Innovating teacher feedback with writing activities aimed at raising secondary school students' awareness of collocation errors

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Abstract

The study examined the types of written corrective feedback given by second language writing teachers on Taiwanese secondary school students' collocation errors. First, the written corrective feedback that teachers provided on learners' word choice errors was examined to uncover the types of feedback provided. Then, analysis focused on verb–noun collocations to draw attention to how students had been receiving different types of written corrective feedback from teachers on a single collocation error type. Results showed that some sentences tagged as including word choice errors only contained rule-based errors. Furthermore, for verb-noun collocation errors, teachers chose to provide indirect and direct feedback almost equally at the expense of metalinguistic feedback. Based on the results, we suggested options for second language writing teachers when providing feedback on word choice errors.

Keywords: L2 feedback; word choice errors; L2 writing activities; written corrective feedback; feedback corpus

1. Introduction

The potential of written corrective feedback for second language (L2) writing improvement has long been acknowledged (e.g., Ferris, 2002; Hyland & Hyland, 2006; Sarré et al., 2019). Despite its potential, writing specialists and theorists have debated and disagreed upon the role of *teachers'* written corrective feedback in facilitating students' English writing (see Lee, 2016, 2017 for discussion). The elements and characteristics of teacher feedback determine its quality and effect on students' English writing. One of these is the level of explicitness required for teacher feedback when its aim is to correct students' writing errors. For example, when teachers mark students' writing errors, should they directly indicate the type of errors the students have made by providing the correct forms and metalinguistic rules or, instead, should they directly indicate erroneous forms through the use of symbols as a way to lead students to self-diagnose and self-correct errors? Another thorny issue is whether teachers are even equipped with the knowledge necessary to provide corrective feedback: They may unknowingly mislabel one error type for another and thereby misinform and misdirect students' attention. While these and other issues are being debated regarding teacher feedback on student writing, few experts would suggest teachers not to provide any type of feedback on student writing. Moreover, students expect teachers to provide feedback on their written errors produced when writing in their L2s (Ferris & Roberts, 2001). Suggestions from researchers as well as the expectations of L2 writing students provide the rationale for the current investigation of teacher feedback practices.

Although most research on written corrective feedback has focused on rule-based grammatical errors, the actual feedback teachers provide often involves a combination of rule-based and non-rule-based (i.e., word choice) errors (e.g., Ferris & Roberts, 2001). Scholars have noted that word choice errors "often cause serious comprehension problems" in the writing produced by L2 writers; these errors have been considered as largely "untreatable" (Ferris & Roberts, 2001, p. 173). Instead of suggesting written corrective feedback, most researchers recommend that L2 writing teachers encourage their students to use corpus tools or other strategies to assist in self-editing (e.g., Reynolds, 2015, 2016; Pérez-Paredes, 2019); however, there has yet to be a detailed analysis of teachers' corrective feedback practice through, for example, an analysis of teacher feedback corpus. Previous research has indicated that student writers may be able to identify and self-correct word choice errors (Ferris & Roberts, 2001). However, the outcomes are limited and expecting students to independently use corpus tools to facilitate independent writing may be met with resistance (e.g., Reynolds, 2015, 2016). The reality has been that student writers

have tended to exhibit strong negative reactions when asked to self-edit word choice errors using corpus tools (Reynolds, 2016); instead, student writers passively await teachers' written corrective feedback (Kao & Reynolds, 2017; Lee, 2014).

Along with the advancement of technology in teaching and learning English writing, corpora have become common tools for learning to write in a L2 (cf. Pérez-Paredes, 2019). Students may consult corpora through an installed application on their computers or through the web via server-based corpora. During the writing process, students may independently search a corpus or use any number of corpus-based tools that can provide additional reference information alongside more conventional learning resources. Writing teachers may also harness corpora technology to further assist students in improving L2 writing; teachers may use the corpora as a resource when administering written corrective feedback. However, applying data-driven learning to writing has been underexplored and how corpora can be used to enhance written corrective feedback practices remains under-researched.

In the context of the current investigation, pertaining to the Taiwanese secondary school EFL writing classroom, product-oriented L2 writing instruction dominates and students expect teachers to provide them with written corrective feedback (Chen & Tsai, 2012; Reynolds, 2016). In terms of product-oriented L2 writing instruction, the main focus is on the mechanical aspects of writing, such as providing students with instruction on grammatical and syntactical structures. In recent years, a call for a shift in focus from product to process writing has been made. Process-based writing refers to how ideas are developed and how writing is formulated. This is not just a localized occurrence in Taiwan but is echoing throughout the world (Johnson, 2020). This call for change has caused many teachers to reconsider their practices when implementing writing pedagogy. The teacher's role in writing shall not become limited to that of a spotter of grammatical errors and reinforcer of a set of grammar rules. Instead, students need and deserve teacher written corrective feedback that can help them reflect on how to notice errors and be able to generate and explore ideas in writing. Therefore, discussion of these issues should not be focused on *whether* L2 writing teachers should provide written corrective feedback but *how* they should do so. This study addressed this issue by providing a practical discussion on how teachers can structure the corrective feedback administered to L2 students' lexical errors found in their writing. This study, aiming to fill this gap, explored teachers' written corrective feedback extracted from a corpus of teacher feedback. The following research question was addressed: *What type of written corrective feedback do secondary school teachers provide for students' verb-noun collocation errors?*

2. Literature review

2.1. Written corrective feedback

When teaching and learning L2 English writing, *written corrective feedback* refers to written information a teacher provides to L2 writers regarding how their writing can be enhanced (Bitchener & Ferris, 2012). Written corrective feedback has been found to be useful when delivered in a way that helps L2 writers in their personal writing development (Bitchener & Ferris, 2012). Such feedback is often direct (i.e., the teacher supplies the correct form) and focused or selective (i.e., the teacher systematically selects one or a few error types to correct) (Ellis, 2009; Ferris, 2006, 2010). For example, when providing direct feedback, a teacher would strike through the word "write" in the sentence "*I ~~write~~ homeworks." and provide the appropriate collocate by writing the word "do" above ~~write~~. If the teacher was also providing focused or selective feedback for collocation errors, the pluralization of homework would not be corrected as this is not the error type targeted by the teacher. Other types of feedback include indirect feedback and metalinguistic feedback. *Indirect feedback* entails the teacher marking the location of an error for L2 writers to correct (Ellis, 2009; Ferris, 2006, 2010). A teacher providing indirect feedback might circle or underline the word "write" to signal the student to self-correct. *Metalinguistic feedback* occurs when the teacher poses questions, provides comments, or offers information related to the error without providing the correct form (Cornillie et al., 2017). Traditionally, metalinguistic feedback has been provided in the form of grammar rules; however, for collocation errors such as the one found in the example above, a teacher might give comments in lieu of a grammar rule. For example, these might look like the following: *We do not write homework. Another verb goes with the noun homework to form a verb-noun collocation. What verb goes with homework*?

Written corrective feedback studies have aimed to determine which type of feedback is most beneficial to L2 writers (Kao, 2020). Many of these studies have suggested that teachers provide feedback that is both direct and focused instead of indirect and unfocused (Bitchener & Ferris, 2012). Unfortunately, these studies have overwhelmingly been concerned with grammatical errors and not lexical errors (see Ekanayaka & Ellis, 2020; for an attempt to investigate both). Moreover, much of the discussion has been limited to investigating the improvement in the use of the English article system (Kao & Wible, 2014) and even these studies have been rather limited to one or two functional uses of English articles (Kao, 2020).

2.2. Word choice and collocations

Clarity is key in writing. Appropriate word choice, defined as usage of the most suitable words to convey a writer's message to readers, is essential in ensuring clarity. One area of word choice with which L2 writers tend to struggle, especially those developing proficiency in the target language, is the selection of appropriate collocates for node words (e.g., *take medicine* rather than **eat medicine*). This problem has been widely discussed in the literature, in which English language teaching (ELT) scholars have observed that word choice errors or miscollocations occur due to incongruence between the first and second language (L1–L2) (Agustín Llach, 2015). For example, L1 Chinese writers may produce the English word combination **eat medicine* because the verb *eat* cannot be translated directly from Chinese into English, yet learners assume semantic and pragmatic equivalence. Collocation errors are an unavoidable issue for L2 writers, as corpus research has shown that collocations are present in all written texts and thus must be accurately produced by L2 writers to convey intended meaning (Lewis, 2000; Vedder & Benigno, 2016). It may be possible to reduce grammatical rule-based errors in L2 writers' subsequent writing when L2 writing teachers provide metalinguistic rule-based explanations as written corrective feedback. However, it may be difficult to explain miscollocations with the help of rules. This is because the use of one particular collocate instead of another is arbitrary and idiomatic (e.g., *do homework* and not **write homework*).

Verb-noun collocations, which refer to phrases containing a verb and a noun that frequently occur together, are important in L2 writing as they can make the language clear and natural (Lewis, 2000). An example is the use of the verb *sit* with the noun *test* to form the collocation *sit a test*.[1] L2 writers that are unaware of this verb-noun collocation may opt to select a more "general" verb such as *make* or *do* but they run the risk of producing language that may not be clear and natural. Furthermore, it could lead to possible misunderstandings in that a reader may interpret *make a test* as *constructing a test* or *designing a test*.

To the best of our knowledge, only two previous studies have investigated the difference in the effectiveness of direct and indirect teacher feedback on collocation errors, both of which used discrete task conditions rather than L2 compositions to elicit the targeted collocations. Furthermore, both used rather loose definitions of what constituted indirect feedback. Ting and Lin (2015) compared direct and indirect feedback through the use of a cloze task targeting 16 adjective-noun and verb-noun collocations. Students that received direct feedback had their incorrect answers marked and the correct answers provided. Students

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[1] This example was provided by Per Snoder (P. Snoder, personal communication, September 22, 2016).

that benefited from indirect feedback had their incorrect answers marked but they had to refer to a handout to locate the correct answers that were accompanied by a picture illustrating the collocating word pairs. The results showed that the students who received the indirect feedback outperformed those who received direct feedback on both a posttest and a delayed posttest. It should be noted, however, that the indirect feedback still provided the correct answers, albeit in a different manner than what usually occurs in direct feedback studies. Zarei and Mousavi (2016) compared direct and indirect feedback through the use of ten L1 to L2 sentence translation tasks targeting a total of 150 lexical collocations (i.e., combinations of nouns, verbs, adjectives, and adverbs). Students that received direct feedback had their incorrectly translated collocations underlined and then the corrected collocations were written on the board for the students to note down. By contrast, students that received indirect feedback had their incorrectly translated collocations underlined and were told to correct them at home; however, if on the next day the collocations were still found to be incorrect, the teacher wrote the correct collocations on the board. As shown in early feedback research (e.g., Lalande, 1982), student writers in Zarei and Mousavi (2016) who received indirect feedback made more improvement than those who received direct feedback. However, as is clear from the extant literature, more methodologically sound studies are needed to make claims regarding the effectiveness of indirect and direct feedback on collocation errors.

Written corrective feedback regarding English verb-noun collocations was targeted for scrutiny in the current investigation because such collocations appear frequently in L2 writing and are challenging for learners to master (Laufer & Waldman, 2011). As few useful guidelines are available for ELT practitioners in providing written corrective feedback for collocation errors found in L2 learners' writing, this study aimed to examine teachers' written corrective feedback extracted from the English Taiwan Learner Corpus (ETLC) and provide L2 writing teachers with advice for giving accurate, complete, and appropriate feedback.

3. Methods

3.1. ETLC data extraction

The data analyzed in the current study were extracted from the ETLC (Shih, 2000), which is the largest annotated learner corpus of English in Taiwan; the ETLC contains local Taiwanese secondary school students' writing and accompanying feedback provided by students' L2 English writing teachers. Students use the Intelligent Web-based Interactive Language Learning (IWiLL) system (Wible

et al., 2001) to compose and submit description/narration and exposition/argumentation essays that are automatically compiled into the ETLC. Subsequently, teachers retrieve the assignments and attach error tags with comments as electronic written corrective feedback to specific highlighted text, which in turn is automatically compiled into the ETLC before the writing is returned to students (with the attached teacher feedback) for review and further revision if necessary. The error tags are not preset by the system; instead, teachers have the freedom to create unique error tags. After creation, the error tags are saved in a teacher's profile for future access.

4. Results

In this study, 518 students' written sentences and their teachers' feedback for one academic year were extracted from the corpus by searching for any tags teachers used that included *word* and/or *form*. This parameter allowed us to target teacher feedback regarding word choice errors, resulting in the extraction of 309 feedback comments indicating word-choice errors (see Figure 1). Although there could have been more word-choice errors made by the students, this study focused only on the feedback that L2 writing teachers provided for word-choice errors. Relevant tags created by teachers included *word choice* (N = 183), *word form* (N = 80), 字詞不當 *improper wording* (N = 23), *change this word* (N = 16), *improper usage or words* (N = 4), *wrong form* (N = 1), *wrong word* (N = 1), and 字詞不當 *word choice improper wording* (N = 1).

word choice			
Student ID : srv1_fuhsing_6350275_6189			
NO. Sentence		Tag & Comment	Essay
1 I'm **happy so much**!		word choice This is not the right word here. Use a different word.	Essay
Student ID : srv1_fuhsing_7300248_4574			
NO. Sentence		Tag & Comment	Essay
2 We meet a teacher that he was seriously **in** that day.		word choice This is not the right word here. Use a different word.	Essay
Student ID : srv1_fuhsing_7300249_4575			
NO. Sentence		Tag & Comment	Essay
3 **At** the weekend.		word choice This is not the right word here. Use a different word.	Essay
Student ID : srv1_fuhsing_7300337_4577			
NO. Sentence		Tag & Comment	Essay
4 I **wish** I can learn English well.		word choice This is not the right word here. Use a different word.	Essay
Student ID : srv1_fuhsing_7350532_3157			
NO. Sentence		Tag & Comment	Essay

Figure 1 Examples extracted from student writing with word choice error tags and L2 writing teacher feedback
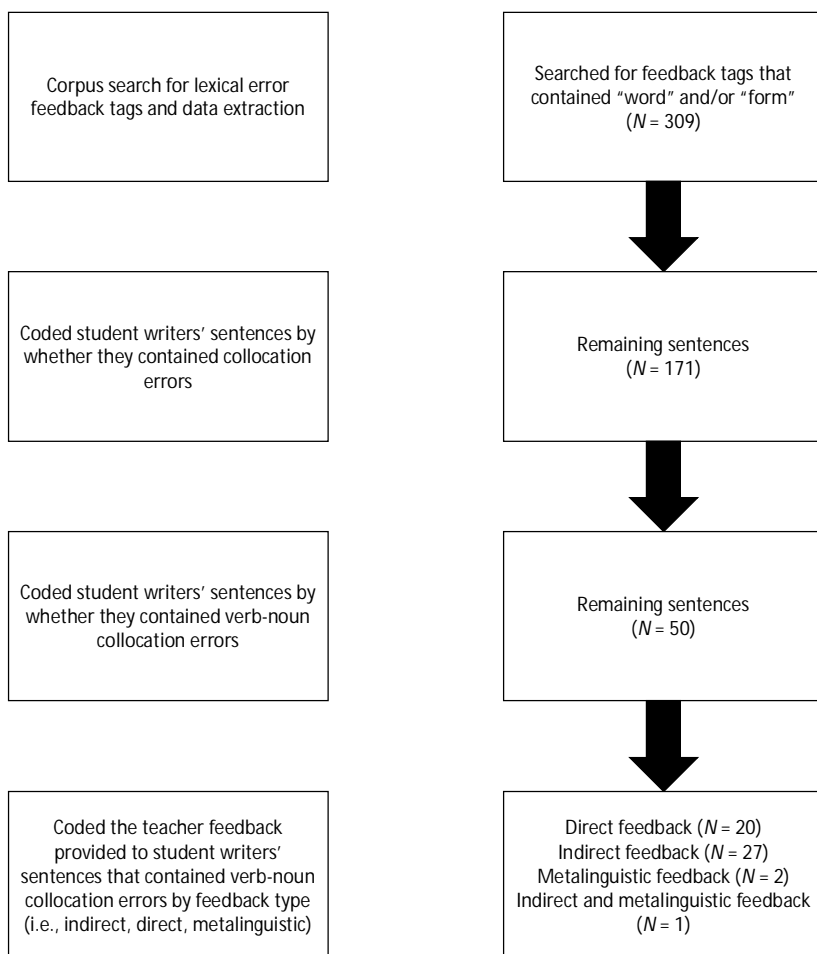
Corpus search for lexical error feedback tags and data extraction	Searched for feedback tags that contained "word" and/or "form" (N = 309)
Coded student writers' sentences by whether they contained collocation errors	Remaining sentences (N = 171)
Coded student writers' sentences by whether they contained verb-noun collocation errors	Remaining sentences (N = 50)
Coded the teacher feedback provided to student writers' sentences that contained verb-noun collocation errors by feedback type (i.e., indirect, direct, metalinguistic)	Direct feedback (N = 20) Indirect feedback (N = 27) Metalinguistic feedback (N = 2) Indirect and metalinguistic feedback (N = 1)

Figure 2 Schematic of corpus data extraction process

After feedback extraction, the second author and a research assistant independently coded 309 students' written sentences given these tags according to whether the sentences contained or did not contain a collocation error (i.e., yes or no). Cohen's κ was run to determine inter-rater agreement, indicating acceptable agreement between the two raters (κ = .886, p < .0005).[2] Sentences on which the raters did not come to a consensus were discussed by the two raters and the first author until an agreement was reached. Results of this round of coding culminated in 171 sentences containing a collocation error. Then, the second author and a research assistant further independently coded the 171 sentences containing a

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[2] The Kappa results were interpreted as follows: values ≤ 0 indicate no agreement, 0.01-0.20 as none to slight, 0.21-0.40 as fair, 0.41-0.60 as moderate, 0.61-0.80 as substantial, and 0.81-1.00 as almost perfect (Cohen, 1960).

collocation error by collocation error type (e.g., verb–noun, adjective–noun, verb–adverb, and so on). Cohen's κ indicated high agreement between the two raters ($κ = .918$, $p < .0005$). Sentences on which the raters did not come to an agreement were discussed by the two raters and the first author until an agreement was reached. Out of the 171 sentences containing collocation errors, 50 sentences contained a verb-noun collocation error. Finally, the second author and a research assistant independently coded the 50 teacher feedback comments on verb-noun collocation errors (i.e., direct, indirect, and metalinguistic) (see Table 1, for examples). Cohen's κ indicated nearly complete agreement between the two raters ($κ = .963$, $p < .0005$). The only feedback comment on which the two raters did not agree involved a teacher providing a combination of indirect and metalinguistic feedback. Among the other 49 teacher feedback comments on verb-noun collocation errors, 20 involved direct feedback, 27 involved indirect feedback, two involved metalinguistic feedback, and one involved a combination of indirect and metalinguistic feedback. A schematic diagram of the data extraction process is provided in Figure 2.

Table 1 Examples of different feedback types given by teachers on verb-noun collocation errors

Feedback type	Sample teacher feedback
Indirect	This is not the right word here. Use a different word.
Direct	This is not the right word here. Use a different word – *set a good example.*
Metalinguistic	These two words do not go together. We don't *do* contributions. What verb goes here instead of *do*?

A chi-square one-way goodness-of-fit test was conducted to determine whether writing teachers chose feedback types for verb-noun collocation errors equally (see Table 2). Results indicated that the secondary school writing teachers provided direct and indirect feedback more often and metalinguistic feedback less often than predicted on verb-noun collocation errors ($χ^2 = 20.367$, $df = 2$, $p < .0001$).

Table 2 Writing teachers' choice of feedback types for verb-noun collocation errors

Feedback type	Direct feedback	Indirect feedback	Metalinguistic feedback
Observed *N*	20	27	2
Expected *N*	16.3	16.3	16.3

5. Discussion

Overall, the research findings can shed light on teaching and learning L2 writing. In the current study, L2 writing teachers provided more direct and indirect feedback for verb-noun collocation errors than metalinguistic feedback. The teachers'

limited linguistic resources, as evidenced by multiple occurrences of inappropriate feedback, may have predisposed them to provide ill-formed or incomplete written feedback on word choice errors in an unobtrusive manner. However, these results should not be interpreted as suggesting that the L2 writing teacher's role is that of an editor who simply provides direct focused corrective feedback on all word choice errors. Instead, with regard to word choice errors, the teacher should attend to the types of formulaic language with which their learners appear to be struggling, decide on appropriate consciousness-raising activities that can help learners to practice producing these troublesome formulaic language types, and reinforce learners' awareness by providing direct corrective feedback on the targeted formulaic language upon activity completion (Reynolds & Teng, 2019). We discuss the findings based on different types of feedback, that is, inaccurate feedback, direct and indirect feedback, metalinguistic feedback, and mixed feedback.

5.1. Inaccurate feedback

L2 writing teachers' feedback was somewhat inaccurate: Some sentences tagged with word choice errors did not always contain such errors. For example, in the first round of coding when word choice error tagged sentences were scrutinized, sentences such as *I learned so much*[3] *different things at his class* and *Only I can do is studying and studying** were tagged by teachers with word choice error tags. One of the main arguments against the effectiveness of corrective feedback is that teachers provide inconsistent or inaccurate feedback on writing errors (Truscott, 1996). This claim was empirically investigated by Lee (2004), who demonstrated that only three percent of Hong Kong secondary teachers surveyed had administered inaccurate corrective feedback on grammar errors: The errors were accurately located but inaccurately corrected or the errors were accurately located but inaccurately coded. Still, nearly half of the feedback analyzed in Lee's study was found to be unnecessary. The accuracy of secondary school English teachers' feedback practices deserves consideration. Even though this previous research indicated that teachers might be more accurate in their feedback on grammatical errors, less is known about teachers' feedback on lexical errors.

While the data from the current study provided by secondary school teachers show that appropriate feedback on verb-noun collocation errors was provided, the same cannot be said for all lexical errors. Empirical studies are needed that aim at investigating the accuracy of the feedback teachers provide on a range of lexical errors. Although Ferris (2001) found that ESL writers could

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[3] Highlights indicate teachers' highlights for the word-choice error tag.

self-correct word choice errors more accurately compared to rule-based errors, Reynolds (2016) found EFL writers to be unwilling to take the initiative to self-correct verb-noun collocations. So, it is not just the role of teachers but also the attitude of the students that must be considered when measuring feedback effectiveness.

5.2. Direct and indirect feedback

Teacher feedback extracted from the corpus shows that teachers provided indirect and direct feedback on student writers' verb-noun collocation errors significantly more frequently than metalinguistic feedback (see Table 2). Moreover, they supplied indirect feedback more often than direct feedback on student writers' verb-noun collocation errors. In the current study, teacher feedback that was indirect, indicated only with a feedback tag, showed to learners that a word choice error had been made. However, teacher feedback that was direct not only indicated that a word choice error had been made but also provided the corrected collocation for the student writers to incorporate into their revised draft.

The earliest distinction between teacher feedback types was the comparison between direct and indirect feedback (Ellis, 2009; Ferris, 2010). While some early researchers did not find a difference in grammar improvement for learners that received indirect or direct feedback (e.g., Robb et al., 1986), more recent research, including meta-analytic studies, has shown that regardless of whether direct or indirect feedback is administered by teachers, both feedback types were effective and resulted in a positive long-term learning effect on students' linguistic accuracy (Van Beuningen et al., 2008; Kang & Han, 2015). It then seems that the secondary school teachers' feedback examined in the current study was appropriate and would have led to improvements in their students' L2 writing.

5.3. Metalinguistic feedback

When scrutinizing the feedback given on verb-noun collocation errors, we found that teachers provided relatively little metalinguistic feedback. Providing metalinguistic feedback may help to increase L2 writers' awareness of the errors and has been shown to be effective in reducing occurrences of targeted errors in subsequent writings (Bitchener, 2008; Bitchener & Knoch, 2010). While it could be argued that metalinguistic feedback is not possible as the mutual relationship between a collocate and a node cannot be explained with a rule, providing this sort of explanation in itself could be considered as a type of metalinguistic feedback. The teacher could, for example, probe a student to consider which verb goes together with a particular noun while also reminding the student to draw upon their knowledge of such combinations that are used in their L1 (Butzkamm, 2001;

House, 2009). Research has yet to be undertaken that could investigate whether this sort of feedback on lexical errors such as collocation errors would or would not be more or less effective than providing direct feedback. Moreover, Sarré et al. (2019) hold the view that written corrective feedback represents an explicitness continuum where underlining an error would be considered the least explicit form of written corrective feedback and providing the corrected form alongside additional explanation of the error would be the most explicit. We feel that the explicitness of this kind of feedback can impact learner noticing, which, in turn, can affect the likelihood of the written corrective feedback as input becoming intake. It could have been the raising of language awareness and the explicitness of the feedback that led to the more robust results for the indirect feedback, as supported in previous studies (Ting & Lin, 2015; Zarei & Mousavi, 2016).

5.4. Mixed feedback

Among instances of teacher feedback on verb-noun collocations examined in the current study, only one occurrence was found to represent a mixed-feedback type. This involved combining metalinguistic and direct feedback or combining metalinguistic and indirect feedback. Instead, teachers tended to choose between providing indirect or direct feedback. Indirect feedback only required teachers to indicate a word choice error had been made, while direct feedback entailed teachers knowing which collocate the student intended to use and then providing the student with the intended collocate as feedback. These results could be interpreted as indicating that L2 writing teachers did not possess equal levels of knowledge and therefore reverted to providing indirect feedback on word choice errors. If this was the case, this finding indicates that L2 secondary school writing teachers in Taiwan who use IWiLL and similar systems to provide feedback may require training to help them make effective choices in differentiating word choice and rule-based errors. For example, feedback tags can be color coded so that students are made aware that feedback is targeting word choice errors or rule-based grammatical errors. Another interpretation could be that the teachers felt that providing direct feedback might misinterpret students' meaning (Ferris, 2002) or that it was inappropriate as the errors might have been considered untreatable as they were related to word choice (Lee, 2003).

6. Limitations and implications

6.1. Limitations

While the study succeeded in uncovering both appropriate and problematic teacher feedback practices, it also suffers from some limitations. First, the data

were only extracted from the ETLC, making it impossible to generalize findings to all L2 writing teachers and learning contexts. Second, while the focus was placed on teachers' practices involved in providing written corrective feedback, students' attitudes towards such feedback or the feedback process were not analyzed. Third, teacher feedback on only one type of word choice errors, namely verb-noun collocation, was analyzed.

6.2. Implications for teacher education

The results of this investigation suggest that there may be a gap between what teachers should provide as corrective feedback and what they actually do. As previous research has shown that the most significant predictor of the pedagogical beliefs held by in-service teachers can be attributed to the learning that occurred in their teacher education programs (Levin et al., 2013), addressing the issue of teacher feedback efficacy in pre-service teacher programs is clearly a priority. Although instruction on how to provide effective feedback on student writing often occurs in TESOL training programs, Liu (1998) reported that pre-service non-native English teachers' training about formulaic language may be insufficient. In addition, it was also suggested (cf. Liu, 1998) that TESOL trainers should encourage non-native pre-service teachers to complete class projects, term papers, and short-term research studies focusing on areas in which the trainees consider themselves to be weak, which could help them build their collocational competence. We feel that the affordances provided by IWiLL and similar systems such as Turnitin (http://www.turnitin.com) have the potential to facilitate teacher feedback practice because these online systems streamline creating a teacher feedback bank (Chen, 2014; Guichon et al., 2012; Sarré et al., 2019). If the teacher aiming to provide direct feedback on miscollocations and other types of formulaic language does not possess the required word knowledge, then one of many published collocation dictionaries or other online word reference tools (e.g., Compleat Lexical Tutor; https://www.lextutor.ca) could be consulted when creating feedback tags. Creating an electronic feedback bank will result in many returns on the initial time invested. Once a teacher adds a feedback tag to a database, it can be retrieved an unlimited number of times.

6.3. Implications for classroom practice

The data analyzed in the current study showed that L2 writing teachers tended to provide more direct and indirect feedback and less metalinguistic feedback on verb–noun collocation errors. Word choice errors may not be easily explained through metalinguistic feedback, as no grammar rules can be provided.

However, writing teachers could also use metalinguistic explanations to illustrate that verb-noun collocation errors cannot be explained with a grammar rule and that the errors in question were due to selecting incorrect collocates (Kao, 2015, 2019). Although teachers may have provided direct feedback in class after offering indirect feedback on word choice errors via IWILL, this scenario is unlikely; the teaching of L2 English writing in Taiwan is generally product-oriented with little to no emphasis on the writing process (Chen & Tsai, 2012). Providing direct feedback requires L2 writing teachers to know which particular collocate matches the node word. By contrast, offering indirect feedback only requires that L2 writing teachers indicate there is an error and leave it up to the learner to correct. We tend to agree with Ferris and Roberts's (2001) recommendation that direct feedback should be provided for word choice errors, with the caveat that writing teachers do not assume that L2 writers are either able or willing to self-correct verb–noun collocation errors (Reynolds, 2015). Furthermore, learners that are accustomed to analyzing language from a grammatical point-of-view may require several rounds of awareness raising classroom activities to aid in noticing newly encountered word patterns and assimilating fixed phrases into their L2 word repertoires (Willis & Willis, 1996).

Available literature has offered little advice on how learners can improve their collocation competence other than suggesting they try to notice collocations independently when encountering such structures in texts (see Lewis, 2000). Other researchers have recommended that teachers focus collocation-related lessons on incongruent collocations (Bahns, 1993). Furthermore, noticing collocations in a text and having the wherewithal to recall and produce collocations in L2 writing represent challenges for L2 learners (Laufer, 1998; Laufer & Paribakht, 1998). Instead of simply asking learners to notice collocations in input and hoping they will eventually be able to produce such collocations as output, we suggest an L2 writing activity that systematically combines noticing targeted collocations in input and then requires learners to produce the same targeted collocations as output. We acknowledge that there is the possibility that L2 writing teachers may not possess the linguistic knowledge to provide appropriate written corrective feedback on their students' word choice errors; however, as discussed earlier, there are digital tagging systems that have been developed that can facilitate teacher feedback in terms of both word choice and rule-based errors (Pérez-Paredes, 2019; Kılıçkaya, 2019). Furthermore, teachers that are unsure of whether an error is a word choice or rule-based error can reference any number of widely available collocation reference dictionaries prior to administering feedback. Nevertheless, we argue that both L2 writing teachers' written corrective feedback on word choice errors and their students' word choice competence can be better facilitated by the execution of focused L2 writing activities exemplified in this article.

Skehan (1998) claimed that "what is needed is to consider approaches which, in the context of meaningful communication, draw attention to form in more inductive ways, or raise consciousness" (p. 41). Studies focusing on what learners do when they read L2 texts and how this process affects productive use of collocations have indicated that drawing learners' attention to collocations in input will result in an increase in written productive use of targeted collocations. For example, Wible et al. (2011) found collocation acquisition to occur as a result of focusing learners' attention on highlighted collocations. Lee (2003) noted that increasing exposure to targeted vocabulary during prewriting encouraged written productive use of those targeted words. Schmitt (2000) further suggested that grammar-based correction may not help remedy the appearance of word choice errors as word choice errors could be the result of faulty acquisition of formulaic sequences. His recommendation is for teachers to "draw students' attention to the variable expressions" and to provide them examples using concordance data (p. 112). This type of noticing falls more in line with the interpretation of Godfroid et al. (2013), who observed that the more time learners spent processing unknown words in input, the more likely they were to recognize the words in an unannounced post-reading vocabulary test. The noticing of unknown collocations in language input or the noticing of corrective feedback on the misuse of collocations in teachers' written corrective feedback cannot be equated with the type of noticing that Truscott (1998) criticized when discussing the noticing of metalinguistic knowledge. The effect of processing on learning outcomes does not seem to hinge on whether learners have become consciously aware of a metalinguistic rule. Instead, eye-tracking has provided "a measure of the amount of attention that participants allocate to target forms in the input" (Godfroid et al., 2013). The amount of on-line processing time spent on the language input is correlated with the performance measured on off-line measurements.

Building upon the results and suggestions from previous studies, researchers have successfully incorporated pre-activity noticing of formulaic language to encourage productive use in subsequent L2 writing activity execution. Lindstromberg et al. (2016) found that using a modified dictogloss in which learners first read isolated formulaic sequences on a pre-activity worksheet (i.e., priming) allowed students to produce more formulaic sequences as intact wholes during the written reconstruction phase of the dictogloss. Snoder and Reynolds (2019) also found students' review of an L1-L2 glossed list of verb-noun collocations during a pre-activity to have a substantial effect on whether learners could produce the targeted collocations as intact wholes in spoken and written output. Although these studies did not provide feedback on word choice errors, results from recent research have implied that when L2 writers' verb–noun collocation errors receive direct focused corrective feedback from teachers, the

learners produce significantly fewer verb-noun collocation errors in subsequent writing (Kao, 2015, 2019). In addition, learners who realized that the teacher's feedback was intended to correct verb-noun collocation errors required fewer errors to be corrected before demonstrating progress in verb-noun collocation accuracy in subsequent writing. Lastly, drawing learners' attention to the relationship between collocates and node words by drawing an arrow between a collocating noun and verb was found to enhance acquisition when combined with direct focused written corrective feedback (Kao, 2015, 2019). Taken together, the literature has indicated that awareness-raising pre-activities combined with writing activities in which learners receive and review teacher-provided direct focused corrective feedback could result in improvements in formulaic language production.

In the classroom, however, L2 writing teachers in Taiwan have grown accustomed to providing unfocused written corrective feedback that encompasses all errors in students' writing, whether word choice or rule-based (Reynolds, 2016). Although this approach may be suitable for advanced learners (Bitchener & Ferris, 2012), a different method may be needed for more novice writers such as the Taiwanese secondary school students who received teacher feedback in the current study. When dealing with word choice errors, L2 writing teachers may need to dedicate time and activities to addressing learners' problems in producing accurate formulaic language in L2 writing by targeting specific word choice error types. As an added benefit, L2 writing teachers that focus on specific word choice error types will afford themselves opportunities for practice in providing feedback. As the targets for said feedback will be selected beforehand, there is a decrease in the chance that the feedback provided by the teachers will be inappropriate. For example, in the case of providing feedback on verb-noun collocation errors, the teachers will already know which collocates match the node words.

6.4. A sample activity

We argue that the most meaningful contexts for encouraging productive collocation competence in L2 writing involve implementing instructional approaches that include three steps: 1) providing L2 writing practice through activities intended to draw learners' attention to targeted formulaic language (i.e., receptive knowledge) through a pre-activity; 2) providing opportunities for learners to produce the targeted formulaic language (i.e., productive knowledge) in L2 writing during activity execution; and 3) providing learners with direct focused teacher feedback on the written production of targeted formulaic language in L2 writing. This approach is informed by Nation's (2007) *four strands principle* that calls for language learning course activities to balance opportunities for meaning-focused input, meaning-focused output, language-focused learning,

and fluency development. An example of such an activity targeting the practice of verb-noun collocations is illustrated in Figure 3 and discussed below.
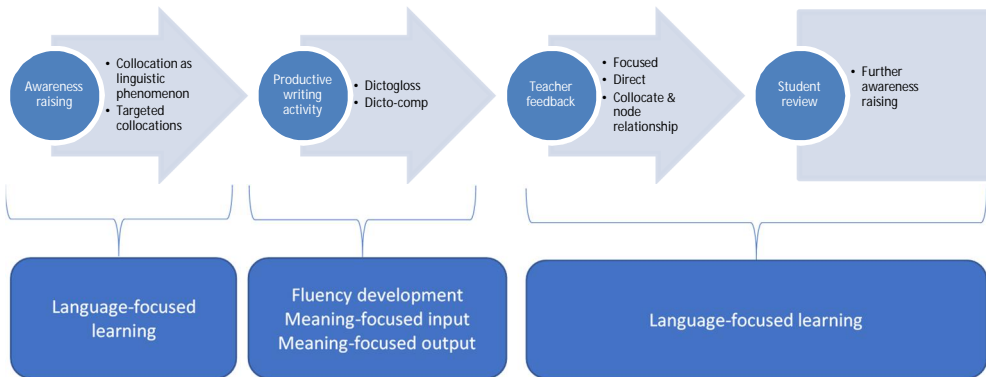

Figure 3 Incorporating focused written corrective feedback in an L2 writing activity

This sample activity is accomplished first through execution of consciousness-raising, which is part of the language-focused learning strand (Nation, 2007). Through instruction, learners can be guided by the teacher to focus on and deliberately learn targeted verb-noun collocations. During this first step, learners give deliberate attention to understanding the linguistic phenomenon of collocation and then give spaced repeated attention to the targeted verb-noun collocations. The aim of this step is to facilitate the noticing of the target language structures consciously and subconsciously in order to internalize the input so that it becomes intake (Schmidt, 1990). This is a very important step as noticing is the essential starting point for second language acquisition. It is thus necessary for L2 writing teachers to manipulate their learners' attention so that they are focused and aware of collocations in language input. This increased attention and awareness has been identified as two cognitive processes that mediate language input and intake (Robinson, 2003).

Subsequently, during step two, a modified dictogloss as discussed in Lindstromberg et al. (2016) or a dicto-comp (Ilson, 1962), can be executed by the teacher. While completing the dictogloss activity, learners first receive meaning-focused input as the teacher reads out a short text containing targeted verb-noun collocations. Since teachers should select texts for the activity that do not contain many unknown words, learners' listening fluency is further developed as they take notes to prepare for text reconstruction. The dictogloss or dicto-comp ends with text reconstruction that provides opportunities for meaning-focused output of L2 writing. If the text is co-reconstructed in dyads, learners' opportunities for meaning-focused input and output are also increased. This step favors disadvantaged learners who may experience different types and levels of noticing during feedback interaction (Mackey, 2006). One justification for this step is that input for language learning is something objective in

the environment, whereas in practice the stuff of acquisition (e.g., word choice errors) consists of mental constructs that exist in the mind and not in the environment at all. Hence, in this step, the modified dictogloss groups teachers' exemplars together that form categories representing both fixed and open slots, leading to explicit (aware) and implicit (unaware) processes of generalization as the constructions acquire more abstract meaning. In other words, in an activity that focuses on verb-noun collocations, it allows learners to not only focus on individual verb-noun collocations but also begin to generalize verb-noun collocations as a type or unit of formulaic language.

Finally, during the last step, the written direct corrective feedback provided by the teacher aims to again draw learners' attention to the targeted verb-noun collocations through an additional round of language-focused learning. This step can be concluded as the strengthening stage, wherein learners' awareness of and attention to feedback is further raised (Leow, 2001). The strengthened role of awareness and attention is crucial to learners' subsequent processing of feedback on word choice, which results in an enhanced ability to recognize and produce the targeted verb-noun collocations.

7. Conclusion

Although our discussion has focused on verb-noun collocations as a single word choice error type, L2 writing teachers should target the type(s) of word choice error(s) most relevant to their learners (e.g., other types of collocations, multi-word/phrasal verbs, idioms, binomials, discourse markers, and so on). L2 writing teachers should also be aware that the activities we have suggested will enhance targeted formulaic language as well as encourage the integration and practice of listening, speaking, reading, and writing (Nation, 1991). In addition, preparation of such activities takes relatively little time apart from selecting a topic and pre-activity appropriate for the targeted learners, locating a short text approximately 150 words in length, and targeting the formulaic language in the text (Snoder & Reynolds, 2019). Lastly, this activity encourages learners to participate in peer and self-editing because execution of such activities requires learners to attempt to reconstruct a dictated text, thus involving repeated reading and revision cycles to complete the activity.

Acknowledgements

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