studies yielded mixed results (Ekanayaka & Ellis, 2020; Karim & Nassaji, 2018; Shintani et al., 2014; Suzuki et al., 2019). For instance, Shintani et al. (2014) conducted a study to examine the efficacy of two types of WCF (i.e., DCF and ME) on Japanese English learners' ability to use indefinite articles and the hypothetical conditional. The study showed that learners improved their accuracy of only the hypothetical conditional during one testing period but not during the following. Similarly, no effect for improvement with indefinite articles was found on new writing. Consistent with the findings of Shintani et al. (2014), Karim and Nassaji (2018) examined the effects of DCF and ICF on revision and new writing pieces. The study concluded that the DCF group outperformed the other groups in error reduction in all revision tasks, but no noticeable differences were observed in new pieces of writing. Reporting similar findings, Suzuki et al. (2019) conducted a study to assess WCF's efficacy on two target structures: the past perfect tense and indefinite article. The study suggested that WCF was effective in improving both targeted linguistic structures in the revised draft. However, the long-term effect was only found in the past perfect tense in a new writing draft and not for the indefinite English articles. Similarly, Ekanayaka and Ellis (2020) conducted a study to investigate whether asking learners to revise their texts improves writing accuracy. The study results indicated that groups, who received WCF, were more accurate than those without WCF. However, the effect of WCF for both treatment groups was diluted in the third writing task with the authors citing the complexity of the linguistic structure as a reason for the decline.

To sum up, studies have demonstrated that WCF could have a lasting effect on new pieces of writing. However, it is evident that there are variations in the results. Karim and Nassaji (2019) argued that such variations in findings might be because of how the feedback was provided, such as unfocused WCF (Ekanayaka & Ellis, 2020; Karim & Nassaji, 2018; Truscott & Hsu, 2008; and Van Beuningen et al. (2008, 2012) or WCF on focused errors (Bitchener, 2008; Bitchener & Knoch, 2008, Bitchener & Knoch, 2009, 2010; Bitchener et al., 2005; Ellis et al., 2008; Sheen, 2007; Sheen et al., 2009; Shintani et al., 2014; Suzuki et al., 2019). In addition to the focus of the feedback, other factors, such as the learners' engagement with feedback, may influence the efficacy of WCF. Storch and Wigglesworth (2010) observed that learners who engaged with WCF more extensively exhibited a higher level of improvement than those who did not. Storch and Wigglesworth concluded that the efficacy of WCF tends to be influenced not only by its focus, but also by the complex and dynamic interaction of linguistic and affective factors. Moreover, Bitchener and Ferris (2012) stated that the nature of the error could influence the effects of WCF. For instance, Bitchener et al. (2005) suggested that WCF works better for rule-based errors, such as the past tense or articles. Shintani et al. (2014) reported that WCF enabled learners to improve accuracy for the hypothetical conditional more than the indefinite articles. Similarly, Suzuki et al. (2019) reported that WCF increased

accuracy of use of the past perfect more than with the indefinite articles. These studies, taken together, clearly demonstrate that the efficacy of WCF is influenced by the nature of the errors, the focus of the feedback, and the learner's engagement with the feedback provided.

The WCF Studies in ESL and EFL context

The instructional context refers to whether English is regarded as a second language (ESL) or a foreign language (EFL) (Al Harrasi, 2019; Guo, 2015). The instructional context may determine how motivated learners are towards their teachers' WCF. Hedgcock and Lefkowitz (1994) state that EFL learners are less motivated to respond to WCF than ESL learners because they learn a language merely to pass required tests or improve qualifications (Table 1).

| Studies | Context |
|----------------------------|---------|
| Robb et al. (1986) | EFL |
| Ashwell (2000) | |
| Stefanou and Revesz (2015) | |
| Rummel (2014) | |
| Shintani & Aubrey (2016) | |
| Guo (2015) | |
| Ellis et al. (2008) | |
| Al Harrasi (2019) | |
| Guo and Barrot (2019) | |
| Ferris and Roberts (2001) | ESL |
| Bitchener (2008) | |
| Bitchener and Knoch (2010) | |

Table 1: WCF studies in ESL/EFL context

In an ESL context, English is taught as a second language, and teachers give significance to the accuracy of learners' writing. Bitchener and Storch (2016) said that learners' experience in EFL and ESL contexts may shape their beliefs, goals, and attitudes about WCF. However, little empirical evidence is available explaining how the learning and teaching context affects learners' responses to WCF (Guo, 2015). In this regard, Al Harrasi (2019) argues that more WCF studies are needed that recruit ESL learners to draw a firm conclusion. In addition to this, more studies are needed which investigate how instructional context influences the efficacy of WCF that targets different grammatical structures.

Conclusion, Implications and Recommendations for Future Research

To sum up, this study examined the past literature to try to explain how the field of WCF has grown in the last four decades. While the current study highlighted the usefulness of WCF in general, it also provided evidence that a host of factors can influence the efficacy of WCF. The current study considered five key areas: 1) efficacy of WCF in general; (2) the efficacy of different forms of WCF; (3) the efficacy of focused versus unfocused WCF; (4) the efficacy of WCF on revised and new pieces of writing; and (5) the WCF studies and the instructional context. The interpretation of previous studies seems to provide evidence that WCF can improve the accuracy of learners in general. It also suggests that different types of WCF have differential effects on L2 learners' accuracy. Similarly, it highlighted the studies that have compared the effectiveness of focused and unfocused WCF. Lastly, it synthesized literature that has examined the efficacy of WCF on both revised and new writing and provided evidence that WCF studies are limited in the ESL context.

The current study has offered a number of practical implications to teachers across the globe. ESL/EFL teachers can use different types of WCF to help learners improve their grammatical accuracy. These teachers should also take into account the learning needs of the learners and plan their WCF accordingly. For instance, if learners struggle to master a particular linguistic structure, ESL/EFL teachers can provide focused WCF targeting that particular linguistic structure. Secondly, ESL/EFL teachers can exploit the explicitness of WCF according to the proficiency level of the learners. If learners exhibit low proficiency, then DCF seems to be a better choice than ICF, which seems to be suitable for high proficiency learners.

In addition to these practical classroom implications, the current study provides implications for future research areas that need to be covered. First, more studies that reflect the real classroom practice of teachers with respect to WCF are needed. In this regard, Lee (2020) suggested that studies should be conducted in which WCF is provided by the teachers, not by the researchers, as shown in the studies analyzed in the current study. Moreover, more studies should be conducted using varied WCF, such as

focused/comprehensive + direct/ indirect (Lee, 2020). Secondly, another vacuum that needs to be filled is more studies that assess the long-term effects of WCF. Most of the studies examined in the current research have shown the effectiveness of WCF with the short term effect. While these studies have shown the effectiveness of WCF, what remains to be explored is how effective WCF is in the long run. Finally, another area that needs the attention of research scholars is improving writing accuracy and the overall quality of learners' written drafts.

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