



Written Corrective Feedback under SLA Lens: From Research to Practice

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ABSTRACT

It is widely accepted that written corrective feedback (WCF) is an effective tool for helping learners develop their L2 knowledge. Yet, it remains inconclusive as to which type of WCF can best facilitate L2 learning. In recent years, many second language acquisition (SLA) researchers agree that *direct* and *focused* WCF may be more effective in aiding learners' L2 development when compared to *indirect* and *unfocused* WCF. Other SLA scholars argue that the type of WCF might not matter as all types have been shown to be effective to some extent. Instead, the focus should be on selecting the appropriate type of WCF that is tailored to the needs of target learners. Recent research has suggested that practitioners consider learners' proficiency levels and beliefs towards the use of feedback before selecting the type of WCF to be used in class as these factors can significantly determine the success of WCF. To guide practitioners' practical decision-making on this topic, this article aims to provide a comprehensive review of studies on WCF and offer recommendations on how to best implement it in specific teaching contexts based on current literature.

Keywords: written corrective feedback, SLA, L2 learning, learner differences, learners' beliefs

Introduction

In most second language (L2) composition classrooms, written corrective feedback (WCF), a teacher's written response to learners' linguistic errors in their writing, is generally viewed as an effective tool that helps improve learners' accuracy. Even though some teachers may be skeptical about its efficacy in promoting L2 knowledge, many still believe that WCF contributes to learners' L2 development in some way (Benson & DeKeyser, 2019; Bitchener & Storch, 2016; Mao & Lee, 2020). In the L2 writing and Second Language Acquisition (SLA) field, WCF has also become a topic of interest for many researchers who question whether this entrenched practice can truly contribute to the development of learners' L2 knowledge.

To date, five meta-analyses (i.e., Biber et al., 2011; Brown et al., 2023; Kang & Han, 2015; Lim & Renandya, 2020; Truscott, 2007) have been conducted to examine the effect of WCF on L2 learning. Among these, only Truscott's (2007) analysis found a negative effect of WCF on L2 learning, while subsequent meta-analyses (i.e., Biber et al., 2011; Brown et al., 2023; Kang & Han, 2015; Lim & Renandya, 2020), synthesis reviews (e.g., Li & Vuono, 2019; Mao & Lee, 2020; Mao et al., 2024) and an increasing number of empirical studies (e.g., Benson & DeKeyser, 2019; Chingchit, 2024; Ellis et al., 2008; Ferris et al., 2013; Frear & Chiu, 2015; Hartshorn et al., 2010; Kim et al., 2020; Shintani & Ellis, 2013; Shintani et al., 2014; Stefanou & Révész, 2015; Wagner & Wulf, 2016) have demonstrated the effectiveness of WCF in promoting learners' L2 knowledge. The results affirm the advantages of providing L2 learners with WCF. Despite that, a firm conclusion regarding which type of WCF is most beneficial for L2 learning could not be made, even though the result could greatly benefit L2 composition teachers, providing clear guidance in their classrooms.

In fact, Kang and Han's (2015) recent meta-analysis has suggested that direct and focused WCF might be more effective than indirect and unfocused WCF (based on an effect size index, even though the difference is not statistically significant). Moreover, in recent years, many SLA researchers (e.g., Benson & DeKeyser, 2019; Stefanou & Révész, 2015; Suzuki et al., 2019) seem to have unanimously agreed that direct WCF is more effective in aiding learners' L2 development compared to indirect WCF. An increasing amount of recent research also provides further evidence in support of the effectiveness of direct WCF in enhancing learners' grammatical accuracy and its effect has been shown to be more durable. Similarly, numerous SLA scholars argue that focused WCF is more advantageous than unfocused WCF as its narrower scope could better facilitate noticing and consequently, acquisition.

While it is well accepted that WCF is an effective pedagogical tool

that helps L2 learners develop their L2 knowledge, which type of WCF can best facilitate learning in what type of situation is a complex issue. Therefore, it is essential that L2 teachers are made aware of current trends in WCF literature as such information could contribute to a fuller understanding of the role WCF plays in learners' L2 development and could be beneficial for future practice. To guide teachers' practical decision-making, this article (1) compares research findings regarding the effectiveness of each type of WCF, and (2) suggests how each WCF type could be appropriately implemented in specific teaching contexts based on recent literature.

Research Insights

The Effectiveness of Direct and Indirect WCF

In the early years (from the 2000s), the most common types of WCF found in L2 writing literature were “*direct*” and “*indirect*” WCF (also see Bitchener & Knoch, 2010a, 2010b; Ferris, 2006; Ferris et al., 2013; Storch & Wigglesworth, 2010; Van Bueningen et al., 2008, 2012). At that time, L2 writing researchers tended to show more interest in indirect WCF (i.e., learners' errors are identified but correct linguistic forms are not provided) believing that this type of feedback engages learners in the guided learning process and problem-solving tasks, thereby facilitating their long-term acquisition.

However, advocates of direct WCF (i.e., correct linguistic forms are substituted for learners' errors) believe otherwise. They argue that direct WCF is more effective in reducing learners' confusion towards error correction as learners can instantly internalize correct forms provided by direct WCF, thereby fully benefiting from the feedback (Bitchener & Ferris, 2012; Ellis et al., 2008; Stefanou & Révész, 2015; Suzuki et al., 2019). In contrast, indirect WCF can make learners, especially ones with limited L2 knowledge, even more confused because they may not be able to self-correct their errors or may start to self-doubt their hypothesized corrections. This may imply that only learners with adequate metalinguistic knowledge can benefit from indirect WCF. Ferris et al. (2013) also comment that indirect WCF may be more advantageous for writing development by improving learners' self-monitoring ability. Nevertheless, when acquisition is the main concern, direct WCF may prove more effective as it provides unambiguous and comprehensible information about the target structure to learners, allowing them to immediately benefit from it.

Thus far, it remains inconclusive whether direct or indirect WCF is more effective for L2 learning as research conducted under this agenda yields mixed findings. While some earlier studies suggested the superiority of direct over indirect WCF (e.g., Bitchener & Knoch, 2010a, 2010b; Van Bueningen

et al., 2008), others have found the advantage of indirect WCF (e.g., Storch & Wigglesworth, 2010; Tan & Manochphinyo, 2017). However, some did not find any significant differences between the two (e.g., Ferris, 2006; Van Bueningen et al., 2012). In part, a firm conclusion could not be made due to discrepancies in research designs, methodologies, accuracy measurements, varied population, and target linguistic structures, all of which are believed to contribute to the contradictory findings in the literature (Kang & Han, 2015; Li & Vuono, 2019; Lim & Renandya, 2020; Mao & Lee, 2020; Mao et al., 2024).

However, as aforementioned, the findings of recent meta-analysis studies by Kang and Han (2015) and Lim and Renandya (2020) have demonstrated that direct feedback is more effective than indirect feedback, although the differences were not statistically significant. In recent years, numerous SLA researchers (e.g., Benson & DeKeyser, 2019; Ferris et al., 2013; Shintani et al., 2014; Stefanou & Révész, 2015; Suzuki et al., 2019) seem to have unanimously agreed that direct WCF is more effective in promoting learners' L2 development.

Theoretically, from their SLA standpoint, direct WCF could be more effective given that it promptly provides unambiguous comprehensible input (i.e., positive evidence) about the target structure to learners and learners can immediately incorporate the input into their cognitive systems (Ellis, 2009a; Manchón, 2011; Nassaji, 2015). In contrast, learners may not be able to immediately internalize indirect WCF because they need to spend some time figuring out their corrections. Such a delay in the uptake of the information may leave them benefit less from the given feedback. In addition, direct WCF seems to better promote L2 learning than indirect WCF because direct WCF provides learners with both positive evidence (i.e., correct linguistic forms) and negative evidence (i.e., an indication of unacceptable information). Conversely, indirect WCF can only provide learners with negative evidence.

The Effectiveness of Focused and Unfocused WCF

Another dichotomy that has attracted researchers' interest is that between "*focused*" (only specific error types are corrected while the rest are disregarded) and "*unfocused*" (all or most grammatical errors are corrected) WCF. For example, focused WCF may involve correcting only errors related to the use of articles, adjectives or tenses, whereas unfocused WCF may involve correcting all types of grammatical errors such as articles, nouns, adjectives, adverbs, and tenses.

Regarding the effectiveness of focused WCF, Ellis (2009a) contends that focused WCF is more effective than unfocused WCF because learners are likely to notice and understand corrections better when they have to pay attention to fewer types of grammatical errors (also see Nassaji, 2015). His

assumption is based on the SLA theoretical premise that noticing and understanding are prerequisites for language acquisition and that noticed input is more likely to become intake (Schmidt, 1995). Bitchener (2008) and Sheen et al. (2009) corroborate Ellis' (2009a) viewpoint, arguing that unfocused WCF is more likely to overload learners' attention and cognitive capacities, as learners need to pay attention to a wide range of corrections at the same time; therefore, limiting their feedback processing. Lee (2019) also questions the effectiveness of unfocused WCF, arguing that correcting all errors without considering learners' proficiency and developmental readiness may be ineffective as learners may not be at the stage where they can comprehend the corrected features. Focused WCF, on the other hand, seems to be a promising technique as it targets only a selective number of errors. As a result, learners can easily notice the feedback and this is facilitative to learning. Truscott (2001) also suggests that for WCF to be effective (rather than harmful), the feedback must be provided selectively rather than comprehensively. For these reasons, researchers who support focused WCF assert that focused WCF is more beneficial for L2 learning than the unfocused one.

However, advocates of unfocused WCF argue that the attention capacity issue might be more critical in online (i.e., speaking) as opposed to offline processing such as in writing, when learners have more time available to reflect on corrections. Ferris (2010) further asserts that correcting only certain types of errors while disregarding the rest may confuse learners and does not help improve their writing ability. Hartshorn et al. (2010) postulate that focused WCF might disappoint learners who expect to have all their errors corrected. Van Beuningen et al. (2012) also comment that even though focused WCF may better facilitate learners in restructuring their interlanguage by repeatedly addressing the same errors, unfocused WCF corresponds to actual practice and, consequently, seems to have higher ecological validity. In Kang and Han's (2015) meta-analysis, although focused WCF had been shown to yield a larger effect size on learners' L2 learning outcomes compared to unfocused WCF, the difference between the two was not statistically significant. In contrast, in Brown et al.'s (2023) recent meta-analysis, the effectiveness of focused WCF was found to be twice that of unfocused WCF.

From most SLA researchers' viewpoints, focused WCF appears to be more promising than unfocused WCF since it responds well to SLA theories (Benson & DeKeyser, 2019; Lee, 2019; Shintani & Ellis, 2013), given Schmidt's Noticing Hypothesis (2001) for example. Schmidt's Noticing Hypothesis (2001) posits that conscious attention to linguistic forms is a prerequisite for acquisition, since "people learn about things they attend to and do not learn much about the things they do not attend to" (Schmidt,

2001, p. 30) and only through conscious attention that input can be internalized into intake. In other words, conscious attention makes learners aware of the input, i.e., target structures, and notice a mismatch between their interlanguage output and the target-like input, prompting the destabilization and reconstruction of learners' interlanguage grammar (Bitchener & Storch, 2016; Gass, 2003; Long, 1996, 2014). Drawn upon this theory, many SLA researchers believe that focused WCF, which targets limited ranges of linguistic structures, can make the target structures more salient to learners and that better facilitates learners' noticing and L2 acquisition respectively. On the contrary, unfocused WCF might demand learners to pay attention to multiple structures at the same time; therefore, potentially limiting their noticing ability and overloading their limited cognitive capacities, ultimately resulting in unsuccessful uptake of the feedback.

However, it is still debatable to date whether focused or unfocused WCF is more effective. Most studies that only investigated the effectiveness of focused WCF (e.g., Benson & DeKeyser, 2019; Bitchener 2012; Shintani et al., 2014; Stefanou & Révész, 2015) found that focused WCF is beneficial for L2 learning. Likewise, studies that only explored the effectiveness of unfocused WCF (e.g., Bonilla López et al., 2018; Van Beuningen et al., 2012; Wagner & Wulf, 2016) have also found it effective for L2 development. Only a small number of studies have actually been conducted to compare the effectiveness of these two types of WCF within a single study (e.g., Chingchit, 2024; Ellis et al., 2008; Frear & Chiu, 2015; Sheen et al., 2009) and the results are inconclusive.

For example, in Ellis et al.'s (2008) study which compared the effects of direct focused and direct unfocused WCF on the use of English articles among 49 intermediates Japanese EFL learners, both types of WCF were found to be comparably effective in improving learners' accuracy. However, in Sheen et al.'s (2009) study which examined the effects of direct focused and direct unfocused WCF on accurate uses of articles, copula 'be', regular and irregular past tense forms and preposition among 80 intermediate ESL learners, the finding revealed that direct focused WCF was more effective than direct unfocused WCF. Farrokhi and Sattarpour's (2012) finding concurs with that of Sheen et al. (2009) which found an advantage of direct focused over direct unfocused WCF. In their study, Farrokhi and Sattarpour (2012) explored the differential effects of direct focused and direct unfocused WCF on the use of English articles by 120 Iranian EFL learners from "low and high" levels of proficiency. In contrast, recent work by Chingchit (2024) comparing the effects of direct focused and direct unfocused WCF on 75 low-intermediate EFL learners' acquisition of English plurals showed that both types of WCF were equally effective in helping learners develop their English plural knowledge.

As previously mentioned, such variations in research methodology, population, instructional contexts and target linguistic structures contribute to these contradictory findings and limit the amount of comparable research leading to insufficient evidence for drawing affirmative conclusions. This line of research is, thus, still in need of further investigation for a firm conclusion to be made.

Pedagogical Implications

As shown above, several studies have confirmed the general effectiveness of WCF on L2 development. Nonetheless, pedagogically, a firm conclusion regarding which type of WCF is most beneficial for L2 learning has not yet been reached. Current findings seem to warrant the effectiveness of all types of WCF, whether it is direct, indirect, focused or unfocused. However, as there are many types of WCF, a question may arise as to which WCF type is most effective in aiding L2 learning and should be adopted in L2 classrooms. In this respect, Ellis (2009b) has argued that the effectiveness of WCF does not depend on the feedback type but is largely influenced by learners' current grammatical knowledge (i.e., proficiency levels). Hence, as there is no 'one-size-fits-all' WCF, L2 practitioners should adopt feedback types that correspond more closely to their learners' needs or aligns with their learners' proficiency levels. Guenette (2013) also supports Ellis' (2009b) premise suggesting that L2 practitioners should consider learners' background knowledge before adopting particular feedback strategies. For example, indirect feedback may be suitable for learners who already have partial knowledge of the target structures while direct WCF should be provided if the structures are entirely new to learners. Even though both types of WCF have been proven effective for learning, it does not mean that both will be equally effective for the same group of learners, as the learning opportunities provided by feedback may go unheeded if they are beyond learners' developmental levels (see Aljaafreh & Lantolf, 1994, for Zone of Proximal Development (ZPD)). In addition, recent findings from Kang and Han's (2015) and Lim and Renandya's (2020) meta-analyses also indicated that proficiency level is one of the most influential variables moderating the effectiveness of WCF. The researchers contend that the effects of different types of WCF are not clearly distinguishable because the efficacy of WCF is moderated by other learner difference factors, such as learners' proficiency levels, their preferences for WCF type and instructional context (see Chingchit, 2024; Storch, 2018; Mao & Lee, 2020).

The finding that proficiency levels are a strong moderator thus underscores the necessity for L2 practitioners to consider learners' developmental readiness when providing feedback (also see Pienemann,

1998). It also suggests that practitioners should be aware of their learners' current proficiency levels, whether they are beginners, intermediate or advanced, so that they can reasonably select the type of WCF that could best facilitate their learners' learning.

Based on current findings in the WCF literature, most researchers suggest that for learners at a high proficiency level (i.e., intermediate and advanced learners), who have sufficient knowledge of the target linguistic structure(s), all types of WCF seem to be equally effective and practically can be appropriately used in class. However, in cases where some errors persist, direct focused WCF may be a better option, at least at the beginning, as learners only have to pay attention to the problematic forms and the practice on a few types of errors may better accelerate the acquisition of the target structures (see Chingchit, 2024).

Nevertheless, for beginner or lower proficiency learners, it is suggested that direct and focused WCF may be more facilitative than indirect and unfocused WCF because indirect and unfocused WCF might be overwhelming for this group of learners (Bitchener & Storch, 2016; Gass, 1997; Schmidt, 2001). With indirect WCF, beginner learners may not be able to self-correct their errors due to their limited L2 knowledge. In the case of unfocused feedback, since multiple errors are corrected at the same time, less proficient learners may be less likely to notice and recognize all the gaps in their language usage (Gass, 2003; Schmidt, 2001). In addition, due to their limited L2 knowledge, beginner learners may not understand all the corrections given to them, so it is a waste of the teacher's time and effort to locate or correct all types of grammatical errors for learners at this stage. It is therefore recommended that teachers initially provide beginner learners with direct and focused WCF (targeting one or a few types of grammatical errors) and provide them with indirect and unfocused WCF later when they gain more L2 knowledge or show developmental readiness. Lee (2020) also proposes another alternative approach, suggesting teachers provide focused WCF on a longer text while providing unfocused WCF for the shorter ones. In sum, for highly proficient learners, any type of WCF can be equally effective and appropriately used in class. However, for beginner or low proficient learners, direct and focused WCF seems to be a more practical option at least at the beginning. Once learners acquire more L2 knowledge, all types of WCF can be used in place of direct and focused WCF.

In addition to learners' proficiency levels, another factor that moderates the efficacy of WCF is learners' beliefs or preferences for WCF type. Research shows that learners may not benefit from WCF if their beliefs diverge from teachers' practices or if they see little value in WCF provided by their teachers (see Ene & Kosobucki, 2016; Han & Hyland, 2015; Storch & Wigglesworth, 2010). That is, learners' preferences for a particular type of

WCF may affect the extent to which they use it for their learning. If a learner believes that a particular type of feedback is useful for their learning, they are likely to pay more attention to that feedback compared to when they don't perceive it as useful. Therefore, several researchers have suggested that learners' beliefs and teachers' practices should be aligned so that the given WCF could be optimized. In Ene and Kosobucki's (2016) and Storch and Wigglesworth's (2010) studies, it was found that a conflict between learners' beliefs and teachers' choices of feedback could lead to a lack of learners' engagement with the feedback and feedback retention. So, what if learners do not perceive the provided feedback as helpful while the teachers believe otherwise? For instance, in a scenario in which most learners in the class prefer direct WCF, but the teacher believes that indirect WCF could be more beneficial, it is suggested that the teacher may need to have an open discussion with learners explaining why they decided to choose such feedback option. It is the teacher's responsibility to adjust learners' expectations or preferences if the teacher's choice could better facilitate learning. Although learners' beliefs or preferences should be valued and taken into consideration when choosing an optimal feedback strategy, their beliefs or preferences are "not necessarily more effective (than those of the teachers) for being preferred" (Brown, 1998, p. 253). However, L2 practitioners still need to be mindful of their learners' beliefs and preferences for WCF type and try their best to find WCF that closely aligns with learners' beliefs so that they become more engaged and invested in their learning.

Conclusion

This article provides insights into the effectiveness of each type of WCF based on SLA grounds. It also offers a critical view of how each WCF type can be best implemented in specific contexts. Theoretically, most SLA researchers believe that WCF facilitates L2 learning when appropriately provided, with direct and focused WCF potentially being more effective than indirect and unfocused ones. However, recent research suggests that certain learner difference factors, such as learners' proficiency levels and beliefs towards teachers' choices of feedback could moderate the effectiveness of WCF. A lack of understanding of these learner difference factors may hinder learners' opportunities to benefit from the given feedback. Thus, while it is clear that teachers should continue to provide WCF to learners as it is beneficial for their learning, teachers should also take learners' proficiency levels (i.e., developmental readiness) and learners' beliefs into account when selecting WCF so that they can fully maximize its effectiveness in their composition classrooms.

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