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A Research Synthesis of Unfocused Feedback Studies in the L2 Writing Classroom: Implications for Future Research

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ABSTRACT

Introduction. The issue of whether or not teachers should correct second language learners' grammatical errors has been hotly contested in the literature. Researchers who studied corrective feedback were particularly interested in determining what kinds of feedback may help students commit fewer errors in subsequent writing. One of the primary points of contention in this discussion is whether language teachers should provide focused (i.e., only one or a few types of grammar errors are targeted for correction) or unfocused written corrective feedback (i.e., all or most error types are corrected). Although focused feedback has been found to be more effective than unfocused feedback (Kao & Wible, 2014), focused feedback has been questioned to ecologically invalid in authentic classrooms (Xu, 2009). Because little attention has been paid to unfocused feedback effects, the present study looked into not only the short-term but also the long-term learning effects of unfocused feedback.

Methods. The present study adopted the meta-analysis software Comprehensive Meta-analysis[1] to calculate an effect size across previous studies. Several keywords were used to search for relevant studies in online databases and selection criteria were set to determine whether these studies were appropriate to be synthesized. 34 studies which met the criteria were included for analyses.

Results and Discussion. This meta-analysis revealed that unfocused grammatical feedback was effective, as assessed by immediate posttests, and that the benefits of unfocused feedback increased over time, as revealed by delayed posttests, potentially contradicting Truscott's (1996; 2007) conclusions on grammar correction. This finding needs to be carefully interpreted because only 12 out of 34 studies provided statistical data in delayed posttests. Furthermore, publication bias seemed to be minimal, and both immediate and delayed posttest effect sizes were heterogeneous.

Conclusion. It is strongly suggested that more future studies should investigate the long-term learning effects of unfocused feedback. In addition, because the effect sizes obtained for unfocused feedback practices were heterogeneous, other moderating variables need to be considered such as instructional settings (Mackey & Goo, 2007; Truscott, 2004a), type of feedback (Lee, 2013), focus of feedback (Ellis, 2009), learners' revisions (Ferris, 2010), intervention length (Li, 2010; Lyster & Saito, 2010) and so on. It is essential to conduct more meta-analyses to look into the potential effects of such moderating variables.

KEYWORDS

meta-analysis, unfocused feedback, unfocused correction, comprehensive feedback, comprehensive correction

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[1] Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2005). Comprehensive Meta-Analysis [Computer software]. Biostat.

INTRODUCTION

Second language (L2) instructors must decide whether to correct student errors. Truscott (1996) reviewed related studies and argued that corrective feedback (CF) does not benefit learning outcomes. In response, Ferris (1999) asserted that a conclusion that CF has no place in writing courses would be premature given the incomparability of related studies. In response to Ferris, Truscott (1999) stated that it is reasonable to conclude that CF should be abandoned because similar results obtained in different circumstances led to the same conclusion that CF is ineffective. Numerous researchers have since conducted empirical studies to examine the effect of CF. Many of them have examined the efficacy of CF in the field of L2 writing instruction. Truscott (2004a, 2009) responded to Chandler's (2004, 2009) arguments in favor of CF, indicating that her study results were conjecture rather than evidence of the benefits of CF owing to the presence of several flaws in her research design.

After her debates with Truscott, Ferris stopped focusing on whether studies provided proof of the benefits of CF. She conceded that studies did not sufficiently prove the effects of CF and focused on ideas for future studies, providing general suggestions for researchers and instructors in the field of L2 writing (Ferris, 2004). Guénette (2007) analyzed the design of related studies and highlighted some design problems. However, Guénette recommended that teachers continue providing CF to students. Although Ferris and Guénette have exhibited optimism toward future research and practice related to CF, they have failed to offer a clear research direction for future studies. Truscott (2007) conducted a small-scale meta-analysis of CF studies and concluded that corrections negatively affect the ability of students to write accurately. The results indicated that even if CF is beneficial to students, the effect is small. In 1996, Truscott strongly argued that CF has no educational benefits, but his position seems to have changed. Because his analyses are based on small-scale studies, his results remain dubious. For example, Russell and Spada (2006) conducted a related meta-analysis of large-scale studies, and their findings support the beneficial role of CF.

CF researchers wish to determine the types of feedback that reduce student errors. These researchers apply various feedback mechanisms and examine the effect they have on students' writing accuracy. Most error correction–related studies involve comparisons of feedback. Many researchers believe that feedback comparisons can help determine the most effective form of feedback. However, researchers are still unsure which type of feedback has the most benefits for learners (Ellis, 2009; Hyland & Hyland, 2006). Other variables that could influence the effect of corrections have been discussed, including the type of error corrected (e.g., Ferris & Roberts, 2001; Kao, 2022; Shao & Liu, 2022)[2], the number of error types corrected (e.g., Ellis et al., 2008; Sheen et al., 2009), students' L2 ability (e.g., Ammar & Spada, 2006; Bitchener, 2009; Iwashita, 2001), the research design adopted (e.g., Ferris, 2004; Guénette, 2007; Truscott, 2007), the instructional settings (Sheen, 2004), and the ethnic background of students (e.g., Bitchener & Knoch, 2008). They all intended to investigate and discover which variables contribute the most to the effectiveness of CF in L2 learning and teaching. Although their foci vary, the aforementioned researchers all gave feedback to students and explored its effects on students' grammatical errors in language production.

In Truscott's (1996) review in which he argued against grammar corrections in L2 writing classes, he asserted that the effects of correction should be evaluated in discourse writing instead of grammar exercises. His argument is that if corrections are proven to be ineffective at improving discourse writing, then they are harmful to students' writing ability and should be abandoned. Truscott's assertions have drawn considerable research attention. Researchers interested in feedback have considered his concerns when evaluating the effects of corrections. Such researchers have generally assigned writing tasks to students and determined whether students' writing accuracy improved upon receiving CF (e.g., Bitchener & Knoch, 2009; Doughty & Varela, 1998; Fazio, 2001; Muranoi, 2000; Polio et al., 1998; Sheen, 2007); however, their findings have been inconsistent.

Despite Truscott's criticism of CF, several researchers have expressed optimism regarding the potential of CF and research related to it (e.g., Ellis, 2009; Ferris, 2004; Guénette, 2007; Hyland & Hyland, 2006). For example, Ferris (2004) conceded that several studies have not sufficiently proven the positive effects of CF but provided general suggestions to L2 writing researchers and instructors. Guénette (2007) highlighted research design problems in related studies but recommended that teachers continue providing CF to students. Although most related researchers have expressed optimism with regard to CF research and practice, they have failed to provide a clear research direction for future studies.

Russell and Spada (2006) conducted a meta-analysis of studies that involved oral and written feedback to examine the extent to which CF improved the grammatical skills of L2 learners. A large effect size was identified, and they concluded that such feedback was effective. In a meta-analysis centered on written feedback, Truscott (2007) revealed that the effect of correction on students' written accuracy was small and negative. He contended that the results of Russell and Spada were in line with his findings because the studies they included in their meta-analysis examined only whether learner performance in artificial grammar tests improved

[2] Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2005). Comprehensive Meta-Analysis [Computer software]. Biostat.

after receiving corrections or whether they could successfully revise their writing on the basis of teachers' corrections. These studies have not examined whether corrections helped learners speak and write accurately in realistic contexts (Truscott, 2007). Truscott has been criticized for reiterating most of his evidence against the utility of written correction from his review in 1996 in his meta-analysis in 2007 (the average publication year in Truscott's [p. 262] Table 1 was 1999); it was thus unsurprising that he again found error correction to be ineffective (Bruton, 2010).

Teachers' correction of language learners' grammatical errors has been hotly debated in the published literature. Error feedback researchers have been interested in investigating what types of feedback will effectively reduce students' errors in subsequent writing. One of the main areas of this debate concerns whether the written corrective feedback administered by language teachers should be focused (i.e., only one or a few grammar error types are targeted for correction) or unfocused (i.e., all or most error types are targeted for correction). These debates and the empirical research studies inspired by them have been insightful to language learners and teachers alike; however, the arguments concerning teacher feedback continues to be complicated and controversial even to this day. Kao and Wible (2014) pursued a much more persuasive line of investigation based upon this leading idea that the meta-analyses showing little or negative effects of correction had conflated important distinctions in ways of giving grammar feedback. Specifically, they re-analyzed the published meta-analysis data, adding more recently published studies that meet the criteria used in the published meta-analysis. Further, they added to their meta-analysis a crucial distinction between focused feedback and unfocused feedback. Their findings show that conflating focused and unfocused corrective feedback in research distorts the effects of both. Conflation over-estimates the effect of unfocused feedback (unfocused feedback is shown to be even less effectual when considered separately from focused feedback studies), and under-estimates the effect size of focused feedback. Taken separately, focused feedback studies showed large positive effect sizes.

Subsequent meta-analyses seemingly point towards the conclusion that unfocused feedback (i.e., feedback provided on all errors that occur in a piece of writing) is less effective than focused feedback (i.e., feedback provided on one or only a select number of errors) (Kang & Han, 2015; Lim & Renandya, 2020). However, the majority of these studies collectively drawing this conclusion have overwhelmingly been concerned with the improvements of one grammatical error type (usually English article usage). These studies have overwhelmingly been concerned with feedback given to grammatical rule-based errors at the expense of the investigation of unfocused feedback on phraseological or lexical errors. Furthermore, these studies have often compared focused feedback to unfocused feedback for several rounds instead of investigating the effects of a single round of unfocused feedback on the grammatical accuracy of subsequent writings. Furthermore, while the lion's share of the research has been conducted in language classrooms in the form of quasi-experimental studies, what occurs in the classrooms where the data for feedback giving studies was collected does not mimic the type of feedback giving practices that often occur in classrooms. Therefore, more ecologically valid studies that include the administration of unfocused feedback are needed in order to measure its effectiveness more accurately in the correction of multiple L2 writing grammar and lexical error types.

We considered the potential drawbacks of meta-analyses such as those of Truscott (2007) and followed the study selection criteria of Truscott insofar as possible. Additionally, we included only studies published after his meta-analysis and only those that met his selection criteria. In Truscott's (2004b) critique of the meta-analysis of Norris and Ortega (2000), he criticized that Norris and Ortega's finding favoring grammar instruction might be misleading because most included studies only investigated the immediate effects of grammatical instruction. The purpose of the present meta-analysis, therefore, was to investigate not only immediate but also delayed effects of unfocused CF. The following research question was proposed:

Does written unfocused CF have short- and long-term effects on students' linguistic accuracy?

METHOD

Meta-analysis is a useful method of answering research questions not posed in original studies and can illuminate moderator variables of interest to those involved in empirical research. Meta-analyses may enable researchers to account for conflicting results because such analyses yield increased statistical power for detecting the effects of moderating variables when they exist. Therefore, a meta-analysis was conducted to comprehensively examine extant grammar correction research.

Literature Search

Studies were identified from six online databases: Science Direct, the Chinese Periodical Index, the Education Resources Information Center, Linguistics and Language Behavior Abstracts, Google Scholar, and SCOPUS (Elsevier). The following keywords were used: (a) "error correction," (b) "grammar correction," (c) "written corrective feedback," (d) "unfocused correction," (e) "unfocused feedback," (f) "comprehensive feedback," (g) "comprehensive correction," and (h) "feedback in L2 writing."

Selection Criteria

The CF-related studies focusing on L2 writing that were reviewed herein are chiefly from publications in the field of L2 pedagogy with an international readership. Most of such studies had been reviewed by Ferris (1999, 2004) and Truscott (1996, 1999, 2007). Studies published in recent years were included. Certain selection criteria were used to determine whether studies were appropriate for inclusion. Truscott (1996) indicated that feedback is used to correct grammatical errors and not content or the organization or clarity of composition. In the present meta-analysis, only studies related to the effect of CF on students' grammatical errors were reviewed. Secondly, studies with a single-group pretest–posttest research design were not considered for review (Truscott, 2007) because such designs involve various uncontrolled variables. Studies comparing at least two groups (i.e., experimental and control groups) are held in higher regard. Third, to determine students' improvements in grammar as a result of CF, only studies in which participants composed essays were included; this approach was employed because students' metalinguistic knowledge and grammar skills cannot be appropriately measured using multiple-choice questions or cloze tests (Truscott, 1996). Finally, only unfocused feedback studies are included in the analyses because the research focus of this meta-analysis is on the effectiveness of unfocused feedback practices.

Procedures & Data Analyses

When using the Comprehensive Meta-Analysis program[3], a researcher must extract an effect size for each study and then synthesize these effect sizes across studies. The principle of "one study, one effect size" is followed because when one study has more than one effect size, the sample size is inflated, data points lose their independence, and standard errors are distorted (Borenstein et al., 2009; Lipsey & Wilson, 2001). Furthermore, meta-analyses (e.g., Li, 2010; Russell & Spada, 2006) related to CF have also adhered to the aforementioned principle.

To ensure the reasonable interpretations of the quantitative effect sizes identified, meta-analyses involve standard approaches of accounting for various factors. First, in meta-analytic approaches, two statistical models are widely employed to overcome problems related to variation: random- and fixed-effect models (Borenstein et al., 2009; Hunter & Schmidt, 2004). These two models are based on different assumptions. Under the fixed-effect model, all studies are assumed to be identical with only one true effect size. Any variation is attributable to sampling variability. By contrast, under the random-effects model, the true effect size is assumed to vary by study, and studies are presumed to be similar rather than identical. Any variation is ascribed to heterogeneous factors. Because the assumption that all studies included in this meta-analysis are identical would be unreasonable, the random-effects model was adopted to calculate relevant effect sizes. Second, Cohen's *d* (1992) is widely adopted for effect size interpretations in meta-analyses. A small, medium, and large effect size is indicated by a value of 0.2–0.5, 0.5–0.8, and ≥0.8, respectively. Common formulas for effect size calculations are as follows.

$$d = \frac{\text{Mean difference}}{\text{Pooled } SD} \qquad d = \sqrt{\frac{F(N_1 + N_2)}{N_1 N_2}} \qquad d = \frac{t}{\sqrt{\text{Harmonic } N/\sqrt{2}}}, \qquad \text{Harmonic } N = \frac{2N_1 N_2}{N_1 + N_2}$$

Third, to accurately provide an average effect size, in addition to Cohen's d, the 95% confidence interval (CI) should be considered. When a 95% CI does not include zero, the certainty that a study's true effect size is represented in the statistical result is 95%. The smaller the CI is, the more precise related statistics are[4]. The Begg and Mazumdar rank correlation test was performed to investigate whether a publication bias existed among the studies included in the meta-analysis. Finally, a test for heterogeneity was conducted to determine whether any moderator variables influenced feedback effectiveness.

To investigate the effectiveness of CF, students' language accuracy was based on immediate posttests in selected studies. According to Li (2010), a short-term immediate posttest is an assessment given within one week post intervention. Therefore, posttests conducted immediately after participants had read feedback (see Bitchener, 2008; Ellis et al., 2008) or within approximately one week after participants had read feedback (see Sheen et al., 2009; Van Beuningen et al., 2012) were considered to be immediate posttests. Because some studies have provided information of students' grammatical performance on posttests administered at least three weeks after participants had read feedback, we also examined the long-term effects of feedback in this meta-analysis.

RESULTS

A total of 34 unfocused feedback studies published between 1984 and 2018 met the criteria and were included in the me-

[3] Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2005). Comprehensive Meta-Analysis [Computer software]. Biostat.

[4] Larson-Hall, J. (2010). *A guide to doing statistics in second language research using SPSS*. Routledge.

Figure 1

Publication Frequency of Studies from 1984 to 2018

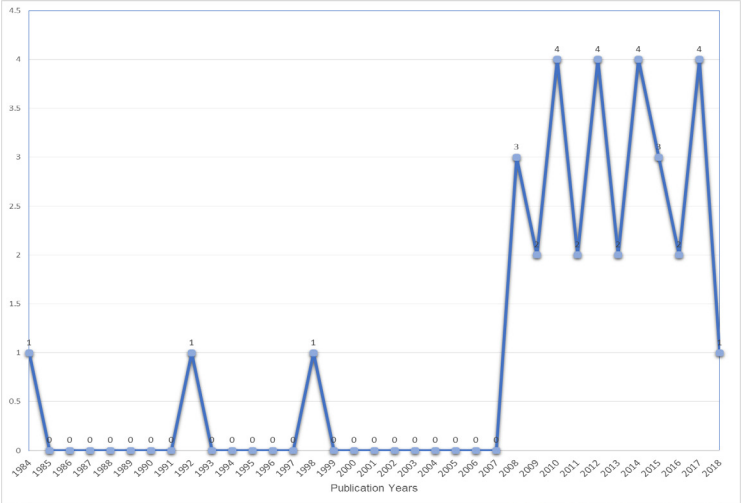

Table 1

Overall Effect Sizes of Unfocused CF in Immediate Posttests (k = 34)

Random-Effects Model	Statistical Data
Effect Size	0.468
Standard Error	0.077
Variance	0.006
Minimum	-0.565
Maximum	1.732
Upper CI	0.619
Lower CI	0.317
P value	0.000

Table 2

Overall Effect Sizes for Unfocused CF in Delayed Posttests (n = 12)

Random-Effects Model	Statistical Data
Effect Size	0.753
Standard Error	0.282
Variance	0.080
Minimum	-0.421
Maximum	5.736
Upper CI	1.306
Lower CI	0.199
P value	0.008

ta-analysis (Data collection was completed by November 2022). Most studies were published journal articles, and few studies published as conference papers or book chapters were included. In looking at the 34 studies included in our meta-analysis, a rapid growth in the number of studies on written corrective feedback in 2008 was found (Figure 1).

This section reports the overall effects of unfocused CF as determined by immediate and delayed posttests. 34 studies were included for analyses in this section. Table 1 presents the overall effect size related to unfocused CF as determined through immediate posttests. The effect sizes in these 34 studies varied considerably; the effects ranged from large and positive to medium and negative. According to the random-effects model, CF had a small effect size (d = 0.468). Because the 95% CI excluded zero, the observed effect sizes were deemed to be reliable. In addition, the Begg and Mazumdar rank correlation test suggested that the effect sizes obtained in this meta-analysis were not confounded by publication bias (z value for tau = 1.156, $p > .05$). In addition, a heterogeneity test indicated that the effect size was moderately heterogeneous (I^2: 58.508).

Because only 12 studies provided statistical data on the delayed posttests, Table 2 presents the effect sizes from delayed posttests in these 12 studies. The delayed posttest results of these studies revealed a medium positive effect size for grammar error correction (d = 0.753). Additionally, because the 95% CI excluded zero, the effect size obtained was deemed to be reliable. In addition, the Begg and Mazumdar rank correlation test suggested that the effect sizes obtained in this meta-analysis were not confounded by publication bias (z value for tau = 1.577, $p > .05$). Additionally, a heterogeneity test indicated high heterogeneity (I^2: 90.271) in effect sizes across these included studies.

DISCUSSION

The motivation for conducting this meta-analysis was based upon the fact that the number of studies included in Truscott's (2007) meta-analysis was too small. Thus, studies published after his meta-analysis were included. Potentially contradicting Truscott's (1996; 2007) conclusions on grammar correction, this meta-analysis suggests that unfocused grammatical feedback is effective, as determined by immediate posttests, and that the benefits of unfocused feedback even increase over time, as indicated by delayed posttests. The finding, nevertheless, needs to be carefully interpreted because the majority of unfocused feedback studies do not investigate whether the corrective feedback effect persists after at least three months. Therefore, it is suggested that more research should be carried out to analyze the long-term learning effects of unfocused corrective feedback. Additionally, publication bias appeared to be negligible, and the effect sizes obtained for both immediate and delayed posttests were heterogeneous. Other moderating variables might need to be considered when investigating the effectiveness of CF in the future. For example, certain variables that might influence feedback effectiveness are as follows: instructional settings (Mackey & Goo, 2007; Truscott, 2004a), type of feedback (Lee, 2013), focus of feedback (Ellis, 2009), learners' revisions (Ferris, 2010), and intervention length (Li, 2010; Lyster & Saito, 2010). More meta-analyses should be conducted to investigate the possible effects of those moderating moderators.

AN OVERVIEW OF THE SPECIAL ISSUE ON RETHINKING THE (IN)EFFECTIVENESS OF UNFOCUSED FEEDBACK IN THE L2 WRITING CLASSROOM

Although unfocused feedback has been found to show not only short-term but also long-term learning effects in the current meta-analysis, it is still worthwhile to further explore to what extent unfocused feedback could be effective for L2 writers by adopting multifaceted approaches to pursue this line of research. Echoing the findings from the present meta-analysis on unfocused feedback studies, the authors of the articles included in the present special issue, *Rethinking the (In)effectiveness of Unfocused Feedback in the L2 Writing Classroom*, discuss unfocused feedback practices from multiple perspectives. This issue consists of 2 editorials, 11 research papers, 1 opinion paper, and 2 book reviews. The issue begins with the present meta-analysis and editorial followed by the second editorial written by Lilia Raitskaya and Elena Tikhonova titled *Writing Feedback from a Research Perspective*. They retrieved 194 papers regarding writing feedback retried from the Scopus database, finding many studies reporting on computer mediated-automated forms of feedback on writing (i.e., automated writing evaluation).

Eleven research articles appear after the two editorials. The first research article titled *Learning Outcomes Generated through the Collaborative Processing of Expert Peer Feedback* by Nicholas Carr and Paul Wicking reports a qualitative study investigating whether Japanese learners could benefit from written corrective feedback from their expert peers in the United States. The results indicated that the Japanese learners considered themselves as language users and their language skills improved from the expert peer feedback. The second paper titled *The Effects of Coded Focused and Unfocused Corrective Feedback on ESL Student Writing Accuracy* by Chunrao Deng, Xiang Wang, Shuyang Lin, Wenhui Xuan and Qin Xie reported on a mixed-method approach to investigated whether the scope of feedback (i.e., focused or unfocused feedback) influenced ESL learners' acquisition of linguistic features (i.e., articles, singular/plural nouns and verb forms). The study showed that students who received focused indirect feedback significantly outperformed those who received unfocused indirect feedback in terms of their acquisition of English article usages in new writing tasks. The in-depth interviews further revealed that coded focused feedback led to a deeper understanding of English article usages. In addition, focused indirect feedback helped learners successfully correct errors involving singular/plural nouns in their revised essays. The third paper titled *Towards Understanding Teacher Mentoring, Learner WCF Beliefs, and Learner Revision Practices through Peer Review Feedback: A Sociocultural Perspective* by Yang Gao and Xiaochen Wang used a mixed methods design to investigate learners' writing practices on an online platform and their beliefs about WCF through interviews. They found peer feedback and teacher mentoring facilitated learners' revision practices and there existed a strong need for scaffolding in the L2 writing classroom. The fourth paper titled *Writing Task Complexity, Task Condition and the Efficacy of Feedback* by Esmaeil Ghaderi, Afsar Rouhi, Amir Reza Nemat Tabrizi, Manoochehr Jafarigohar and Fatemeh Hemmati explored the role of task complexity and task condition in learner gains from WCF. They found task condition played a greater role than task complexity in the writing improvements exhibited by the learners involved in their study. The fifth paper titled *The Effectiveness of Direct and Metalinguistic Written Corrective Feedback to Deal with Errors in the Use of Information-Structuring Connectors* by Steffanie Kloss and Angie Quintanilla aimed to determine the effectiveness of direct and metalinguistic focused written corrective feedback on information structuring connectors. They found both the direct WCF and metalinguistic feedback groups improved but only the improvements for the latter were statistically significant. The sixth article titled *Accuracy Gains from Unfocused Feedback: Dynamic Written Corrective Feedback as Meaningful Pedagogy* by Kendon Kurzer explored the impact of unfocused direct WCF on students' writing. Statistically significant improvements in a number of different error types were shown regardless of the unfocused nature of the feedback. The seventh article titled *Moroccan EFL Public University Instructors' Perceptions and Self-Reported*

Practices of Written Feedback by Abderrahim Mamad and Tibor Vígh aimed to explore EFL instructors' perceptions and their self-reported practices of product- and process-based written feedback. They found Moroccan university instructors considered written corrective feedback and written feedback important for product-oriented teaching of writing and written feedback for process-oriented teaching of writing. However, some mismatches between teachers' reported practices and their actual teaching were found. For example, teachers tended to apply written feedback less often than they claimed. The eighth paper titled *Unfocused Written Corrective Feedback and L2 Learners' Writing Accuracy: Relationship between Feedback Type and Learner Belief* by Syed Muhammad Mujtaba, Manjet Kaur Mehar Singh, Tiefu Zhang, Nisar Ahmed, and Rakesh Parkash found both direct and indirect feedback effective at increasing the accuracy of student writing. Furthermore, no relationship was found between the effectiveness of written corrective feedback and learners' beliefs about its effectiveness. The ninth paper, *The Effects of Implicit Written Corrective Feedback on ESL Learners' Writing Skills*, by Frankie Subon and Nurul Amira Ali showed implicit corrective feedback to have significant effects on ESL learners' writing performance. Their qualitative analyses revealed that teachers' indication of errors as implicit feedback prompted ESL learners to self-correct their own writing. In the tenth paper, *Experienced and Novice L2 Raters' Cognitive Processes while Rating Integrated and Independent Writing Tasks*, Kobra Tavassoli, Leila Bashiri and Natasha Pourdana explored how the rating experience of L2 raters might affect their rating of integrated and independent writing tasks. Experience mattered when rating language use, mechanics of writing, organization, and the total. They also found that referencing of the writing rubric was mediated by the type of writing being rated. The eleventh paper titled *EFL University Students' Self-Regulated Writing Strategies: The Role of Individual Differences* by Atik Umamah, Niamika El Khoiri, Utami Widiati, Anik Nunuk Wulyani aimed to investigate EFL university students' preference towards self-regulated writing strategies. Their results pointed out that students' self-regulated writing strategies served as a significant predictor of their writing performance, and they used help-seeking strategies the most frequently. The authors suggested peer feedback should be able to promote self-regulated learning.

The issue includes ends with 1 opinion paper and 2 book reviews. The opinion paper titled Unfocused Written Corrective Feedback for Academic Discourse: The Sociomaterial Potential for Writing Development and Socialization in Higher Education by Daron Benjamin Loo discusses the practice of administering unfocused written corrective feedback by adopting the principles of sociomateriality. Loo suggests that the unfocused written corrective feedback in real classrooms should not aim to correct linguistics errors but to support language learners' academic discourse socialization. Accordingly, in the book review of Reconciling Translingualism and Second Language Writing (Silva & Wang, 2020), Chunhong Liu and Taiji Huang provide a succinct summary of all the chapters and discuss the merits of the book, particularly in regard to how the book authors deal with translingualism and second language writing. Next, Xiaowen (Serina) Xie reviewed the book Innovative Approaches in Teaching English Writing to Chinese Speakers (Reynolds & Teng, 2021). Besides providing a summary of each of the chapters, a critical discourse of three key issues raised in the book is provided. The review ends with a final evaluation of the overall contribution of the book to the field of second language writing instruction.

CONCLUSION

This editorial presented a meta-analysis to show a comprehensive picture of unfocused feedback effectiveness, suggesting that it should be worth exploring the issue of unfocused feedback practice from multifaceted perspectives. In addition, an overview of the special issue was offered to discuss and examine the role of unfocused feedback in the L2 writing classroom from diverse viewpoints. This special issue provides opportunities for researchers to rethink the (in)effectiveness of unfocused feedback in the development of L2 acquisition.

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DECLARATION OF COMPETITING INTEREST

None declared.

AUTHORS' CONTRIBUTION

Barry Lee Reynolds: Conceptualization, Writing – Review & Editing, Supervision, Funding acquisition

Chian-Wen Kao: Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Data curation, Writing – Original Draft

REFERENCES

Ammar, A., & Spada N. (2006). One size fits all? Recasts, Prompts, and L2 learning. *Studies in Second Language Acquisition*, 28(4), 543-574. https://doi.org/10.1017/S0272263106060268

Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing, 17*, 102-118. https://doi.org/10.1016/jslw.2007.11.004

Bitchener, J. (2009). Measuring the effectiveness of written corrective feedback: A response to "overgeneralization form a narrow focus: a response to Bitchener (2008)". *Journal of Second Language Writing*, *18*, 276-279. https://doi.org/10.1016/j.jslw.2009.06.001

Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research, 12*, 406-431. https://doi.org/10.1177/1362168808089924

Bitchener, J., & Knoch, U. (2009). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics, 31*(2), 193-214. https://doi.org/10.1093/applin/amp016

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of feedback on ESL student writing. *Journal of Second Language Writing, 14*, 191-205. https://doi.org/10.1016/j.jslw.2005.08.001

Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2009). *Introduction to meta-analysis.* John Wiley & Sons, Ltd.

Bruton, A. (2009). Designing Research into the effects of grammar correction in L2 writing: Not so straightforward. *Journal of Second Language Writing*, 18, 136-140. https://doi.org/10.1016/j.jslw.2009.02.005

Chandler, J. (2004). A response to Truscott. *Journal of Second Language Writing, 13*, 345-348. https://doi.org/10.1016/j.jslw.2004.05.001

Chandler, J. (2009). Response to Truscott. *Journal of Second Language Writing, 18*, 57-58. https://doi.org/10.1016/j.jslw.2008.09.002

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159. https://doi.org/10.1037//0033-2909.112.1.155

Doughty, C., & Varela, E. (1998). Communicative focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 114-138). Cambridge University Press.

Ellis, R. (2009). A typology of written corrective feedback types. *ELT Journal, 63*, 97-107. https://doi.org10.1093/elt/ccn023

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36, 353-371. https://doi.org/10.1016/j.system.2008.02.001

Fazio, L. L. (2001). The effect of corrections and commentaries on the journal writing accuracy of minority- and majority-language students. *Journal of Second Language Writing, 10*, 235-249. https://doi.org/10.1016/S1060-3743(01)00042-X

Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott. *Journal of Second Language Writing, 8,* 1-11. https://doi.org/10.1016/S1060-3743(99)80110-6

Ferris, D. (2004). The "grammar correction" debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the mean time…?). *Journal of Second Language Writing, 13*, 49-62. https://doi.org/10.1016/j.jslw.2004.04.005

Ferris, D. (2010). Second language writing research and written corrective feedback in SLA. *Studies in Second Language Acquisition, 32,* 181-210. https://doi.org/10.1017/S0272263109990490

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing, 10*, 161-184. https://doi.org/10.1016/S1060-3743(01)00039-X

Guénette, D. (2007). Is feedback pedagogically correct? Research design issues in studies of feedback on writing. *Journal of Second Language Writing, 16*, 40-53. https://doi.org/10.1016/j.jslw.2007.01.001

Hunter, J., & Schmidt, F. (2004). *Methods of meta-analysis*. SAGE Publications.

Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching, 39*, 83-101. https://doi.org/10.1017/S0261444806003399

Iwashita, N. (2001). TThe effect of learner proficiency on interactional moves and modified output in nonnative–nonnative interaction in Japanese as a foreign language. *System, 29*, 267-287. https://doi.org/10.1016/S0346-251X(01)00015-X

Kang, E., & Han, Z. (2015). The efficacy of written corrective feedback in improving L2 written accuracy: A meta-analysis. *The Modern Language Journal, 99, 1-18*. https://doi.org/10.1111/modl.12189

Kao, C.W. (2022) (Online first). Does one size fit all? The scope and type of error in direct feedback effectiveness. *Applied Linguistics Review*. https://doi.org/10.1515/applirev-2021-0143

Kao, C.W. & Wible, D. (2014). A meta-analysis on the effectiveness of grammar correction in second language writing. *English Teaching & Learning, 38*, 29-69. https://doi.org/10.6330/ETL.2014.38.3.02

Lee, I. (2013). Research into practice: Written corrective feedback. *Language Teaching, 46,* 108-119. https://doi.org/10.1017/s0261444812000390

Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning, 60*, 309-365. https://doi.org/10.1111/j.1467-9922.2010.00561.x

Lim, S.C., & Renandya, W.A. (2020). Efficacy of written corrective in writing instruction: A meta-analysis. *TESL-EJ: Teaching English as a Second or Foreign Language, 24,* 1-26.

Lipsey, M.W., & Wilson, D.B. (2001). *Practical meta-analysis.* Sage.

Lyster, R., & Saito, K. (2010). Oral feedback in classroom SLA: A meta-analysis. *Studies in Second Language Acquisition, 32*, 265-302. https://doi.org/10.1017/S0272263109990520

Mackey, A. & Goo, J. (2007). Interaction research in SLA: A meta-analysis and research synthesis. In A. Mackey (Ed.), Conversational interaction in second language acquisition: A collection of empirical studies (pp. 407-452). Oxford University Press.

Muranoi, H. (2000). Focus on form through interaction enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning, 50*, 617-673. https://doi.org/10.1111/0023-8333.00142

Norris, J.M. & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning, 50*, 417-528. doi: 10.1111/0023-8333.00136

Polio, C., Fleck, C., & Leder, N. (1998). "If I only had more time:" ESL learners' changes in linguistic accuracy on essay revisions. *Journal of Second Language Writing*, 7, 43-68. https://doi.org/10.1016/S1060-3743(98)90005-4

Reynolds, B.L., & Teng, M.F. (2021). *Innovative approaches in teaching English writing to Chinese speakers.* De Gruyter Mouton.

Russell, J., & Spada, N. (2006). The tffectiveness of corrective feedback for the acquisition of L2 grammar: A meta-analysis of the research. In J.M. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 133-164). John Benjamins Publishing Company.

Shao, J., & Liu, Y. (2022). Written corrective feedback, learner-internal cognitive processes, and the acquisition of regular past tense by Chinese L2 learners of English. *Applied Linguistics Review, 13,* 1005-1028. https://doi.org/10.1515/applirev-2019-0131

Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research, 8,* 263-300. https://doi.org/10.1191/1362168804lr146oa

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly, 41*, 255-283. https://doi.org/10.1002/j.1545-7249.2007.tb00059x

Sheen, Y., Wright D. & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System, 37*, 556-569. https://doi.org/10.1016/j.system.2009.09.002

Silva, T., & Wang, Z. (Eds.). (2020). *Reconciling translingualism and second language writing*. Routledge.

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning, 46*, 327-369. https://doi.org/10.1111/j.1467-1770.1996.tb0138.x

Truscott, J. (1999). The case for "The case against grammar correction in L2 writing classes": A response to Ferris. *Journal of Second Language Writing, 8*, 111-122. https://doi.org/10.1016/S1060-3743(99)80124-6

Truscott, J. (2004a). Evidence and conjecture on the effects of correction: A response to Chandler. *Journal of Second Language Writing, 13*, 337-343. https://doi.org/10.1016/j.jslw.2004.05.002

Truscott, J. (2004b). The effectiveness of grammar instruction: Analysis of a meta-analysis. *English Teaching & Learning, 28*, 17-29.

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing, 16*, 255-272. https://doi.org/10.1016/j.jslw.2007.06.003

Truscott, J. (2009). Arguments and appearances: A response to Chandler. *Journal of Second Language Writing*, *18*, 59-60. https://doi.org/10.1016/j.jslw.2008.09.001

Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning, 62,* 1-41. https://doi.org/10.111/j.1467-9922.2011.00674.x

Xu, C. (2009). Overgeneralization from a narrow focus: A response to Ellis et al. (2008) and Bitchener (2008). *Journal of Second Language Writing, 18,* 270-275. https://doi.org/10.1016/j.jslw.2009.05.005

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Writing Feedback from a Research Perspective

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ABSTRACT

Introduction. Being an essential part of teaching and learning, feedback in close connection with evaluation is the focus of many researchers. Their interest lies mainly in automated systems, learners' and teachers' perceptions of writing feedback and feedback on feedback, new forms of feedback and their efficacy for motivation and writing performance. The review aims to identify the prevailing directions of research in the field.

Methods. The review is based on 194 documents extracted from the Scopus database. The ultimate results of the search for "writing feedback" were limited to a field filter (social sciences, arts & humanities), a language filter (English), a document type (article, review, book chapter, conference paper) as well to manual screening in accordance with the inclusion criteria and relevance to the theme.

Results. Seven directions of research were identified: automated and non-automated evaluation; feedback on writing: general issues; automated feedback; peer review and teacher feedback on writing; perceptions and emotions relating to writing feedback; feedback on scholarly writing; evaluation and improvement in Chinese calligraphy. The reviewed documents proved the prominence of the topic and greater interest in new computer-mediated forms of feedback on writing.

Conclusion. The results of the review may serve as a guidance for researchers at large and potential JLE authors focused on teaching and learning writing. The limitations of the review are linked to the scope and methods applied.

KEYWORDS

feedback, evaluation, writing, automated feedback, automated evaluation, peer review, teacher feedback, faculty feedback, feedback on feedback, feedback tolerance

INTRODUCTION

Writing is thoroughly studied within linguistics, education, and communication domains. The thematic scope is rather wide, ranging from the language aspects to teaching and learning writing. Feedback is an essential component of any teaching and learning processes at all levels of education. It is a critical side of pedagogical communication. If wisely and efficiently worded, it encourages learners to improve their skills and enforces self-regulating learning. Feedback is integral to evaluation, but in addition to assessment, it includes commentary on the progress, errors, strong and weak points. It is defined as "learning-oriented processes by which learners make sense of, evaluate, and use the information to improve their current and/or future performance" (Yu, Geng, Liu, & Zheng, 2021).

Researchers of feedback also concentrate on personal traits that help in or prevent students from recognising feedback. They analyse error and feedback tolerance (Aben, Timmermans, Dingyloudi, Lara, & Strijbos, 2022). As any evaluation is more or less biased, errors may be differently defined and perceived. The subjectivity of errors coupled with students' levels of tolerance both to errors and feedback have recently come to the fore (Aben, Timmermans, Dingyloudi, Lara, & Strijbos, 2022; Zhang, & McEneaney, 2020).

The taxonomy of feedback on writing is often based on the identity of the feedback giver (teacher, peer, self, and au-

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tomated, or computer-mediated feedback) or mode of its delivery (face-to-face, written, oral, audio, video). Students' involvement in the feedback process also vary. Traditionally, the prevailing forms of teachers' feedback are oral (face-to-face or computer-mediated) or written. At present, technology offers other modalities for feedback, including text, video, and audio. Students' emotions that feedback variations may arouse vary as interaction modes influence the language choices in feedback and engagement of both sides of the feedback process (Cunningham, 2019; Cunningham, & Link, 2021). Cunningham, & Link (2021) underline that "responding to student writing can be a complex interpersonal process with multifaceted effects on students' emotional states".

Doctoral writing takes a separate place in the field. Being an integral part of academic writing and aligned to scholarly communication, PhD writing essentially differs from other courses. It may encompass many writing-related activities, including working in pairs and groups, peer review activities, with many of which combining writing with contribution to science. Though, supervisory feedback aims for a strong thesis, some researchers highlight supervisory feedback and feedforward on doctoral writing as they are essential for training fully-fledged researchers, aspiring for a PhD degree (Carter, & Kumar, 2017).

Emotions aroused by feedback range from positive (satisfaction, pleasure, joy, etc.) to negative (dissatisfaction, frustration, sadness, discontent). Researchers have been studying this aspect of feedback, with papers on various feedback variations and environments (Lipnevich, Murano, Krannich, & Goetz, 2021; Mazzotta, & Belcher, 2018; Yu, Geng, Liu, & Zheng, 2021; Zhang, He, Du, Liu, & Huang, 2022; Yu, Di Zhang, & Liu, 2022).

The use of web-based platforms for feedback brought new possibilities for peer review in writing (Lam, 2021). Computer-mediated feedback as compared with face-to-face evaluation is more distant, time and place independent, written and perceived as anonymous (Tuzi, 2004).

Feedback tends to be teacher-centered. But to be productive, feedback must be faced by students whose feedback literacy is formed. and perceived as a stimulus for improvement. On the whole, students' feedback literacy is focused on "how learners approach, use, and evaluate feedback and manage their feelings in the process" (Yu, Di Zhang, & Liu, 2022). It is defined as "students' ability to understand, utilise and benefit from feedback processes" (Molloy, Boud, & Henderson, 2020). The feedback literacy structure covers "understanding feedback purposes and roles, seeking information, making judgements about work quality, working with emotions, and processing and using information for the benefit of their future work" (Molloy, Boud, & Henderson, 2020, p. 527).

With all the advantages feedback on writing entails, it may occasionally have a negative side. "Lack of specification, low quality, superficial feedback, unclear feedback criteria, inconsistent feedback, one-way communication, and unclosed loop" may negatively affect students' development and performance, and occasionally may lead to their frustration (Yu, Geng, Liu, & Zheng, 2021).

The editorial review aims to determine the scope of research on writing feedback published in international journals. Thus, the ***review question*** we are to answer in this paper is the following:

- What are the major thematic clusters in the writing feedback domain?

METHOD

To estimate how deep feedback writing has been researched, we searched for the keywords "teaching writing", "writing feedback", "feedback on writing" in the field covering titles, abstracts, and key words in the Scopus database as of November 21, 2022. Initially, with the applied limitations, the search brought 1,147 publications for all years. The limitations included a field filter (Social Sciences; Arts & Humanities); language (English) and types of publications (articles, reviews, book chapters, conference papers).

Then, 208 publications on writing feedback were screened and manually processed on the basis of the inclusion and exclusion criteria (see Table 1). While filtering the publications, we found that fourteen articles turned out irrelevant to the subject and, thus, we eliminated them from the list. Thus, the final selection included 194 publications for further analysis.

Ultimately, the 194 publications included 157 articles, 28 conference papers, 5 book chapters, and 4 reviews.

The 194 documents are distributed unevenly, with an upward tendency from 2012 (see Figure 1). The reviewed documents were published in the following sources: *Assessing Writing* (n=12); *Journal of Second Language Writing* (n=10); *Lecture Notes in Computer Science* (n=8); *Calico Journal* (n=7); *System* (n=6). The remaining journals brought out from five publications to one.

The most prolific authors embrace J. Wilson (n=13); S. Yu (n=8); D.S. McNamara (n=7); R.D. Roscoe (n=7), and L.K. Allen (n=6).

The University of Delaware (n=13), Iowa State University (n=12), the University of Macau (n=9), Arizona State University (n=8), and Georgia State University (n=6) top the list of the affiliations. The geographical breakdown is shown in Figure 2. The top ten countries include the USA (n=69), China (n=42),

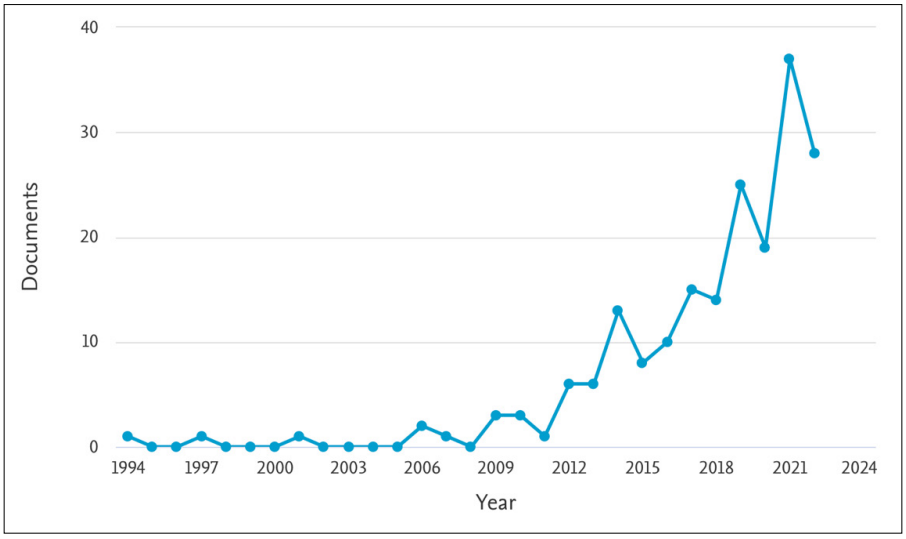
Table 1

Review Criteria of Inclusion and Exclusion

Criteria	Inclusion	Exclusion
Database	Scopus Database	Databases other than Scopus
Language	English	Other languages
Period	All years	No criterion applicable
Subject Area	Social Sciences	Other areas
	Arts & Humanities	
Type of Publications	Articles	Other types
	Reviews	
	Book Chapters	
	Conference Papers	
Citations	All readings	No criterion applicable
Level of Education	All levels	No criterion applicable

Figure 1

Research on Writing Feedback: Breakdown by Year



Note. Source: Scopus Database as of November 21, 2022

the UK (n=14), Australia (n=11), Taiwan (n=11), Canada (n=9), Turkey (n=6), Japan (n=5), Singapore (n=5), and Hong Kong (n=4).

The initial topical analysis of the selected publications lead to the following segmentation:

(1) writing feedback types;

(2) writing evaluation;

(3) teacher feedback on writing;

(4) automated feedback and evaluation;

(5) emotions, perceptions, and motivation relating to writing feed back.

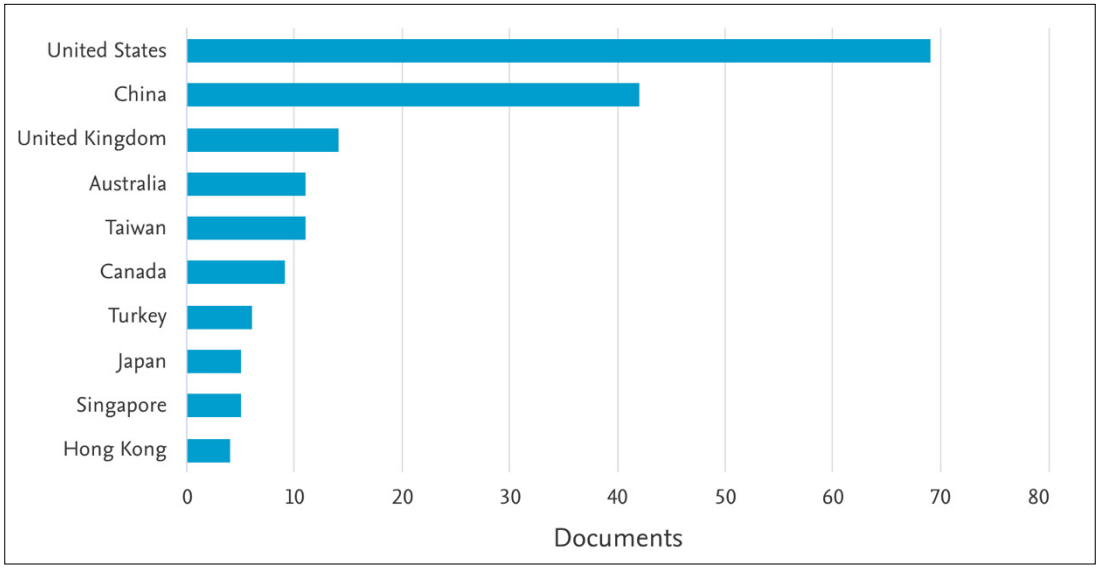
We categorized the 194 publications individually, each on our own. Then, we compared the results. The clusters were refined. The ultimate breakdown includes seven clusters: automated and non-automated evaluation; feedback on writing: general issues; automated feedback; peer review and teacher feedback on writing; perceptions and emotions relating to writing feedback; feedback on scholarly writing; evaluation and improvement in Chinese calligraphy.

RESULTS AND DISCUSSION

The 184 publications were distributed among the seven thematic clusters, with overlapping excluded in favour of the prevailing topic. Some of the clusters (Automated and

Figure 2

Research on Writing Feedback: Breakdown by Country (Territory)



Note. Source: Scopus Database as of November 21, 2022

Table 2

Thematic Clusters of Scopus-Indexed Publications on Writing Feedback (all years)

Thematic Cluster	Number of Publications (n)	Brief Cluster Description
Automated and Non-Automated Evaluation	79	Automated writing evaluation; testing services for analysing papers; tools for automated evaluation, including computed-based checkers; evidence for evaluation inference; computer-generated quantitative assessments and qualitative diagnostic feedback on writing; effectiveness of automated writing evaluation systems
Feedback on Writing: General Issues	44	Types of writing feedback; cognitive effects of intervention on the revision process and text improvement; quality of feedback; feedback practices; audio feedback; improving text revision with self-regulated strategies; collaboration in writing
Automated Feedback	21	Automated formative feedback; intelligent tutoring systems, including the Writing Pal, Automated Essay Scoring, Research Writing Tutor, Automated Casual Discourse Analyzer, Formative Writing Systems (with automated scoring), Grammarly, MI Write, CyWrite, Peerceptiv
Peer Review and Teacher Feedback on Writing	18	Feedback on feedback; formative feedback to peers; vis-à-vis teacher feedback; peer critique of writing; learning from giving and receiving feedback on writing
Perceptions and Emotions Relating to Writing Feedback	15	Students' and academics' satisfaction or dissatisfaction with feedback on their writing; timeliness of feedback; students' engagement and interest in feedback on writing; motivation relationship with indicators of academic performance in writing; a sociocultural framework of the perception of writing feedback
Feedback on Scholarly Writing	12	Writing in disciplinary and academic contexts; supervisory feedback on doctoral writing; feedback for academic writing development; supervisory feedback literacy; automated evaluation in improving academic writing
Evaluation and Improvement in Chinese Calligraphy	5	Computer aided calligraphic learning systems in supporting beginners of Chinese; manual assessment vs computer aided systems; digital ink technology in Chinese calligraphy

Non-Automated Evaluation; Feedback on Writing: General Issues) were enlarged by combining several sub-themes.

Automated and Non-Automated Evaluation (n=82)

Evaluation is an essential component of any feedback. With computer-mediated evaluation systems on the rise, automated evaluation attracts "has been applied with the significant frequency to the evaluation and assessment" of writing (Wang, Shang, & Briody, 2013). Automated evaluation has a potential for formative assessment (Ranalli, Link, & Chukharev-Hudilainen, 2017). Automated writing evaluation systems provide "immediate computer-generated quantitative assessments" (Bai, & Hu, 2017). Automated writing evaluation complements "instructor input with immediate scoring and qualitative feedback" (Li, Link, Ma, Yang, & Hegelheimer, 2014). Controversy arises when automated writing evaluation is applied "in high-stakes tests like TOEFL" (Stevenson, 2016). Students' motivation to use automated writing evaluation is "determined by perceived usefulness, attitude towards using and computer self-efficacy" (Li, Meng, Tian, Zhang, Ni, & Xiao, 2019). In addition to better writing performance, automated writing evaluation systems facilitate grammatical development (Crossman, & Kite, 2012). As research shows automated evaluation are still facing a challenge in "evaluating content and discourse-specific feedback" (Saricaoglu, 2019).

Feedback on Writing: General Issues (n=44)

The approach to writing feedback is not unanimous. Many teachers strongly believe that corrective feedback to students' writing improves their accuracy, but others disagree (Guenette, 2007). Researchers study "the influences of different writing feedback practices on learner affective factors" (Yu, Jiang, & Zhou, 2020), including motivation. Some papers research feedback on writing in the context of higher education (Seror, 2009), including feedback on academic writing (Chang, 2014), and university students' feedback on feedback through student' generated screencasts (Fernandez-Toro, & Furnborough, 2014). Feedback literacy has attracted attention as it seriously increases its efficacy (Parker, & Baughan, 2009; Yu, Di Zhang, & Liu, 2022). The communication between a student and a teacher in a writing class creates the so-called "instructor-student loop" (Knight, Greenberger, & McNaughton, 2021).

Automated Feedback (n=21)

Computer-mediated systems providing feedback on writing are getting popular. Their characteristics are constantly being improved. Most systems are designed to improve students' writing proficiency. Such systems integrate a combination of "explicit strategy instruction, game-based practice, essay writing practice, and automated formative feedback" (Roscoe, Allen, Weston Crossley, & McNamara, 2014). Systems of automated essay scoring analyse quantitatively and qualitatively across the feedback categories of grammar, usage, and mechanics (Dikli, & Bleyle, 2014). Automated systems are working "towards providing timely and appropriate feedback" (Calvo, & Ellis, 2010). Some studies proved that corrective feedback generated by systems may be similar to the direct comments made by teachers "in terms of improving the quality of the content by criteria of structure, organisation, supporting ideas and others (Liu, Li, Xu, & Liu, 2017). Some systems (for instance, Research Writing Tutor) maintain "genre and discipline-specific feedback on the functional units of research article discourse" (Cotos, & Pendar, 2016). Roscoe, Alen, Johnson, and McNamara (2018) established the fact that the students' "perceptions of automated feedback accuracy, ease of use, relevance, and understanding" and attitudes over regular sessions brought them to revising (Roscoe, Alen, Johnson, & McNamara, 2018). The research on popular systems like Grammarly analysed students' acceptance of the new technology in editing and revising their essays and found outperformance of those who regularly applied Grammarly (Chang, Huang, & Whitfield, 2021; Tambunan, Andayani, Sari, & Lubis, 2022).

Peer Review and Teacher Feedback on Writing (n=18)

Teacher feedback is a traditional form prevailing in writing across all levels of education. It has been in the highlight for researchers for many years. The quality of teachers' feedback determines learners' efficacy in writing. Students tend to react positively to teachers' feedback relating to both content and language errors (Elwood, & Bode, 2014), but most learners see teachers' feedback as prescriptive directions to be followed without fail (Still, & Koerber, 2010). At the same time, giving feedback on student writing "can be a learning experience for most L2 writing teachers" (Yu, 2021). With the introduction of automated writing feedback systems, researchers compare them with feedback provided by teachers (Howard Chen, Sarah Cheng, & Chirstine Yang, 2017).

The provision of teachers' feedback on writing is limited in some environments and may be set off by peer feedback. The latter is studied as a resource leading to greater improvements in writing (Yang, & Badger, 2006). Another study focuses on the timing of the peer review and further student writers' revisions (Baker, 2016). Facilitating writing may be realized through directed peer review (Crossman, & Kite, 2012). Peer review is researched in various environments, i.g. institutionally integrated teletandem sessions (Aranha, & Cavalari, 2015); online peer review platforms (Kumaran, McDonagh, & Bailey, 2017). The meta-analysis conducted by Thirakunkovit and Chamvharatsri (2019) found that a noticeable difference in effect sizes was recorded between untrained peer feedback and peer feedback with prior training (Thirakunkovit and Chamcharatsri, 2019).

Perceptions and Emotions Relating to Writing Feedback (n=15)

As efficient feedback on writing results in improved texts, it must influence students' emotions in a positive way, strengthening their motivation and engagement. Students' and academics' approaches to feedback and its evaluation often differ. The research findings proved "a significant discord between staff and students to certain aspects of feedback practice" (Mulliner, & Tucker, 2017; Liu, & Wu, 2019). Writing feedback is also considered from a perspective of self-efficacy and self-aptitude (Ekholm, Zumbrunn, & Conklin, 2015). Some papers dwell upon teachers' emotions in giving feedback and their attitudes to automated writing evaluation and feedback (Wilson, & et al., 2021).

Feedback on Scholarly Writing (n=12)

These papers dwell upon on feedback on students' and undergraduates' writing in the disciplines, including faculty feedback (Hyland, 2013); feedback for academic writing development in postgraduate research (Hey-Cunningham, Ward, & Miller, 2021); students' engagement with automated feedback on academic writing (Zhang, & Xu, 2022); effective computer-based writing tools for the support of composing scholarly texts by non-native speakers (Lee, Wang, Chen, & Yu, 2021); doctoral writing feedback across cultures (Carter, Sun, & Jabeen, 2021); and supervisory feedback on doctoral writing (Carter, & Kumar, 2017; Wei, Carter, & Laurs, 2019).

Evaluation and Improvement in Chinese Calligraphy (n=5)

Chinese calligraphy is getting popularity worldwide. Beginners of Chinese tend to face difficulties in Chinese calligraphy and suffer from unstable characters writing. There are five papers on Chinese calligraphy writing on the reviewed list. They focus on computer-mediated digital-ink writing and methods of evaluation and improvement (Lai, & Zhang, 2021; Wu, Zhou, & Cai, 2013).

CONCLUSION

The identified directions in the research on writing feedback cover automated and non-automated evaluation; feedback on writing: general issues; automated feedback; peer review and teacher feedback on writing; perceptions and emotions relating to writing feedback; feedback on scholarly writing; evaluation and improvement in Chinese calligraphy. They may provide a reliable guidance for researchers. The review results are likely to serve as a landmark for potential JLE authors working on relevant topics. Though, this review has some limitations. First, it is a probing study of the topical area. Second, the review has a simplified document-selection method that does not allow to analyse the field in-depth. Future researchers may apply a more complex review methods, i.e. a scoping review methodology. A further study of the field needs spotting the gaps in a wider database covering more publications.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

L. Raitskaya: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing, other contribution.

E. Tikhonova: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Validation, Visualization , Writing – original draft, Writing – review & editing, other contribution.

REFERENCES

Aben, J. E. J., Timmermans, A. C., Dingyloudi, F., Lara, M. M., & Strijbos, J. (2022). What influences students' peer-feedback uptake? Relations between error tolerance, feedback tolerance, writing self-efficacy, perceived language skills and peer-feedback processing. *Learning and Individual Differences, 97*. https://doi.org/10.1016/j.lindif.2022.102175

Aranha, S., & Cavalari, S. M. S. (2015). Institutional integrated teletandem: What have we been learning about writing and peer feedback? *DELTA Documentacao De Estudos Em Linguistica Teorica e Aplicada, 31*(3), 763-780. https://doi.org/10.1590/0102-445039175922916369

Bai, L., & Hu, G. (2017). In the face of fallible AWE feedback: How do students respond? *Educational Psychology, 37*(1), 67-81. https://doi.org/10.1080/01443410.2016.1223275

Baker, K. M. (2016). Peer review as a strategy for improving students' writing process. *Active Learning in Higher Education, 17*(3), 179-192. https://doi.org/10.1177/1469787416654794

Carter, S., & Kumar, V. (2017). 'Ignoring me is part of learning': Supervisory feedback on doctoral writing. *Innovations in Education and Teaching International, 54*(1), 68-75. https://doi.org/10.1080/14703297.2015.1123104

Carter, S., Sun, Q., & Jabeen, F. (2021). Doctoral writing: Learning to write and give feedback across cultures. *Studies in Graduate and Postdoctoral Education, 12*(3), 371-383. https://doi.org/10.1108/SGPE-07-2020-0054

Chang, G. C. L. (2014). Writing feedback as an exclusionary practice in higher education. *Australian Review of Applied Linguistics, 37*(3), 262-275. https://doi.org/10.1075/aral.37.3.05cha

Chang, T., Li, Y., Huang, H., & Whitfield, B. (2021). Exploring EFL students' writing performance and their acceptance of AI-based automated writing feedback. Paper presented at the *ACM International Conference Proceeding Series,* 31-35. https://doi.org/10.1145/3459043.3459065

Cotos, E., & Pendar, N. (2016). Discourse classification into rhetorical functions for AWE feedback. *CALICO Journal, 33*(1), 92-116. https://doi.org/10.1558/cj.v33i1.27047

Crossman, J. M., & Kite, S. L. (2012). Facilitating improved writing among students through directed peer review. *Active Learning in Higher Education, 13*(3), 219-229. https://doi.org/10.1177/1469787412452980

Cunningham, K. J. (2019). How language choices in feedback change with technology: Engagement in text and screencast feedback on ESL writing. *Computers and Education, 135*, 91-99. https://doi.org/10.1016/j.compedu.2019.03.002

Cunningham, K. J., & Link, S. (2021). Video and text feedback on ESL writing: Understanding ATTITUDE and negotiating relationships. *Journal of Second Language Writing, 52*. https://doi.org/10.1016/j.jslw.2021.100797

Dikli, S., & Bleyle, S. (2014). Automated essay scoring feedback for second language writers: How does it compare to instructor feedback? *Assessing Writing, 22*, 1-17. https://doi.org/10.1016/j.asw.2014.03.006

Ekholm, E., Zumbrunn, S., & Conklin, S. (2015). The relation of college student self-efficacy toward writing and writing self-regulation aptitude: Writing feedback perceptions as a mediating variable. *Teaching in Higher Education, 20*(2), 197-207. https://doi.org/10.1080/13562517.2014.974026

Elwood, J. A., & Bode, J. (2014). Student preferences vis-à-vis teacher feedback in university EFL writing classes in Japan. *System, 42*(1), 333-343. https://doi.org/10.1016/j.system.2013.12.023

Howard Chen, H., Sarah Cheng, H., & Chirstine Yang, T. (2017). Comparing grammar feedback provided by teachers with an automated writing evaluation system. *English Teaching and Learning, 41*(4), 99-131. https://doi.org/10.6330/ETL.2017.41.4.04

Hyland, K. (2013). Faculty feedback: Perceptions and practices in L2 disciplinary writing. *Journal of Second Language Writing, 22*(3), 240-253. https://doi.org/10.1016/j.jslw.2013.03.003

Knight, S. K., Greenberger, S. W., & McNaughton, M. E. (2021). An interdisciplinary perspective: The value that instructors place on giving written feedback. *Active Learning in Higher Education, 22*(2), 115-128. https://doi.org/10.1177/1469787418810127

Kumaran, S. R. K., McDonagh, D. C., & Bailey, B. P. (2017). Increasing quality and involvement in online peer feedback exchange. *Proceedings of the ACM on Human-Computer Interaction, 1*(CSCW). https://doi.org/10.1145/3134698

Lai, Y., & Zhang, X. (2021). Evaluating the stability of digital ink Chinese characters from CFL beginners based on center of gravity guided by calligraphy. *ACM International Conference Proceeding Series,* 19-25. https://doi.org/10.1145/3451400.3451404

Lam, S. T. E. (2021). A web-based feedback platform for peer and teacher feedback on writing: An activity theory perspective. *Computers and Composition, 62.* https://doi.org/10.1016/j.compcom.2021.102666

Lee, L., Wang, Y., Chen, C., & Yu, L. (2021). Ensemble multi-channel neural networks for scientific language editing evaluation. *IEEE Access, 9*, 158540-158547. https://doi.org/10.1109/ACCESS.2021.3130042

Lipnevich, A. A., Murano, D., Krannich, M., & Goetz, T. (2021). Should I grade or should I comment: Links among feedback, emotions, and performance. *Learning and Individual Differences, 89.* https://doi.org/10.1016/j.lindif.2021.102020

Li, R., Meng, Z., Tian, M., Zhang, Z., Ni, C., & Xiao, W. (2019). Examining EFL learners' individual antecedents on the adoption of automated writing evaluation in China. *Computer Assisted Language Learning, 32*(7), 784-804. https://doi.org/10.1080/09588221.2018.1540433

Liu, M., Li, Y., Xu, W., & Liu, L. (2017). Automated essay feedback generation and its impact on revision. *IEEE Transactions on Learning Technologies, 10*(4), 502-513. https://doi.org/10.1109/TLT.2016.2612659

Liu, Q., & Wu, S. (2019). Same goal, varying beliefs: How students and teachers see the effectiveness of feedback on second language writing. *Journal of Writing Research, 11*(2), 299-330. https://doi.org/10.17239/jowr-2019.11.02.03

Mazzotta, M., & Belcher, D. (2018). Social-emotional outcomes of corrective feedback as mediation on second language Japanese writing. *Journal of Cognitive Education and Psychology, 17*(1), 47-69. https://doi.org/10.1891/1945-8959.17.1.47

Molloy, E., Boud, D., & Henderson, M. (2020). Developing a learning-centred framework for feedback literacy. *Assessment & Evaluation in Higher Education, 45*(4), 527–540. https://doi.org/10.1080/02602938.2019.1667955

Mulliner, E., & Tucker, M. (2017). Feedback on feedback practice: Perceptions of students and academics. *Assessment and Evaluation in Higher Education, 42*(2), 266-288. https://doi.org/10.1080/02602938.2015.1103365

Parker, P., & Baughan, P. (2009). Providing written assessment feedback that students will value and read. *International Journal of Learning, 16*(11), 253-262. https://doi.org/10.18848/1447-9494/cgp/v16i11/46715

Ranalli, J., Link, S., & Chukharev-Hudilainen, E. (2017). Automated writing evaluation for formative assessment of second language writing: Investigating the accuracy and usefulness of feedback as part of argument-based validation. *Educational Psychology, 37*(1), 8-25. https://doi.org/10.1080/01443410.2015.1136407

Roscoe, R. D., Allen, L. K., Johnson, A. C., & McNamara, D. S. (2018). Automated writing instruction and feedback: Instructional mode, attitudes, and revising. *The Proceedings of the Human Factors and Ergonomics Society, 3,* 2089-2093. https://doi.org/10.1177/1541931218621471

Roscoe, R. D., Allen, L. K., Weston, J. L., Crossley, S. A., & McNamara, D. S. (2014). The writing pal intelligent tutoring system: Usability testing and development. *Computers and Composition, 34*, 39-59. https://doi.org/10.1016/j.compcom.2014.09.002

Saricaoglu, A. (2019). The impact of automated feedback on L2 learners' written causal explanations. *ReCALL, 31*(2), 189-203. https://doi.org/10.1017/S095834401800006X

Stevenson, M. (2016). A critical interpretative synthesis: The integration of automated writing evaluation into classroom writing instruction. *Computers and Composition, 42*, 1-16. https://doi.org/10.1016/j.compcom.2016.05.001

Still, B., & Koerber, A. (2010). Listening to students: A usability evaluation of instructor commentary. *Journal of Business and Technical Communication, 24*(2), 206-233. https://doi.org/10.1177/1050651909353304

Tambunan, A. R. S., Andayani, W., Sari, W. S., & Lubis, F. K. (2022). Investigating EFL students' linguistic problems using Grammarly as automated writing evaluation feedback. *Indonesian Journal of Applied Linguistics, 12*(1), 16-27. https://doi.org/10.17509/IJAL.V12I1.46428

Thirakunkovit, S., & Chamcharatsri, B. (2019). A meta-analysis of effectiveness of teacher and peer feedback: Implications for writing instructions and research. *Asian EFL Journal, 21*(1), 140-170.

Tuzi, F. (2004). The impact of feedback on the revisions of L2 writers in an academic writing course. *Computers and Composition, 21*(2), 217–235. https://doi.org/10.1016/j.compcom.2004.02.003

Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing, 15*(3), 179-200. https://doi.org/10.1016/j.jslw.2006.09.004

Yu, S. (2021). Feedback-giving practice for L2 writing teachers: Friend or foe? *Journal of Second Language Writing, 52.* https://doi.org/10.1016/j.jslw.2021.100798

Yu, S., Di Zhang, E., & Liu, C. (2022). Assessing L2 student writing feedback literacy: A scale development and validation study. *Assessing Writing, 53.* https://doi.org/10.1016/j.asw.2022.100643

Yu, S., Geng, F., Liu, C., & Zheng, Y. (2021). What works may hurt: The negative side of feedback in second language writing. *Journal of Second Language Writing, 54.* https://doi.org/10.1016/j.jslw.2021.100850

Wang, Y., Shang, H., & Briody, P. (2013). Exploring the impact of using automated writing evaluation in English as a foreign language university students' writing. *Computer Assisted Language Learning, 26*(3), 234-257. https://doi.org/10.1080/09588221.2012.655300

Wei, J., Carter, S., & Laurs, D. (2019). Handling the loss of innocence: First-time exchange of writing and feedback in doctoral supervision. *Higher Education Research and Development, 38*(1), 157-169. https://doi.org/10.1080/07294360.2018.1541074

Wilson, J., Ahrendt, C., Fudge, E. A., Raiche, A., Beard, G., & MacArthur, C. (2021). Elementary teachers' perceptions of automated feedback and automated scoring: Transforming the teaching and learning of writing using automated writing evaluation. *Computers and Education, 168.* https://doi.org/10.1016/j.compedu.2021.104208

Wu, Y., Lu, X., Zhou, D., & Cai, Y. (2013). Virtual calligraphic learning and writing evaluation. *Proceedings - 6th International Symposium on Computational Intelligence and Design, ISCID 2013, 2* 108-111. https://doi.org/10.1109/ISCID.2013.141

Zhang, M., He, Q., Du, J., Liu, F., & Huang, B. (2022). Learners' perceived advantages and social-affective dispositions toward online peer feedback in academic writing. *Frontiers in Psychology, 13.* https://doi.org/10.3389/fpsyg.2022.973478

Zhang, X., & McEneaney, J. E. (2020). What is the influence of peer-feedback and author response on Chinese university students' English writing performance? *Reading Research Quarterly, 55*(1), 123–146. https://doi.org/10.1002/rrq.259

Zhang, Z., & Xu, L. (2022). Student engagement with automated feedback on academic writing: A study on Uyghur ethnic minority students in China. *Journal of Multilingual and Multicultural Development.* https://doi.org/10.1080/01434632.2022.2102175

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Learning Outcomes Generated through the Collaborative Processing of Expert Peer Feedback

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ABSTRACT

Background. Studies have shown that the collaborative processing of feedback on a jointly produced text facilitates language learning in a traditional classroom. However, it is still unknown whether there are similar learning benefits when the feedback is provided through an online modality from an expert peer during an international virtual exchange (IVE).

Purpose. The present study fills this gap in the literature by investigating Japanese learners engaged in processing written corrective feedback from expert language users in the United States.

Method. Qualitative data concerning students' perceptions of learning outcomes were collected via retrospective interviews and narrative frames, then triangulated with their first and final drafts of written texts and analyzed using activity theory (AT).

Results. Findings indicate that learning benefits accrued in areas of language skills such as vocabulary, spelling, and grammar, as well as deepening learners' reflexive awareness of themselves as language users.

Conclusion. A discussion of these findings, informed by sociocultural theory and shaped by the categories of AT, brings to light some of the interactional dynamics that contributed to the creation of these outcomes. These interactional dynamics show that the learning benefits of the activity primarily resided in the peer-to-peer interactions rather than interactions with the expert-peer.

KEYWORDS

activity theory, collaborative writing, peer feedback, international virtual exchange, written corrective feedback

INTRODUCTION

International virtual exchange (IVE), also known as telecollaboration (Çiftçi & Savaş, 2017) or online intercultural exchange (O'Dowd & Lewis, 2016), is a rapidly developing field of inquiry. Sadler and Dooly (2016) define these exchanges as "an embedded, dialogic process that supports geographically distanced collaborative work through social interaction, involving a/synchronous communication technology so that participants co-produce mutual objective(s) and share knowledge-building" (p. 402). These mutual objectives usually include two goals: growth in additional language learning and deepening of intercultural competence, with the extant literature showing achievement of these goals is often successful (Avgousti, 2018; Carney, 2006; Çiftçi & Savaş, 2017).

When researching student interactions in virtual exchange, peer feedback on writing is a particularly worthy avenue of inquiry, not least because it can facilitate opportunities for additional language development (e.g., Díez-Bedmar & Pérez-Paredes, 2012; O'Dowd, 2020) but is also often something that students find worthwhile and enjoyable (Ennis et al., 2021). Very often feedback in an IVE is received at the level of the individual, with the learning outcomes of participants in an IVE who collaboratively process peer feedback provided by expert peers on jointly produced texts being

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significantly under-researched. As Storch (2021) highlights, this gap is noteworthy, due to a growing body of research suggesting that talking through responses to feedback on jointly produced texts facilitates language learning (e.g., Brooks & Swain, 2009; Coyle et al. 2018; Storch & Wigglesworth, 2010).

This study seeks to add to this body of research in two ways. First, it aims to provide more specific detail on the type of knowledge learners co-construct when collaboratively processing peer-feedback in an online modality. Secondly, this investigation endeavors to provide a rich description on how learners approached the task of collaboratively processing the feedback and identify factors which influenced the activity's outcome. Data were collected from student work, narrative frames and interviews; the authors used activity theory (AT) to investigate the experiences of Japanese learners of English who received expert peer feedback from American learners of Japanese.

Novices Helping Novices: Face-to-Face and Computer-Mediated Peer Feedback

Several studies have investigated peer feedback on writing, and the collaborative processing of feedback, using a sociocultural theory (SCT) framework. Informed by a Vygotskian view of development, research has shown that the co-construction of knowledge is not limited to traditional expert–novice interactions, but includes novices pooling their resources to form a collective expert (Donato, 1994) and shaping and reshaping cognition as learners discuss language use (Swain, 2006). De Guerrero and Villamil (1994, 2000) and Villamil and de Guerrero (1996, 1998, 2019) investigated language learners receiving feedback from their peers orally in a face-to-face language learning classroom. All five studies revealed that learners were able to support each other despite no traditional expert being present, enabling learners to perform at a level higher than they could individually. Additionally, the support was often bidirectional, because each member of the dyad assisted the other to find solutions, rather than the traditional one-way, didactic, expert-novice type interaction (Villamil & de Guerrero, 2019).

Another means of employing a collective expert is for learners to collaboratively process a teacher's feedback on jointly produced texts. Such studies have shown that participants can co-construct knowledge during text construction (Brookes & Swain, 2009) and through the interactions initiated by teacher feedback (Brooks & Swain, 2009; Storch & Wigglesworth, 2010). Furthermore, the process of talking about the feedback with a peer has been argued to be a key factor in facilitating the construction of knowledge (Coyle et al. 2018; Swain, 2006).

Sociocultural theory posits that changes in one's environment lead to changes in additional language learning processes (Lantolf & Poehner, 2014). Therefore, the findings of peer feedback in traditional face-to-face environments should not be assumed to hold true in computer-mediated environments. The medium of feedback delivery and its timing, either synchronous (oral or text) or asynchronous (oral or text with a delay), have been shown to influence the nature and quantity of peer feedback and the author's engagement with it (Chang, 2012; Guardado & Shi, 2007). Furthermore, as Guardado and Shi point out, the influence of computer-mediated peer feedback on learning cannot be described in simple categorical terms as more or less beneficial than traditional face-to-face peer feedback.

One benefit of computer-mediated peer feedback is that it is less face-threatening when compared to face-to-face discussions (Liu & Sadler, 2003). Additionally, it has been argued that the online environment frees peers from the embarrassment of communicating in the additional language when learners share the same dominant language (Jones et al., 2006). When the online environment ensures anonymity, the honesty and level of criticism in the feedback has been found to increase (Guardado & Shi, 2007; Strenski et al., 2005). Despite these advantages, the level of engagement when responding to peer feedback has been reported as lower when using asynchronous computer-mediated peer feedback (Chang, 2012; Guardado & Shi, 2007). Guardado and Shi argued this was partly due to online communication requiring more effort than face-to-face interactions. Synchronous computer-mediated peer feedback has been found to result in less engaging discussions between peers than face-to-face discussions (Chang 2012; Liu & Sadler, 2003); the reasons for this range from learners going off task (Schulz, 2000) to difficulty in understanding turn taking and a lack of paralinguistic cues (Liu & Sadler, 2003).

Expert Peers Helping Novices: Feedback in IVEs

Advances in communication technologies enable novices to receive feedback from geographically distant expert language users. This process, referred to as tandem language learning, involves expert peers and novices coming together to support each other in learning the other's language (O'Rourke, 2005). Expert peers are foreign language learners, closely related in age to the novices, and expert users of their peers' target language. They can provide feedback via synchronous or asynchronous interactions.

The small body of research into text-based synchronous feedback suggests that synchronous text feedback results in a low percentage of error correction. Bower and Kawaguchi (2011) performed a comparative analysis of synchronous and asynchronous corrective feedback provided in an eTandem project. Their study, involving language learners of Japanese and English, found that synchronous text interactions produced very low rates of corrective feedback: 0.8% of total errors in English sessions and 4.1% in Japanese sessions. In contrast, Lee's (2006) study found a much higher rate of

correction, with 73% of learners' errors receiving feedback. However, the expert speakers in this study were language teachers, which probably inflated the rate of correction. Iwasaki and Oliver (2003) paired adult native speakers of Japanese with learners of Japanese in Australia, and found their synchronous chat exchanges resulted in 14% of errors receiving implicit corrective feedback. However, the study was unable to conclude whether this feedback resulted in actual language learning.

Synchronous, webcam-based interaction was studied by Konishi (2017). The interactions were between groups of three, with each group consisting of one dyad of Japanese learners and one Australian student. While there is no evidence that negative (corrective) feedback on language use was exchanged, there is evidence that positive feedback in terms of exposure to language produced by expert peers, being understood and sharing a communicative experience increased learners' motivation to study and willingness to communicate. Indeed, it seems likely that the format of the exchange influences the type of feedback given. Díez-Bedmar and Pérez-Paredes (2012) compared digital forums with wikis, and found that feedback in the forums was more affective and goal-oriented, whereas feedback in the wikis focused more on language form: specifically, morphosyntactic and lexical concerns.

This kind of feedback on form does not naturally occur in interaction without explicit instruction. Ware and O'Dowd (2008), taking a sociocultural approach, studied peer feedback and attention to form in asynchronous writing. They found that participants desired written feedback on form, but only provided it when explicitly instructed to do so, suggesting that corrective feedback does not emerge spontaneously during interactions. Bower and Kawaguchi (2011) supported this conclusion. Despite finding an almost total absence of corrective feedback during synchronous interaction, they observed that when instructed to provide corrections by email after learners participated in online chat, over 60% of errors were corrected.

Students tend to trust feedback from a classmate (defined in this paper as a near peer) less than feedback from a teacher, believing that near peers may lack sufficient knowledge (Sengupta, 1998, cited in Hyland & Hyland, 2006.) An expert user of the target language, however, is in a better position to make linguistic evaluations. Even so, Díez-Bedmar and Pérez-Paredes (2012) found that a small amount of feedback from expert peers was rejected when the writer believed it to be incorrect.

Aranha and Cavalari (2015) supplemented asynchronous, text-based feedback with synchronous, spoken feedback from expert peers in institutionally integrated teletandem. After making written comments and corrections on writing produced by their overseas partners, learners then engaged in online discussion of those corrections. Learners' direct corrections focused on form, especially spelling, prepositions, vocabulary, accuracy, and verb form. However, Aranha and Cavalari found that this approach to correction, by being prescriptive and thus impeding their partners' exercise of their own learning strategies, did not align with their pedagogical goals of promoting autonomous and collaborative foreign language learning.

Significance of this Study

IVEs in an Asian context have been the subject of little research to date (Çiftçi & Savaş, 2017; O'Dowd & Lewis, 2016). Additionally, within the extant literature on the provision of feedback on writing, the learning potential of feedback provided by expert peers remains under-researched. In the few studies of feedback provided by expert peers, participants have worked individually throughout the writing process (Díez-Bedmar & Pérez-Paredes, 2012; Ware & O'Dowd, 2008), with the research mainly focusing on the quality and quantity of feedback and not exploring the experiences and learning outcomes of participants. However, an emerging body of research suggests that learners benefit from working collaboratively in both the production of texts and processing of subsequent asynchronous feedback (e.g., Coyle et. al, 2018). Consequently, there is a need to investigate learners working collaboratively throughout the whole writing process when receiving expert peer feedback in an IVE to study their experiences and learning outcomes.

This study aimed to contribute to these under-researched areas by providing a rich description of the outcomes that Japanese university students identified as arising from discussing expert peer feedback on jointly produced texts during their participation in an IVE with American college students. Furthermore, this study aimed to contribute to our understanding of *how* and *why* these outcomes came to be. Based on these aims, the following research questions were developed:

RQ1. What are the outcomes of Japanese university students collaboratively processing expert peer feedback on jointly produced texts?

RQ2. What interactional dynamics within the dyad contributed to the creation of these outcomes?

METHOD

IVE Program Design

A case study methodology was adopted to explore the research questions presented above. The subject of investigation, or bounded instance (Nunan & Bailey, 2009), was an IVE program conducted between two language classes. Participants in the first class, titled English Writing I, were first-year English students at a Japanese university (n=15). Partic-

ipants in the second class, titled Advanced Japanese, were third- and fourth-year students at a university in the U.S. (n=16). Participants were divided into four groups. Three groups comprised four U.S. and four Japanese students, and one group had four U.S. and five Japanese students. The program had two stages: Stage 1 consisted of an asynchronous video exchange, in which students introduced themselves to their partners; Stage 2 was a collaborative writing task. This paper focuses on the second stage.

This study sought to illuminate how learning processes and IVE program outcomes are affected when the active agent is a dyad, rather than a sole individual. It did this by focusing on dyads and one group of three (henceforth referred to as a dyad for expediency), exploring how the students at the Japanese university worked together to process feedback on a piece of collaborative writing. After the Japanese (JP) students completed their jointly produced text, it was then shared with a group of expert peers in the partner school (US students). The US students were instructed to provide feedback on the language and content of the text written in the target language (see Figure 1). In addition to receiving some training in methods and types of feedback (such as focusing on content or form), all participants were experienced language learners. Consequently, it was judged that they possessed the necessary meta-linguistic knowledge for commenting on peers' writing. They were instructed to provide feedback to their partners on linguistic forms that they perceived as incorrect, in a condition that Ware and O'Dowd (2008) termed e-tutoring. This is qualitatively different to another form of interaction, tandem language learning, which adheres to the principle of learner autonomy and thus rejects prescribed sequences of tasks (O'Rourke, 2005).

After having received feedback, each dyad reflected on the feedback and decided collaboratively how to respond. The importance of reflective practice during IVEs has been affirmed repeatedly in the literature (Bueno-Alastuey & Kleban, 2016; Lewis et al., 2016; Martí & Fernández, 2016; Müller-Hartmann & Kurek, 2016). Often this takes the form of individual reflection in a written journal or teacher-guided reflective sessions. Collaborative reflection is a way to encourage learners to externalize their emerging knowledge and support each other in learning (Swain, 2006). The writing process was run over four weeks, as shown below.

Week 1: Dyads collaboratively produced a written report.

Week 2: These reports were uploaded to a shared online folder. Individuals from the partner school then read the reports and gave feedback in the form of written comments.

Week 3: Dyads collaboratively processed the feedback and revised the report.

Week 4: Reports were submitted to the class teacher for evaluation.

Data Collection and Analysis

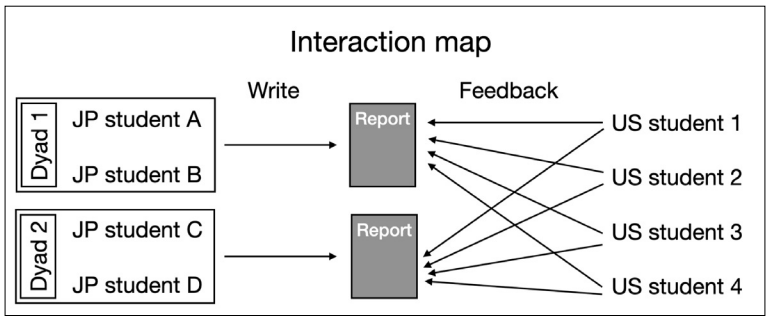
Data were collected via three main instruments: documents related to participants' writing tasks, narrative frames, and semi-structured interviews. Data from these three sources were gathered consecutively and triangulated. This follows Yamagata-Lynch's (2010) recommendation that researchers engaging in activity systems analysis collect data that address both observable behavior and cognitive mental activities. The documents from the writing tasks provide a record of observable behavior, while narrative frames and semi-structured interviews gave insight into participants' mental activities and the thought processes that guided that behavior.

The first data source, documents from the exchange, includes the collaboratively written first drafts of the students' reports, expert peers' written feedback, and the final drafts of the reports. These documents were all created and shared online, then exported as PDF documents and imported into NVivo 12 for coding.

The second data source was narrative frames; these are essentially a series of sentence completion tasks, woven together in a logical and cohesive sequence, which scaffold the writer and provide a guide for narrating experiences (Barkhuisen & Wette, 2008). They provide students with time and space to reflect on their responses and to express their ideas freely (see Appendix). These narrative frames aimed to elicit data concerning how students processed feedback,

Figure 1

Provision of Expert Peer Feedback



evaluated learning gains, and experienced the IVE overall. As three participants did not return their narrative frames, twelve completed narrative frames were collected and the data were input into a spreadsheet and coded according to each category in the narrative frame.

The third source of data was semi-structured interviews with six of the Japanese students, who were randomly chosen by the class teacher. Interviews were conducted by one of the authors who was not the class teacher, and answers were elicited in both English[1] and Japanese. These interviews aimed to capture deeper insights into the *how* and *why* of participants' experiences within the IVE-experiences which may not have been captured in the narrative frames due to their written mode, use of English only, and inability to follow up on points of interest. After transcribing the interviews, each researcher coded all the data using NVivo. The coding scheme was created deductively by the researchers working in consultation and according to the foci of the study. A coding comparison query was performed in order to obtain a statistical measure of inter-rater reliability. After a process of negotiated agreement, a kappa coefficient of 0.8 was achieved, indicating good reliability.

Interpretation of Activity Theory

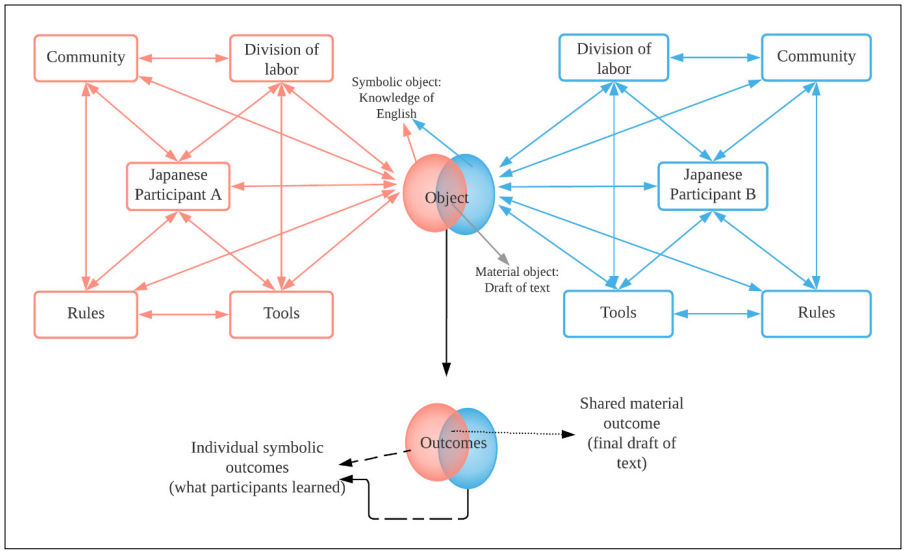
Data were analyzed through the lens of AT. In addition to AT being used in previous investigations of IVEs (e.g., Antoniadou, 2016; Müller-Hartmann & Kurek, 2016; Nishio & Nakatsugawa, 2020; Priego & Liaw 2017), the theory met the aims of the current study. AT is capable of facilitating a rich description of a learning activity (Barahona, 2015) and further developing our understanding of collective human behavior (Yamagata-Lynch, 2010). Additionally, AT is a useful framework when data has been collected from multiple sources (Yamagata-Lynch, 2010). Finally, AT allows Miles and Huberman's (1994, p. 61) "prior and inductive" approach to be employed—with themes emerging naturally from the data initially and later being ascribed to the pre-existing categories of AT. For example, participants' use of online dictionaries and translation software was first coded as "online resources", which was then assigned to AT's pre-existing category of tools.

Central to our interpretation of AT is the work of Engeström (1987, 2001) and Wells (2002). Engeström further developed the second generation (G_2) of AT to more explicitly highlight the interdependent relationship between an activity and a participant's social environment and historical background when acting upon an object. In other words, AT G_2 allows one to ask: how are aspects such as a participant's perceived rules of the activity, the tools available and the community interacting to influence a participant's experiences in the IVE? A third generation (G_3) of the theory was developed later to facilitate the description of multiple participants' perspectives.

The object (or thing which is acted upon) of an activity is both symbolic and material (Wells, 2002). When participants jointly processed feedback and edited the first drafts of their texts, they simultaneously acted upon the text (the material object) and their individual knowledge of English (the symbolic object). Therefore, any activity will produce two outcomes: symbolic and material (Wells, 2002). In this study, the material outcome was the second draft of the report participants wrote. The symbolic outcomes were any changes to each participant's individual knowledge of the English language. A visual representation of this interpretation of AT is provided in Figure 2.

Figure 2

Interpretation of AT G_3 With Two Learners Processing Peer Feedback



[1] Participants had, on average, studied English for six years and are CEFR B1, with some willing and able to express themselves in English.

While the visual representation of AT G_3 in Figure 2 was adapted from Engeström's (2001) original diagram, it is not a new interpretation of the theory. The authors' intention was to emphasize that all participants act upon the same material object and simultaneously upon individual symbolic objects (i.e., their knowledge of English), and that the outcomes include a shared material outcome and individual symbolic outcomes. The aim of this study was to determine the individual symbolic outcomes and to understand how aspects of the activity system interacted to influence them. When presenting how aspects of the activity system influenced participant outcomes, it is important to note that these are dynamic and constantly changing (Cole, 1996). Therefore, the factors presented in this study are not argued to be constant, but rather provide insight into the learning of participants at a particular point in time.

RESULTS

This section presents the answers to both research questions. In addressing the first research question, the symbolic outcomes of the activity for the Japanese participants are presented. In response to the second research question, the section describes how aspects of the activity system interacted to influence the symbolic outcomes described in the first research question.

RQ1. What are the Outcomes of Japanese University Students Collaboratively Processing Expert Peer Feedback on Jointly Produced Texts?

In both the interviews and narrative frames, all participants described the expert peer feedback positively. While the symbolic outcomes of collaboratively processing this feedback were unique to each individual, all outcomes identified by participants can be described as knowledge that is either more concerned with language production or more concerned with reflexive understanding. Knowledge of linguistic production was identified as that which led to improved proficiency in the mechanical aspects of language use, such as vocabulary, spelling, grammar, and expression. In contrast, reflexive understanding was more concerned with norms of behavior and patterns of interaction.

In answering RQ1, these outcomes are presented separately. However, they are often interdependent and should not be construed as being able to be disaggregated cleanly. All participant quotes are presented verbatim.

Improved Proficiency in Language Production

The term "improved proficiency in language production" refers to instances in which a participant identified an instance of learning that can be described in terms of language form, meaning or usage (e.g., learning the new form of a word or appropriate preposition that accompanies a lexeme). Data from both the narrative frames and interviews show that the most common specific linguistic outcome identified by participants was concerned with vocabulary usage. Comments exemplifying this include:

> *"[I learnt] how to use 'that's why', 'also' and 'spend time'" (Natsumi, narrative frame)*
>
> *"[I learnt] my mistakes such as starting the sentence from 'and' …" (Ayaka, narrative frames)*
>
> *"… we wrote cheaper than, but American student said 'more cheaply'. I didn't know about to write 'more cheaply'." (Michina, retrospective interview)*

Instances of improved proficiency in language production tended to be visible in the material outcome. For example, in Natsumi's first draft, she and her partner wrote the following sentence:

> *"We think watching movies is the best way to take a holiday." (Natsumi and Mao, first draft)*

Natsumi and Mao's expert peer feedback deleted the word "take" and inserted the lexeme "spend", with their final draft becoming:

> *"We think watching movies is the best way to spend a holiday." (Natsumi and Mao, final draft)*

In her narrative frame, Natsumi stated that she learnt "spend time", rather than the phrase "spend a holiday". It therefore appears that this outcome was not merely memorized or copied verbatim, but rather internalization had begun to take place. This is due to her explication of the outcome displaying some characteristics of imitation—with imitation being goal-directed and transformative behavior (Vygotsky, 2012) and thus entailing some transformation of language form rather than verbatim copying. Ayaka's outcome of not beginning sentences with the lexeme "and" was also visible in the final draft of her jointly produced text. In the first draft, Ayaka and Kyoko used "and" to combine ideas in two separate sentences as follows:

> *"Don't travel even though you feel sick. And something like others." (Ayaka & Kyoko, first draft)*

The expert peer feedback was provided in Japanese and stated "*machigatta bunpō* [incorrect grammar]". In the final draft of their text, Ayaka and Kyoko changed the sentences to the following:

> *"Don't travel even though you feel sick, and things like this." (Ayaka & Kyoko, final draft)*

As Michina's comments show, knowledge concerning vocabulary was not limited to usage, but included new forms of previously known vocabulary. Michina noted she learnt the adverbial form of "cheap". Michina and her partner originally used the adjective in its comparative form in their first draft as follows:

> *"We can travel cheaper than usual because of the campaign." (Michina & Chiako, first draft)*

The expert peers highlighted the sentence and commented that "the word 'travel' is a verb, so we should use an adverb after it instead of adjective." This led Michina and Chiako to write the following:

> *"We can travel more cheaply than usual because of the promotion." (Michina & Chiako, final draft)*

Michina appears, to some degree, to have considered the comment to reflect a difference between what she and her expert peers consider natural usage rather than a grammatical error. This is evident because she commented in her interview, "in Japan, 'cheaper than' is fine, but for a native speaker, 'more cheaply than' is right." Additionally, Michina did not display evidence of grasping the concept at a deeper level by explaining the rule that adjectives take the adverbial form when modifying verbs and instead limited her outcome to the specific context of her jointly produced text.

In addition to vocabulary usage, knowledge concerning capitalization in headings was identified as one of the learning outcomes for a participant. The title of Takeko and Mai's text was "A unique service". The ensuing expert feedback was as follows:

> *"When using adjectives and nouns in a title, they have to start with an uppercase letter."*
>
> *(Expert peer feedback)*

This feedback resulted in Takeko and Mai correctly using capitalization for the title of their text in its final draft. Upon reflection, Takeko noted in her narrative frame that she learned "when using adjectives and nouns in a title, we should be start with an uppercase letter." In a similar manner to Natsumi, Takeko indicated that she had gone beyond merely copying the correct answer or feedback she received and begun the process of internalization, which allowed her to transfer the knowledge to new situations.

Improved Reflexivity in Language Understanding

Eleven of the 12 narrative frames touched on the notion of cultural knowledge being an outcome of the IVE as a whole. More specifically, seven participants described the symbolic outcome of receiving expert peer feedback in terms of gaining insight into how more proficient peers perceive their English usage. When elaborating on their outcomes during the retrospective interviews, all but one participant identified the benefit of understanding how their language usage was perceived by an expert as an outcome of receiving expert peer feedback. Responses exemplifying this include:

> *"I realized that for the American students, those expressions were considered unnatural or incorrect … The English vocabulary we use, the meaning is the same but they are expressions that the American peers do not use." (Shohei, retrospective interview)*

> *"I learn a lot of things … we used the word demerit, but … demerit is a little strange for New York students … demerit and merit is a little Japanese English, right?" (Tomoe, retrospective interview)*

Participants' comments indicate that they perceived the expert peer feedback as providing them with the opportunity to view their language use through the eyes of an expert peer. This outcome appears to be more than the expert peers merely pointing out mistakes that the Japanese students were unable to notice themselves; it seems to be more concerned with differences in interpretation of lexis, stylistic features and highlighting the unnaturalness of potentially grammatically correct sentences. Examples of the expert peer feedback which helped facilitate these outcomes are shown in Table 1.

As shown in Table 1, participants followed the advice of their expert peers. Participants did not identify these instances of feedback as resulting in constructing linguistic knowledge concerned with the meaning or usage of lexis. Rather, they described the learning as understanding how expert peers perceived their language usage. In other words, participants came to realize that the same utterance may be interpreted differently by users of the language with a

Table 1

Expert Feedback and Revised Text Excerpts

Participants	Original wording	Expert peer feedback	Revised wording
Shohei and Tomoe	These days, we have to refrain from going out somewhere	Somewhere is implied in the context of going out	These days, we have to refrain from going out
	For the first time, we are going to write about	Firstly/First, we are going to write about how we can do anything from our homes	First, we were going to write about
Tamotsu, Tomoe & Rio	It is peculiar to Japan	'unique' or 'distinct' works here. Peculiar is correct, but uncommonly used this way. 'Peculiar' *ka* [acceptable] 'distinct' *yoi* [good] 'unique' *yuu* [best]	It is unique to Japan
	… there are some demerits of it	'Demerits' *no imi ha warui ten demo mezurashii. Menkyo to kōkō dake* [The meaning of 'demerits' is bad points, however it is rarely used. Licences and high schools only.]	… there are some disadvantages of it

different cultural background. Shohei's comments evidence this; he described some of his language use as expressions that expert peers do not use. Tomoe also highlighted this phenomenon when she referred to her use of "demerit" as Japanese-English. While the changes of lexis from the first to final draft are visible in the material artefacts generated from the activity, the symbolic outcomes of understanding how an expert peer viewed participants' usage of the target language are not.

Participants also indicated that the expert peers' feedback concerning their language use was not only highly valued but something which they were unable to experience through their formal studies. It is noteworthy that participants held this perception despite interacting daily with expert English speakers, including native speakers, at university. Comments highlighting this include:

> *"... the content of feedback is I can't study high school or university because it needs to communicate with foreigners directly ... the difference between wasei eigo [Japanese English] and natural English is difficult to understand ... it was great study because they explained to me that some expressions are not usually used." (Tamotsu, retrospective interview)*

Tomoe expressed a similar sentiment, stating "I feel like I was able to come into contact with casual English" during her retrospective interview. In the first draft of Tamotsu's text, his dyad received the following feedback regarding the lexeme "sightseeing":

> *"...people living in Japan can visit sightseeings cheaper than usual." (Tamotsu and Tomoe, first draft)*
>
> *"'sight' ha ii desu [sight is better]. Meishi [noun]: sight/sights Dōshi [verb]: sightseeing."*
>
> *(Expert peer feedback)*

During his interview, Tamotsu explained that "I think, the sightseeings is usually used in English but the sightseeing is not (a location) in English, but sights is used many times. I learnt sightseeing is '*kankōchi*' [tourist site] when I was in high school so I was surprised [by] it." The historical background and context in which Tamotsu first learned the lexeme was being challenged as he experienced how expert users of the language use the term. Tomoe, who was part of Tamotsu's group, described the outcome in slightly different terms, although the sentiment is similar. She described the difference in receiving feedback from an expert peer rather than from her teacher as "coming into contact with casual English." This indicates that she also perceived expert peer feedback as something which she was unable to encounter in her usual English classes.

A second outcome identified by participants as resulting from receiving expert peer feedback was a sense of noticing the gap between their proficiency in the target language and that of their expert peers. Participants did not describe this gap in a self-deprecating manner, but more in terms of how to approach the second draft of their text or future study in the target language. Comments encapsulating this include:

> *"We should reduce mistakes and make more sentences clearly." (Taichi, narrative frame)*
>
> *"We thought we should study English harder." (Manami, narrative frame)*
>
> *"We have to study words choice that formal, casual, soft, or hard to write sentence more naturally." (Mai, narrative frame)*

This symbolic outcome is not visible in the material outcome of the activity. Additionally, participants did not report any of the negative emotions reported in studies such as Lee (2008) and Mahfoodh (2017) despite receiving large amounts of feedback. For example, Shohei and his partner's first draft was 220 words in length and received 16 instances of corrective feedback. However, in his retrospective interview, Shohei commented that despite the large amount of feedback, he "was so happy they made all these corrections. They put so much effort into it for us." These findings corroborate studies such as Mackey et al. (2016) which found learners generally like to be corrected.

RQ2. What Interactional Dynamics within the Dyad Contributed to the Creation of These Outcomes?

AT is not a framework that allows the unit of analysis to be disaggregated (Leont'ev, 1978). Therefore, aspects of the activity system cannot be discussed in isolation. Consequently, the findings for RQ2 are not presented herein as separate categories of the activity system, such as tools and community, but rather highlight how they interacted interdependently to influence the outcomes described in responding to RQ1.

Participants were given the task of editing their jointly produced texts by utilizing their expert peer feedback. The tools participants used to complete the activity were a laptop computer, the expert peer feedback, their individual linguistic knowledge, literary resources such as online translation tools and dictionaries, and their teacher's resources. Participants indicated the primary medium through which they discussed responses to the feedback was their dominant language—Japanese. The rules of the activity and participants' language learning beliefs were interacting in a manner which facilitated the use of these tools. First, participants saw value in (or felt more comfortable) speaking in Japanese rather than restricting themselves to English. Secondly, the use of online literary resources was also perceived as valuable. Thirdly, the rules of the activity permitted use of these tools, with the teacher explicitly giving permission to do so.

During the interviews, participants indicated that the opportunity to discuss the feedback with a near peer was helpful. With the exception of one pair, all participants responded

to the feedback collaboratively. Mao and Natsumi decided to pool their linguistic resources after first attempting to respond to the feedback individually. Despite this, Mao was clear in her interview that she found working collaboratively to be more efficient, stating that "we responded to the feedback individually at first. Then I spoke to Natsumi and we worked together. When talking together, we responded faster and came to understand some feedback." As previously noted, these interactions were mediated through participants dominant language. With participants being of a low-intermediate level, this tool assisted learners to pool their linguistic resources to better understand and respond to instances of feedback.

Furthermore, no participant described the activity of collaboratively processing the expert peer feedback in a manner that suggested any power differences. This suggests the division of labor agreed upon by participants allowed for tasks to be evenly distributed and for participants to feel their ideas were valued and respected. While discussion of the division of labor during text construction is beyond the scope of this study, it should be noted that some participants reported an uneven distribution of tasks and power relations when jointly writing their first draft.

Participants' comments also indicate that the additional tools of their teacher's linguistic support and online literary resources were not used in a delineated manner, but rather were incorporated during interactions as they discussed the feedback. The first manner in which these tools were incorporated was to assist participants find a solution to instances of indirect feedback (feedback which does not provide the correct form of the error). Ayaka described this as follows: "… the ones [instances of feedback] that didn't have the answer, I was confused and not sure. I spoke to my partner 'what's wrong here?' and we didn't know. In the end, we asked our teacher."

The second manner in which these tools were used was to assist participants to either understand the content of the feedback or why the error had occurred. Representative examples of participants working to understand the content of feedback are shown in Table 2.

When reflecting on these instances of feedback, especially the use of the lexemes "ordinal" and "fragment", Shohei commented:

> *There were some aspects we found a little difficult to understand, so I spoke with my partner to understand those aspects … they were difficult. It was quite confusing … we made educated guesses and we used the internet to look into them. (Shohei, retrospective interview)*

Mao and Shohei's comments reveal that additional tools were called upon when the pooling of their own resources was not sufficient to find a solution. Despite 65 of the total 83 instances of feedback explicitly providing the correct form, all participants described the feedback as being difficult to understand. This suggests that rather than participants struggling to find a solution to indirect feedback, the content of the feedback itself was often a challenge for them to comprehend.

Students' perception and use of expert peer feedback was complex and multifaceted. Within the community of the activity, the Japanese participants tended to place the expert peers in a position of authority when it came to discerning proficient target-language usage. Comments included:

> *"Our partners in New York were good at English." (Manami, narrative frames)*

> *"The native speaker wrote us a very neat sentence, and I thought 'so this is the right way of saying it'." (Michina, retrospective interview)*

While positioning the expert peers as the expert is not surprising in itself, the level of expertise participants afforded them was. When asked if she felt the expert peers' feedback was always correct, Ayaka was adamant that this was so, expressing her opinion as follows:

Interviewer:	Do you think that all of the feedback was correct?
Ayaka:	Ah, maybe, I don't think so … I felt that this was mistaken.
Interviewer:	Did you ignore it, or did you feel that your partner was a native, so I should accept the feedback?
Ayaka:	I didn't say, because they are a native … I wouldn't ignore it … I'd follow it.

(Ayaka, retrospective interview)

Table 2

Examples of Feedback Shohei and Manami Found Difficult

Original wording	Peer feedback
October 21th	21st (When you're using an ordinal number, if the ending digit is 1, 2, or 3, it will be 1st, 2nd, or 3rd. If the ending digit is 4 to 9, you will use th after the number)
we are going to write about "we can do anything in our house". Because we …	Sentence Fragment, don't need period

Note. Highlighted text indicates the location of peer feedback.

During his interview, Shohei expressed a similar opinion to Ayaka when he stated that he "thought they must be correct" and that is why he made edits in line with the feedback. Additionally, there were also instances of participants not being satisfied with their own understanding of the expert peer feedback, but still following it. For example, Mao stated "I was not satisfied [with my understanding] but still edited in line with their feedback". These perceptions are reflected in participants accepting 69 of the 83 instances of feedback, with an alternative solution being used on eight occasions and six instances of feedback being rejected. This high level of acceptance is in spite of 18% of the feedback being incorrect.

DISCUSSION

This study corroborates the results of other studies showing that peer feedback facilitates opportunities for language development within an IVE (e.g., Díez-Bedmar & Pérez-Paredes, 2012; Ennis et al., 2021; O'Dowd, 2020). Participants identified several instances of expert peer feedback initiating interactions with their partner which resulted in language development. While the feedback focused on language usage, the most commonly identified outcome was heightened self-awareness and cultural reflexivity in interaction, most commonly expressed as gaining insight into how expert peers, with a different cultural background, interpret and use the target language differently. This indicates that when IVEs focus on language usage, cultural knowledge is still likely to be developed. Additionally, it supports the notion that the symbolic outcomes of collaboration may not be evident in the material outcome (Carr, 2021).

Findings also corroborate studies which have found collaboratively processing feedback as beneficial (e.g., Coyle et al., 2018; Storch & Wigglesworth, 2010), indicating these benefits hold true with expert peer feedback in an IVE. In a similar manner to the interactions studied by Guerrero and Villamil (1994, 2000) and Villamil and Guerrero (1996, 1998, 2000), participants used their dominant language while processing feedback. It would be speculative to state if more or less learning occurred due to participants' high usage of Japanese. However, with dominant language usage reducing feelings of frustration (Butzkamm, 2003) and facilitating continued unbroken interaction (Scoot & de la Fuente, 2008), combined with participants often finding the feedback difficult to understand, it is likely that this tool significantly contributed to the knowledge co-constructed during the activity.

Furthermore, participants drew on additional literary tools, such as online dictionaries and their teacher, when the pooling of their own resources was insufficient to enable a response to an instance of feedback. However, their motives for literary tool usage often differed from those described in Guerrero and Villamil's body of work. In this study, in addition to using literary tools to assist in responding to feedback, participants utilized them to attempt to understand the expert peer feedback. This suggests expert peers would benefit from instruction in how to provide feedback, an argument further strengthened by 18% of the feedback being incorrect and 78% of feedback being direct, despite expert peers being requested to provide indirect feedback. One possible solution to overcoming difficulties in understanding expert peer feedback may be for participants to discuss the feedback in a synchronous online video format.

Despite earlier research indicating that asynchronous feedback results in lower levels of engagement (Chang, 2012; Guardado & Shi, 2007), analysis of participant interviews indicates that the feedback was valued and participants were highly engaged with it. While the reasons for this high engagement are unclear, there are two possibilities: having a co-author with whom to discuss the feedback, and the sense of novelty participants felt while participating in an IVE. As noted previously, participants felt the expert peer feedback facilitated opportunities to acquire knowledge which were unavailable in their daily English classes.

The sense of novelty may also partially explain the positioning of expert peers as always providing correct feedback. While the novelty appears to have had a positive effect on participants' engagement, it also had the drawback of participants sometimes editing in accordance with the feedback, despite doubting its accuracy. This highlights the need for teachers to encourage novices to question, and possibly reject, instances of expert peer feedback.

Because this is a case study of a particular IVE with a small number of participants, generalizations to other populations of learners must be drawn cautiously. However, insights from the findings presented here are hoped to be transferrable to some degree so that educators in other contexts could draw upon them to inform the development of practice in their own institutions. Future research is needed into the effect of feedback type on learning outcomes in collaboratively produced texts, and how expert peers can best be trained to provide that feedback. Additionally, longitudinal research investigating changes in the activity system over multiple episodes of processing feedback will contribute to our understanding of how learners adapt to and utilize the learning opportunities peer feedback in an IVE offer.

CONCLUSION

Within traditional classrooms, it has been observed that talking through responses to teacher feedback on jointly produced writing supports language learning. In this case study, this was also true in a virtual exchange, when the feedback was provided by an expert peer. When collaboratively processing feedback, learners pooled their resources while deeply engaging with the text, which led to growth in knowledge of language in use. Furthermore, some participants

began internalizing this knowledge, leading us to conclude that the linguistic knowledge generated was not ephemeral but had lasting effects for some. Participants also identified a benefit of the activity as gaining an understanding of their language use through the eyes of an expert. Data showed this to be related to participants developing a greater understanding of the interpretation of lexis, stylistic features and the unnaturalness of their writing.

In describing the factors which contributed to the outcome of the activity, results showed that the ability to discuss the expert peer feedback with their partner in their dominant language, combined with additional assistance from online literary resources, played a crucial role in facilitating learning. The pedagogical benefit of expert peer feedback was amplified by the fact that participants enjoyed it. Receiving feedback from an expert user of the target language of a similar age had an inherent authenticity that motivated and inspired participants. While much foreign language learning is mediated through textbooks which usually contain standard or authorized language forms, expert users were able to provide feedback on language as it is actually used. However, expert peers did provide erroneous feedback on multiple occasions, with participants being reluctant to question the accuracy of the feedback they received due to perceiving their study partners as authoritative users of the target language.

A number of pedagogical implications may be transferred to IVEs in other learning contexts. Firstly, we conclude that for language learners taking part in an IVE, interactions with a near peer can be just as important as interactions with an expert peer. Therefore, we recommend teachers provide opportunities for learners to work collaboratively throughout the whole writing process, including a discussion of corrective feedback provided by overseas study partners. Secondly, we recommend learners receive guidance in how the dominant language and online literary resources can be used to enhance learning opportunities when discussing responses to feedback. Finally, we suggest teachers ensure learners understand that while feedback from expert peers is valuable, it is not infallible. Accordingly, language learners should be encouraged to question and, if required, reject feedback. A worthwhile avenue of future research is investigating how expert peers can be trained in feedback provision that is clearer and more understandable and assisting learners gain the confidence to question feedback when appropriate.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

N. Carr: Conceptualization, Methodology, Investigation, Data Curation, Formal analysis, Writing – Original draft, Writing, Review and editing, Visualization

P. Wicking: Conceptualization, Methodology, Investigation, Formal analysis, Validation, Writing Original draft, Writing – Review and editing, Project administration

REFERENCES

Antoniadou, V. (2016). Using activity theory to understand the contradictions in an online transatlantic collaboration between student-teachers of English as a foreign language. *ReCALL, 23*(3), 233–251. https://doi.org/10.1017/S0958344011000164

Aranha, S., & Cavalari, S. (2015). Institutional integrated teletandem: What have we been learning about writing and peer feedback? *DELTA, 31*(3), 763–780. http://dx.doi.org/10.1590/0102-445039175922916369

Avgousti, M. (2018). Intercultural communicative competence and online exchanges: A systematic review. *Computer Assisted Language Learning*, *31*(8), 819–853. https://doi.org/10.1080/09588221.2018.1455713

Barahona, M. (2015). *English Language teacher education in Chile: A cultural historical activity theory perspective*. Taylor and Francis. https://doi.org/10.4324/9781315689937

Barkhuisen, G., & Wette, R. (2008). Narrative frames for investigating the experiences of language teachers. *System*, *36*(3), 372–387. https://doi.org/10.1016/j.system.2008.02.002

Barnard, R., & Viet, N. (2010). Task-based language learning (TBLT): A Vietnamese case study using narrative frames to elicit teachers' beliefs. *Language Education in Asia, 1*(1), 77-86. http://dx.doi.org/10.5746/LEiA/10/V1/A07/Barnard_Nguyen

Bower, J., & Kawaguchi, S. (2011). Negotiation of meaning and corrective feedback in Japanese/English eTandem. *Language Learning & Technology, 15*(1), 41–71. http://llt.msu.edu/issues/february2011/bowerkawaguchi.pdf

Brooks, L., & Swain, M. (2009). Languaging in collaborative writing: Creation and response to expertise. In A. Mackay & C. Polio (Eds.), *Multiple perspectives on interaction in SLA* (pp. 58–89). Lawrence Erlbaum.

Bueno-Alastuey, M. C., & Kleban, M. (2016). Matching linguistic and pedagogical objectives in a telecollaboration project: A case study. *Computer Assisted Language Learning*, *29*(1), 148–166. https://doi.org/10.1080/09588221.2014.904360

Butzkamm, W. (2003). We only learn language once. The role of the mother tongue in FL classrooms: Death of a dogma. *Language Learning Journal, 28*(1), 29-39. https://doi.org/10.1080/09571730385200181

Carney, N. (2006). Telecollaboration for intercultural learning: An overview of projects involving Japan. *JALT CALL Journal, 2*(1), 37–52. https://doi.org/10.29140/jaltcall.v2n1.21

Carr, N. (2021). Internalizing Interactions: Use of the dominant language and an inanimate expert. *Language and Sociocultural Theory 8*(2), 180–205. https://doi.org/10.1558/lst.19232

Chang, C.-F. (2012). Peer review via three modes in an EFL writing course. *Computers and Composition*, *29*(1), 63–78. https://doi.org/10.1016/j.compcom.2012.01.001

Çiftçi, E. Y., & Savaş, P. (2017). The role of telecollaboration in language and intercultural learning: A synthesis of studies published between 2010 and 2015. *ReCALL*, *30*(3), 278–298. https://doi.org/10.1017/S0958344017000313

Cole, M. (1996). *Cultural psychology: a once and future discipline*. Belknap Press of Harvard University Press.

Coyle, Y., Cánovas Guirao, J., & Roca de Larios, J. (2018). Identifying the trajectories of young EFL learners across multi-stage writing and feedback processing tasks with model texts. *Journal of Second Language Writing*, *42*, 25–43. https://doi.org/10.1016/j.jslw.2018.09.002

De Guerrero, M. C. M., & Villamil, O. S. (1994). Social-cognitive dimensions of interaction in L2 peer revision. *The Modern Language Journal*, 78(4), 484–496. https://doi.org/10.2307/328586

De Guerrero, M. C. M., & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 Peer revision. *The Modern Language Journal*, 84(1), 51–68. https://doi.org/10.1111/0026-7902.00052

Díez-Bedmar, M., & Pérez-Paredes, P. (2012). The types and effects of peer native speakers' feedback on CMC. *Language Learning and Technology, 16*(1), 62–90. http://dx.doi.org/ 10125/44275

Donato, R. (1994). Collective scaffolding in second language learning. In J. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 33–56). Ablex Publishing Company.

Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Orienta-Konsultit.

Engeström, Y. (2001). Expansive Learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, *14*(1), 133–156. https://doi.org/10.1080/13639080020028747

Ennis, M. J., Verzella, M., Montanari, S., Sendur, A. M., Simeonova Pissaro M., Kaiser, S., & Wimhurst, A. (2021). A telecollaboration project on giving online peer feedback: Implementing a multilateral virtual exchange during a pandemic. *Journal of Language Education, 7*(4), 66–82. https://doi.org/10.17323/jle.2021.11914

Guardado, M., & Shi, L. (2007). ESL students' experiences of online peer feedback. *Computers and Composition*, *24*(4), 443–461. https://doi.org/10.1016/j.compcom.2007.03.002

Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching, 39*(2), 83–101. https://doi.org/10.1017/S0261444806003399

Iwasaki, J., & Oliver, R. (2003). Chat-line interaction and negative feedback. *Australian Review of Applied Linguistics. Supplement Series, 17*(1), 60–73. https://doi.org/10.1075/aralss.17.05iwa

Jones, R. H., Garralda, A., Li, D. C. S., & Lock, G. (2006). Interactional dynamics in on-line and face-to-face peer-tutoring sessions for second language writers. *Journal of Second Language Writing*, *15*(1), 1–23. https://doi.org/10.1016/j.jslw.2005.12.001

Kirchhoff, C. (2015). Global personnel development through study abroad and study + work abroad. *The Language Teacher, 39*(3), 9-12. https://doi.org/10.37546/JALTTLT39.3

Konishi, M. (2017). Effects of international online video talk in a language exchange situation on Japanese EFL college students taking a teacher training program. *Language Education & Technology, 54*, 113–133.

Lantolf, J., & Poehner, M. (2014). *Sociocultural Theory and the pedagogical imperative in L2 education: Vygotskian praxis and the Research/practice divide*. Taylor and Francis. https://doi.org/10.4324/9780203813850

Lee, I. (2008). Student reactions to teacher feedback in two Hong Kong secondary classrooms. *Journal of Second Language Writing, 17*(3), 144-164. https://doi.org/10.1016/j.jslw.2007.12.001

Lee, L. (2006). A study of native and nonnative speakers' feedback and responses in Spanish-American networked collaborative interaction. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 147–176). Thomson Heinle.

Leont'ev, A. N. (1978). *Activity, consiousness and personality* (M. Hall, trans.). Prentice-Hall. https://www.marxists.org/archive/leontev/works/1978/activity-consciousness-personality.pdf

Lewis, T., O'Rourke, B., & Dooly, M. (2016). Innovation in language learning and teaching: Online intercultural exchange. *Innovation in Language Learning and Teaching*, *10*(1), 1–5. https://doi.org/10.1080/17501229.2015.1133541

Liu, J., & Sadler, R.W. (2003). The effect and affect of peer review in electronic versus traditional modes on L2 writing. *Journal of English for Academic Purposes, 2*(3), 193–227. https://doi.org/10.1016/S1475-1585(03)00025-0

Mackey, A., Park, H.I., & Tagarelli, K. (2016). Errors, corrective feedback and repair: Variations and learning outcomes. In G. Hall (Ed.), *The Routledge handbook of English language teaching* (pp. 499–512). Routledge.

Mahfoodh, O. H. A. (2017). "I feel disappointed": EFL university students' emotional responses towards teacher written feedback. *Assessing Writing, 31*, 53–72. https://doi.org/10.1016/j.asw.2016.07.001

Martí, N. M., & Fernández, S. S. (2016). Telecollaboration and sociopragmatic awareness in the foreign language classroom. *Innovation in Language Learning and Teaching, 10*(1), 34–48. https://doi.org/10.1080/17501229.2016.1138577

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.

Müller-Hartmann, A., & Kurek, M. (2016). Virtual group formation and the process of task design in online intercultural exchanges. In R. O'Dowd & T. Lewis (Eds.), *Online intercultural exchange: Policy, pedagogy, practice* (pp. 131–149). Routledge.

Nishio, T., & Nakatsugawa, M. (2020). 'Successful' participation in intercultural exchange: Tensions in American-Japanese telecollaboration. *Language Learning & Technology, 24*(1), 154–168. https://doi.org/10125/44714

Nunan, D., & Bailey, K. (2009). *Exploring second language classroom research*. Heinle.

O'Dowd, R. (2020). A transnational model of virtual exchange for global citizenship education. *Language Teaching*, *53*(4), 477–490. https://doi.org/10.1017/S0261444819000077

O'Dowd, R., & Lewis, T. (2016). Introduction to online intercultural exchange and this volume. In R. O'Dowd & T. Lewis (Eds.), *Online intercultural exchange: Policy, pedagogy, practice* (pp. 3–20). Routledge.

O'Rourke, B. (2005). Form-focused interaction in online tandem learning. *CALICO Journal, 22*(3), 433-466. http://www.jstor.org/stable/24147933

Priego, S., & Liaw, M. (2017). Understanding different levels of group functionality: Activity systems analysis of an intercultural telecollaborative multilingual digital storytelling project. *Computer Assisted Language Learning, 30*(5), 368-398. https://doi.org/10.1080/09588221.2017.1306567

Sadler, R., & Dooly, M. (2016). Twelve years of telecollaboration: What we have learnt. *ELT Journal*, *70*(4), 401-412. https://doi.org/10.1093/elt/ccw041

Schulz, J. (2000). Computers and collaborative writing in the foreign language curriculum. In M. Warschauer & R. Kern (Eds.), *Networked-based language teaching: Concepts and practice* (pp. 121–150). Cambridge University Press.

Scott, V. M., & de la Fuente, M. J. (2008). What's the problem? La learners' use of the L1 during consciousness-raising, form-focused tasks. *The Modern Language Journal, 92*(1), 100-113. https://doi.org/10.1111/j.1540-4781.2008.00689.x

Storch, N. (2021). Collaborative writing: Promoting languaging among language learners. In M. García Mayo (Ed.), *Working collaboratively in second/foreign language learning* (pp.13–34). Degruyter Mouton. https://doi.org/10.1515/9781501511318-002

Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing. *Studies in Second Language Acquisition*, *32*(2), 303–334. https://doi.org/10.1017/S0272263109990532

Strenski, E., Feagin, C. O., & Singer, J. A. (2005). Email small group peer review revisited. *Computers and Composition*, *22*(2), 191–208. https://doi.org/10.1016/j.compcom.2005.02.005

Swain, M. (2006). Languaging, agency and collaboration in advanced second language proficiency. In H. Byrnes (Ed.), *Advanced Language learning: The contribution of Halliday and Vygotsky* (pp. 95–108). Continuum.

Villamil, O. S., & de Guerrero, M. C. M. (1996). Peer revision in the L2 classroom: Social-cognitive activities, mediating strategies, and aspects of social behavior. *Journal of Second Language Writing*, *5*(1), 51–75. https://doi.org/10.1016/S1060-3743(96)90015-6

Villamil, O. S., & de Guerrero, M. C. M. (1998). Assessing the impact of Peer revision on L2 writing. *Applied Linguistics*, *19*(4), 491–514. https://doi.org/10.1093/applin/19.4.491

Villamil, O. S., & de Guerrero, M. C. M. (2019). Sociocultural theory: A framework for understanding the socio-cognitive dimensions of peer feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing* (pp. 25–44). Cambridge University Press. https://doi.org/10.1017/9781108635547

Vygotsky, L. (2012). *Thought and language* (revised and expanded edition). The MIT Press.

Ware, P. D., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology, 12*(1), 43–63. https://doi.org/10125/44130

Wells, C. G. (2002). The role of dialogue in activity theory. *Mind, Culture, and Activity*, *9*(1), 43–66. https://doi.org/10.1207/S15327884MCA0901_04

Yamagata-Lynch, L. C. (2010). *Activity systems analysis methods: Understanding complex learning environments*. Springer. https://doi.org/10.1007/978-1-4419-6321-5

APPENDIX

Narrative frame used in this study.

In this class, I wrote a report together with a classmate. Working with my classmate was helpful because _____ _____. However, _____. Overall, I thought that working with a classmate was _____ _____. I read some reports written in Japanese by students in New York and I wrote some feedback. When I gave feedback to my exchange partners, I felt it was important to _____ _____. This is because _____ .

We received some feedback and comments from our partners in New York. After discussing the feedback with my classmate, we thought _____ . I felt we improved our writing by _____ .

While talking to my classmate, I was able to learn _____ . When communicating with people from another culture, I learned that it is important to_____ .

The most important thing I learned about writing by doing this exchange is _____ .

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The Effects of Coded Focused and Unfocused Corrective Feedback on ESL Student Writing Accuracy

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ABSTRACT

Purpose. This study adopted a mixed-method approach, including a classroom experiment and 24 in-depth interviews, to investigate the effects of two feedback techniques (coded focused and unfocused written corrective feedback) on ESL learners' writing in a self-financed tertiary institution in Hong Kong.

Method. Three intact classes of 47 students served as the experimental and control groups; the control group only received feedback on content and organization, whereas the two experimental groups also received focused and unfocused linguistic feedback, respectively. The feedback intervention was conducted over an eight-week intensive summer course, focusing on three grammar errors (articles, singular/plural nouns and verb forms). Altogether, students wrote seven pieces, four of which were analysed for the present research.

Results. The study found that students who received focused written corrective feedback (WCF) significantly outperformed the other two groups, though the effects varied across error types. Meanwhile, no significant differences were found between the unfocused and control groups. In-depth interviews explored how individual learners' metalinguistic understanding and engagement affect their intake of WCF. The results revealed that learners who received focused feedback developed a deeper understanding of the linguistic nature of specific error types. Learners with limited English proficiency were less likely to apply their linguistic knowledge to revise a task or write a new one.

Conclusion. Because not all errors deserve equal attention, teachers and students should consider how feedback can be used more effectively, particularly in areas where comprehensive feedback is considered obligatory. When teaching students with limited language proficiency, it is recommended that, rather than providing a wide range of error corrections, teachers provide focused feedback complemented with carefully designed metalinguistic support.

KEYWORDS

written corrective feedback, focused feedback, unfocused feedback, coded feedback, indirect feedback, L2 writing, metalinguistic feedback

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INTRODUCTION

Written corrective feedback (WCF), also referred to as grammar correction or written error correction (Ferris et al., 2013), involves "correction of grammatical errors for the purpose of improving a student's ability to write accurately" (Truscott, 1996, p. 32). WCF has long been widely utilised and recognised as an integral part of feedback in L2 writing across different educational levels and institutions around the world. Given its essential role in L2 writing instruction, WCF is a topic that has been brought up repeatedly over the past four decades.

As far back as the 1980s and early 1990s, empirical studies were being conducted to examine the effects of WCF on English as a Second Language (ESL) students (e.g. Fathman & Whalley, 1990); English as a Foreign Language (EFL) students (e.g. Robb et al., 1986); and students of other foreign languages (e.g. Lalande, 1982; Semke, 1984).The results were

mixed. The first major argument about the efficacy of WCF was sparked by Truscott (1996), who posited that grammar correction was futile and even harmful, and thus "should be abandoned" (p. 328). In one of the most effective responses to this argument, Ferris (1999) criticized Truscott (1996) for arriving at a premature conclusion "[b]ased on limited, dated, incomplete, and inconclusive evidence" (p. 9). At the same time, Ferris (1999, 2004) also acknowledged the critical need for more carefully designed empirical studies to generate more concrete and consistent evidence on the effects of WCF.

Since then, many more studies have been conducted on the efficacy of WCF. These studies often examined and compared the effectiveness of several types of WCF, such as focused and unfocused WCF and direct and indirect WCF. Their findings not only demonstrated whether WCF is effective but also which type of WCF is more effective. Although these studies, which mainly adopted quasi-experimental designs, have contributed a great deal of valuable knowledge and insight about the efficacy of WCF in L2 writing, there are still many under-research topics. For example, there is scant research directly comparing the effectiveness of focused and unfocused WCF (Mao & Lee, 2020). Moreover, there are methodological gaps in this research field. As many researchers have correctly pointed out, most of the existing empirical studies of WCF were either experimental or quasi-experimental studies conducted in controlled research environments. It is, therefore, doubtful whether or not—and if so, to what degree, these studies' findings are applicable to L2 writing instruction in real classrooms (Ferris et al., 2013; Lee, 2013; Mao & Lee, 2020; Storch, 2018). To respond to the recent call "for stronger ecological validity in WCF research" (Mao & Lee, 2020, p. 10), and to fill the two aforementioned research gaps, the present study adopted a mix-method approach to investigate the relative effectiveness of the focused and unfocused WCF and to determine how learners' engagement with WCF affects the intake of teacher feedback in EFL classrooms at a college in Hong Kong.

LITERATURE REVIEW

Effectiveness of WCF

Whether or not WCF is effective appears to be an old question, but the findings in the literature remain inconclusive. First, there has been abundant evidence in favour of WCF (Bitchener et al., 2005; Ferris & Roberts, 2001; Lalande, 1982). Kang and Han (2015) conducted an influential meta-analysis of 21 experimental or quasi-experimental studies on WCF in L2 from 1980 to 2013 and found that WCF could increase L2 writing learners' grammatical accuracy with a "small to moderate" (p. 10) overall effect size. More recent research has also demonstrated the benefits of WCF (e.g. Frear & Chiu, 2015). However, some studies have had less positive findings. For example, in a study of 80 intermediate-level ESL students at a US college, Sheen et al. (2009) found that corrective feedback was not more effective than mere writing practice in increasing the students' linguistic accuracy. Moreover, in another study on ESL learners at an American university, Evans et al. (2011) found that the group that received detailed corrective feedback in the traditional process writing approach even had poorer accuracy over time. Given the inconsistent evidence concerning this essential matter, it is necessary to do more research examining whether WCF is effective in helping L2 writing learners improve their linguistic accuracy.

Effectiveness of Different Types of WCF

The hope to find more effective ways of providing WCF has led to more inquiries into the relative effectiveness of different types of WCF. Studies are often conducted on WCF of different scopes, namely, focused vs unfocused WCF. Focused WCF refers to "correction that is provided for specific error types" (Ferris et al., 2013, p. 309); by comparison, unfocused feedback "lacks a focus" (Lee, 2017, p. 169). In addition to the scope of feedback, the effects of the explicitness of WCF have been examined through comparisons of direct and indirect WCF (Xie & Lei, 2019). When teachers provide direct WCF, they not only identify the error (usually by underlining or circling it) but also provide the correct form above or beside the error (Bitchener et al., 2005; Ferris et al., 2013; Rahimi, 2021). On the other hand, indirect WCF merely indicates the existence of an error but does not provide the correct form (Ferris et al., 2013; Mao & Lee, 2020); thus, students are left to correct their errors by themselves (Bitchener & Knoch, 2008). An alternative feedback instrument that is frequently used in combination with WCF is metalinguistic feedback, which "offers learners metalinguistic explanation and examples through error codes and correct usage" (Mao & Lee, 2020, p. 6). Some researchers believe that metalinguistic feedback can develop L2 writers' awareness and elicit their explicit grammatical knowledge (Mao & Lee, 2020). Ferris et al. (2013) advocated that explicit corrective feedback like metalinguistic explanation may be especially advantageous to EFL learners who have learned a significant amount of formal grammar, "as the codes, corrections, or explanations may elicit their prior knowledge" (p. 309).

Mao and Lee (2020) reviewed 59 empirical studies related to WCF scope published in high-impact journals from 1979 to 2018. They found that previous research has mostly examined either comprehensive or focused WCF separately, and that these studies' findings are mixed and inconclusive. They also found that by 2018 only three studies (Ellis et al., 2008; Frear & Chiu, 2015; Sheen et al., 2009) had directly compared the effects of focused and less focused/comprehensive WCF, highlighting a strong need for comparative studies on focused and unfocused WCF. Recently, Rahimi (2021) has also examined the relative effectiveness of focused and unfocused WCF. The four studies which directly

compared the efficacy of focused and unfocused WCF are reviewed individually below.

Sheen et al. (2009) conducted a nine-week quasi-experimental study at a US college, dividing 80 intermediate-level ESL students into four groups: a direct focused WCF group, a direct unfocused WCF group, a writing practice group and a control group. All three treatment groups were required to complete two written narrative tasks, whereas the control group was not. The direct focused group was corrected on errors in the use of indefinite and definite articles; the direct unfocused group was corrected on five error categories (articles, the copula 'be', regular past tense, irregular past tense and prepositions); and the writing practice group received no feedback. It is worth noting that the writing practice group was the study's actual control group, whereas the group labelled "control" could not be validly compared to the WCF group, as it was not even assigned the writing tasks. The results suggested that focused WCF is more effective than unfocused WCF in improving the accurate use of articles in both the short and long term. A more striking finding was that the unfocused group did not even outperform the "control" group, which neither performed the writing tasks nor received correction; in other words, this study "failed to demonstrate any benefit in providing unfocused CF" (Sheen et al., 2009, p. 567). The authors concluded that focused WCF is beneficial because it can help learners (1) spot the mistakes in their composed work, (2) systematically conduct hypothesis testing and (3) use their explicit grammatical knowledge to monitor the linguistic accuracy of their writing. By contrast, unfocused WCF may be "a confusing, inconsistent and unsystematic way" of providing corrective feedback; moreover, it may overwhelm learners (Sheen et al., 2009, p. 567).

Ellis et al. (2008) conducted a ten-week quasi-experimental study on 49 intermediate-level EFL students at a Japanese university. The students were divided into three groups, all of which completed three picture narrative tasks at different stages of the research. After writing each task, the focused WCF group was directly corrected only on definite and indefinite articles, the unfocused WCF was directly corrected on various grammatical errors, including article misuse, and the control group was not corrected at all. No revision was required. All three groups also took a pretest, an immediate posttest (on the same day of receiving WCF), and a delayed posttest (four weeks later). The study showed that both treatment groups made more notable progress than the control group in terms of grammatical accuracy. Although there seemed to be no significant difference between the performance of the focused group and that of the unfocused group, the study indicated that focused WCF "may be more effective in the long run" (Ellis et al., 2008, p. 367).

Frear and Chiu (2015) conducted a three-week quasi-experimental study on Chinese EFL learners at a university in Taiwan, examining the relative effectiveness of focused and unfocused WCF on the accuracy of weak verbs (regular verbs) and the total accuracy of all structures in new pieces of writing. They divided 42 students into three groups: a focused indirect WCF group, an unfocused indirect WCF group and a control group. The results showed that both focused and unfocused WCF groups outperformed the control group not only in the immediate posttest but also in the delayed posttest; however, there were no differences in the efficacy of the two types of WCF.

In a recent study, Rahimi (2021) assigned 78 French-speaking Canadian learners of intermediate-level ESL into four groups: comprehensive revision, comprehensive non-revision, focused revision and focused non-revision. The results showed that focused WCF was more effective than comprehensive WCF in facilitating the learners' reduction of the targeted errors, especially those which were "more complex and more cognitively difficult to process" (Rahimi, 2021, p. 704).

In short, there is a general belief that, compared to unfocused WCF, focused WCF can reduce writing learners' attentional and cognitive burdens such that the learners are more likely to notice their mistakes (Frear & Chiu, 2015; Mao & Lee, 2020). While some researchers advocate focused feedback, others point out that comprehensive WCF may have greater ecological validity than highly focused WCF in real classrooms (Bruton, 2010; Ferris, 2010; van Beuningen, 2010). As there are few studies comparing the effectiveness of focused and unfocused WCF, the existing findings about the relative effectiveness of the two types of WCF are inconclusive. Moreover, there is even scarcer research on the use of the two types of WCF together with metalinguistic feedback. Therefore, the current study aims to fill this gap by comparing the efficacy of focused and unfocused WCF used in combination with a metalinguistic form.

L2 Writing Learners' Engagement with WCF

As Han and Hyland (2015) pointed out, "learner engagement is a critical link that connects the provision of WCF with learning outcomes" (p. 31). Engagement refers to "how learners respond to the feedback they receive" (Ellis, 2010, p. 345). It may be affected by the type of corrective feedback, learners' individual differences and contextual factors, and it can be investigated from cognitive, behavioural and attitudinal perspectives (Ellis, 2010). Based on Ellis's (2010) framework for engagement with corrective feedback, Han and Hyland (2015) conducted a case study involving four EFL learners at a Chinese university. They found that learners might disregard WCF or mistake it as content feedback or praise. Their findings also showed that noticing errors does not equal understanding, and that EFL learners tend to process WCF "at the surface level" or even use "avoidance strategies" (p. 40). Furthermore, during the revision process, all four students carried out both cognitive strategies (e.g. retrieval of prior knowledge, memorization, and conceptualisation of details)

and meta-cognitive strategies (e.g. making plans, setting priorities, evaluating, and monitoring); however, the effectiveness of these strategies was mainly determined by the learners' individual characteristics, such as "learning goals, beliefs about the effectiveness of WCF, about English writing, and about their own writing abilities" (p. 40). Regarding behavioural engagement, all four students consulted external resources and could draw on them to correct errors even if they did not clearly understand metalinguistic rules. This suggests that the use of external resources alone is not concrete proof of extensive engagement, whereas "the quality of external resources and the way these resources are used" (p.40) make a major difference. With respect to affective engagement, on one hand, the findings seemed to support Truscott's (1996) point that WCF may arouse negative emotions that hinder L2 learners' learning of writing; on the other hand, there is evidence that learners' affective responses may be influenced by their expectations and self-beliefs, and that negative feelings may be controlled or even converted into something positive such as motivation. In short, Han and Hyland's (2015) study demonstrates that learner engagement with WCF involves a complex interplay of various factors on multiple dimensions.

A few other studies have also investigated students' engagement with WCF from various perspectives. Hyland (2003) conducted a case study involving six ESL students at a university in New Zealand to explore their beliefs about and attitudes towards WCF. The students enthusiastically welcomed teachers' WCF and incorporated the feedback into subsequent revisions to varying degrees. All six students felt that such feedback may not have immediate effects, but that "repeated feedback would eventually help them, and that without the feedback they would fail to note the errors and improve" (Hyland, 2003, p. 228). Chen et al. (2016) investigated learners' perceptions of WCF and their WCF preferences through open-ended survey questions posed to 64 EFL students at a Chinese university. These students also reported that they valued WCF and considered it an important tool for learning. However, they expressed dissatisfaction with the lack of interaction in WCF. The desire for more interactive corrective feedback has also been found in other studies. For example, a 16-week multiple-case study on ESL students at a US university highlighted the necessity of providing opportunities for students to discuss their WCF with their teachers (Ferris et al., 2013).

In a large research project on the efficacy of direct and indirect comprehensive WCF for ESL students (predominantly Chinese graduate students) in Australia, Storch and Wigglesworth (2010) conducted a case study exploring individual students' engagement with corrective feedback in revision and new writing. The findings showed a higher level of student engagement with indirect WCF than with direct WCF. The results also indicated a link between the nature of the errors and students' uptake and retention of the WCF. Specifically, for feedback on superficial errors such as mechanics, uptake and retention can occur with "limited or no overt engagement" (p. 328). The study also suggested that "learners' beliefs, attitudes toward the form of feedback received, and their goals seemed to have an effect on whether the feedback was retained" in new writing (p. 328).

To summarize, it is necessary to conduct more carefully designed research on WCF, particularly on topics such as the relative efficacy of focused and unfocused WCF (Mao & Lee, 2020). As Bruton (2009) has argued, the research design must fulfil certain basic requirements, such as including a control group without WCF and a post-test with a new writing task. A control group is essential to ensure that students' grammatical performance can be attributed to the feedback condition and not to other factors (Truscott, 1996). Moreover, most of the existing empirical studies have employed a quasi-experimental design; for the findings to have greater pedagogical value, the efficacy of WCF must be investigated in more ecologically valid contexts such as authentic writing tasks and real, intact classrooms (Evans et al., 2011; Mao & Lee, 2020). Additionally, it is necessary to include qualitative methods in the research to obtain a more thorough and comprehensive understanding of the effects of WCF. Therefore, the current study adopted a mixed-method approach to address the following questions in three authentic EFL classrooms at a college in Hong Kong:

RQ1: Is written corrective feedback useful in helping EFL students improve their linguistic accuracy in subsequent revision and new writing?

RQ2: While the other factors remain constant, which type of WCF, focused or unfocused, is more effective in helping EFL students improve their linguistic accuracy in subsequent revision and new writing?

RQ3: How does EFL students' engagement with WCF affect their linguistic accuracy in subsequent revision and new writing?

METHOD

The present study was designed to respond to the gap of a mixed-method approach in the WCF research. The quantitative segment investigated the effects of two different feedback treatments on groups of learners in an authentic classroom setting during an 8-week semester (RQ1 and RQ2). It involves 47 students' writing collected from three intact classes. We also use interview data to explore how learners' engagement with teacher feedback affect the effect of WCF (RQ3).

Pedagogical Context

The study involved 47 first-year ESL learners (46.7% males and 53.3% females) from two bachelor's degree pro-

grammes at a self-financed college in Hong Kong. More than 60% of these students had scores of Level 2 or below out of five levels (equivalent to IELTS 5.0 or below) on the English subject of the Hong Kong Diploma of Secondary Education Examination, which is the university matriculation examination in Hong Kong. As such, they did not meet the minimum requirements for government-funded bachelor's degree programmes. Thus, the English language proficiency of the participants was located at the weaker end among Hong Kong degree students.

The students were enrolled in an intensive 8-week summer course on English professional communication that included 39 classroom teaching hours over 13 lessons, "the same number of teaching hours as in a regular 13-week semester. The intervention was conducted during the second half of the course, which lasted four weeks (6 lessons). The course was taught by three experienced teacher-researchers, who were all familiar with the course content, expected learning outcomes, assessment requirements and marking rubrics.

Classroom-Experimental Design

The study used a classroom-experimental design involving three intact classes that served as two treatment groups, focused WCF (N = 15) and unfocused WCF (N = 18), and a control group (N = 14). The pretest result indicated no significant differences among the three groups from the outset of the study. All the students were taught with the same materials and were assessed on the same tasks. The intervention had all three groups writing the same set of tasks but receiving different types of feedback.

The focused group received feedback on the three most prominent linguistic error types identified by the marking of the pretest task: articles, singular/plural nouns, and verb forms. Prominent, here, means "most frequent" or "most serious" for text effectiveness. The unfocused group received feedback on 15 types of linguistic errors including the three chosen for the focused group. The additional 12 linguistic error types included word choice, run-ons, pronouns, upper or lower cases, word forms, voice, verb tenses, prepositions, comparative or superlative forms of adjectives, the verb be, subject and verb agreement and fragments (Appendix 1). The control group received no grammar-corrective feedback. To satisfy ethical requirements, all three groups were given feedback on the quality of content and organisation. This is an advantage of our design because it reflects the genuine feedback students would normally receive in natural classroom settings.

There were six treatment sessions (Table 1). In classes 8, 10 and 12, students were asked to write a task in class. They received the feedback in the next lesson (classes 9, 11 and 13), and were then asked to use the feedback to rewrite the task. All three groups were reminded to improve content, organization and language accuracy when rewriting a task. To provide further guidance for the rewriting activities, the focused group was provided with a form containing meta-linguistic explanations of the three chosen grammatical items (Appendix 2), and the unfocused group was provided with a meta-linguistic explanation form containing 15 grammatical items (Appendix 1). The marking codes, their meaning, and examples were provided in the metalinguistic form. For example, Code 5 refers to the common mistake known as run-ons. The meaning of this code is displayed in the next column: "Run-on sentences include (1) fused sentences (no punctuation at all between two independent sentences) and (2) comma splices (two independent sentences are divided by a comma)". Two erroneous sentences are provided as examples: "I like listening he likes talking"; "I like listening, he likes talking". Four correct sentences are provided in the next column to demonstrate how this type of error can be revised (e.g. "I like listening, but he likes talking.").

All in-class professional writing tasks required the use of various linguistic forms to maintain an appropriate tone, achieve coherence and adopt an appropriate style. The stu-

Table 1

Treatment Schedule

	Pretest	Treatment				Posttest
	Class 8 (Pretest)	**Class 9 Revision 1**	**Class 10 (Immediate Posttest)**	**Class 11**	**Class 12**	**Class 13**	**Closed-book examination (Delayed Posttest)**
Focused Group	**T1**	**R1**	**T2**	R2	T3	R3	**T4**
Unfocused Group	**T1**	**R1**	**T2**	R2	T3	R3	**T4**
Control Group	**T1**	**R1**	**T2**	R2	T3	R3	**T4**

Note: T1 (Task 1) = In-class report writing 1 (pretest)
T2 (Task 2) = In-class report writing 2 (immediate posttest for new task)
T3 (Task 3) = In-class email writing
T4 (Task 4) = examination on report writing (delayed posttest for new task)
R1 (rewrite activities) = Task 1 revision (posttest for subsequent revision)
R2 (rewrite activities) = Task 2 revision
R3 (rewrite activities) = Task 3 revision

dents were given 50 minutes to write each task in class. Because all the in-class tasks were similar to the task in the final examination, the intervention was naturally integrated into classroom teaching. We used four of seven writing samples to measure students' performance. Task 1 served as the pretest, while Revision 1 was the subsequent revision, Task 2 was the immediate posttest (3 days after a lesson) and Task 4 was the delayed posttest (examination, four weeks after the first task) (Table 1). The two posttests explore whether students can benefit from WCF in different writing conditions, with Task 2 being open-book, no time constraint and low stake and Task 4 being closed-book, timed and high stake.

Quantitative Data

To ensure marking reliability, two random samples from each group were marked and discussed by the researchers, following which a new sample was marked separately to ensure marking consistency. After achieving over 90% agreement, the rest of the scripts were distributed to individual raters who had been keeping close communication during the marking process. After the marking was completed, 40% of the scripts were selected randomly from each group for a second rater to re-mark. Intra-class correlation coefficients were calculated (via SPSS: two-way mixed model; absolute agreement; single measure) to estimate inter-rater reliability for each of the three error types. The inter-rater reliability indices were found to be .969 for verb forms, .997 for articles, and .940 for singular/plural nouns, indicating that the raters had achieved an excellent level of agreement in coding the errors (Koo & Li, 2016).

Error scores were calculated by normalized error counts, a method suggested by Ferris and Robert (2001). This procedure consists of dividing the number of errors by the number of words in the writing sample and then multiplying it by a standard number representing the average number of words of all writing samples. In this case, the standard number used was 320, i.e. the average length of the samples. The normalized error counts enabled us to compare the numbers generated from different writing tasks across different groups at different times.

The error scores were then compared across groups and over time to answer RQ1 and RQ2. Due to the relatively small sample sizes of the experimental and control groups (N = 15, 18, 14) and the fact that the variables tended to have skewed distributions, a more general non-parametric test (Kruskall-Wallis One-Way ANOVA) was conducted to compare the error statistics across groups. As its name suggests, the Kruskall-Wallis test is conceptually equivalent to its parametric ANOVA test, but it is more general and accommodative and does not have assumptions about data normality. Similarly to ANOVA, the Kruskall-Wallis test starts with an overall test to determine whether there is a

Table 2

Individual Interviews

Class	No. of participants	Post-revision retrospective interviews			Exit reflective interview		
		No. of interviews	Duration/ per interview	Data collected	No. of interviews	Duration/ per interview	Data collected
Focused group	3	3	50 mins	How are learners engaged with WCF when revising their drafts?	1	75 mins	How do students engage with teacher feedback in different writing conditions?
Unfocused group	3	3	50 mins		1	75 mins	
Total	**6**	**18**	**900 mins**	**/**	**6**	**450 mins**	**/**

Table 3

Interviewees' Demographic Information

Group	Pseudonym	Gender	Language proficiency before intervention
Focused group	Ng	Female	Intermediate
	Ma	Male	Intermediate
	Leung	Male	Intermediate-low
Unfocused group	Chan	Female	Intermediate
	Li	Female	Intermediate-low
	Tang	Female	Low

significant difference among the groups, and, if there is, it proceeds to identify which pairs of groups contribute to the difference. In the second post-hoc step, pair-wise comparisons are conducted among all possible pairs. To correct the inflated alpha level due to multiple comparisons, Bonferroni correction was applied to produce a much stricter criterion of statistical significance (adjusted p.).

Individual Interviews

To aid the interpretation of our quantitative data, 24 one-on-one interviews (Table 2) were conducted with six student participants, comprising three post-revision retrospective interviews (Appendix 3) and a reflective exit interview (Appendix 4). All the interviews took about 50 minutes and were video recorded. The six participants (Table 3), three from each treatment group, were chosen by the teacher-researchers after the first revision task was completed. The criteria for choosing an interviewee included the willingness to submit drafts, different levels of language proficiency and availability for participation. Retrospective interviews, carried out within three days of a specific revision lesson, aimed to investigate (1) the extent to which learners understood the WCF, and (2) how learners engaged cognitively with the WCF in their writing. The reflective exit interview was conducted after the examination (T4) at the end of the semester. The interview questions covered various topics, including students' general experience with WCF and the strategies they used for engaging with WCF throughout the course.

Interview Data Analysis

The interview data were analysed according to the principles of inductive analysis (Merriam & Tisdell, 2015). Following the full transcription of the interviews, all the raw data were repeatedly studied and thematically coded (e.g. understanding of WCF, WCF engagement strategies and writing conditions) according to the research questions. The researchers worked together to synthesize ideas, combine similar codes, resolve differences and condense the data into more specific codes pertaining to how students perceive and use WCF. The specific codes include, for example, "avoidance as a strategy", "superficial or deep level of learning" and "use of WCL in different conditions". To enhance the trustworthiness of the findings, different data sets were triangulated, including the students' responses to questions and their actual applications of WCF in subsequent writing.

RESULTS

Results are presented, herein, to address each research question in turn, beginning with the quantitative results comparing the three groups' error codes over time (RQ1 and RQ2), and followed by the interview results illuminating how individual learners perceive, respond to and apply WCF in their writing (RQ3).

Kruskall-Wallis tests were applied to four error scores (namely, the overall score and the scores of three error types) to compare the control, focused and unfocused groups across four writing samples (T1, R1, T2, T4). When the overall test was significant, post-hoc, pair-wise comparisons were conducted to identify which two groups were significantly different. Bonferroni adjustment was applied to the significance level of post-hoc comparisons, and generated stricter adjusted significance statistics. No significant difference was found among the three groups in the pre-test (T1) in the overall scores or the three individual error scores, which means the three groups had comparable performance before the intervention. After the invention, however, significant differences were found among the three writing samples (R1, T2 and T4) in terms of one or more of the error types.

Overall Effectiveness of WCF (RQ1) and Effectiveness of Focused vs. Unfocused WCF (RQ2)

The performance of the control group, which did not receive WCF, was compared with that of two experimental groups, one of which received focused feedback and the other unfocused feedback. Due to space limit, Table 4 only presents the results that are found to be statistically significant; for the full results of the analysis, interested readers can refer to Appendix 5. Figure 1 shows a comparison of the average numbers of overall errors among the three groups. Figure 2 shows a comparison of the average error numbers of each error type among the three groups.

First, no significant difference was found between the control group and the unfocused group (C-UF) in any of the three error types across all four writing samples. This means that the unfocused group produced as many errors as the control group on linguistic accuracy in both the subsequent revision and the new task.

On the other hand, the focused group performed significantly better than both the control group and the unfocused group. It outperformed the control group (F-C) in terms of overall performance (test statistics: -3.245, Adj.p=.004) and singular/plural nouns in R1 (Adj.p=.022). It also outperformed the unfocused group (F-UF) in terms of overall errors in R1 (Adj.p=.011) and articles in R1 (Adj.p=.004) and T2 (Adj.p=.011).

However, no significant difference was found in R1 between the focused group and the control group (F-C) regarding the use of articles and verb forms. Similarly, in the two new tasks (T2 and T4), the differences between the two groups were not significant. Between the focused group and the unfocused group (F-UF), the differences in the use of singular/plural nouns or verb forms were not statistically significant.

Table 4

Significant Differences Were Found by Pair-Wise Comparison of the Three Groups

Overall test of significance	Overall			Articles					
	Subsequent Revision (R1) N=38, *p*=.001			Subsequent Revision (R1) N=38, *p*=.004			New Task (T2) N=40, *p*=.013		
Pair-wise comparison	Std. Test Stat	*p*	*Adj. p*	Std. Test Stat	*p*	*Adj. p*	Std. Test Stat	*p*	*Adj. p*
F-C	-3.245	**0.001****	**0.004****	2.126	**0.034***	0.101	1.826	0.068	0.204
F-UF	2.902	**0.004****	**0.011***	-3.219	**0.001***	**0.004***	-2.914	**0.004***	**0.011***
C-UF	0.551	0.581	1.000	-0.233	0.815	1.000	-0.767	0.443	1.000

Overall test of significance	Singular /plural nouns			Verb forms		
	Subsequent Revision (R1) N=38, *p*=.014			New Task (T4) N=46, *p*=.043		
Pair-wise comparison	Std. Test Stat	*p*	*Adj. p*	Std. Test Stat	*p*	*Adj. p*
F-C	2.684	**0.007****	**0.022***	2.054	**0.040***	0.120
F-UF	-2.171	**0.030***	0.090	-2.279	**0.023***	0.068
C-UF	1.137	0.256	0.767	-0.051	0.960	1.000

Note. F: focused group; C: control group; UF: Unfocused group.

**p <.05; ** p<.01*

Table 4 shows the advantages of focused feedback. The focused group performed significantly better than the unfocused group in its use of articles in the subsequent revision (R1) and in one of the new tasks (T2); it also performed better on verb forms in one of the new tasks (T4), though not to the point of statistical significance (T4, p=.068).

Compared to the unfocused group, which had to deal with up to 15 different error types in WCF, the focused group only had to attend to three different error types, at most, so these students probably had more cognitive space for internalizing the WCF and correcting the errors.

Taken together, the findings for RQ1 and RQ2 show that WCF is more effective than self-revision in helping EFL students improve their linguistic accuracy in subsequent revision and new writing (RQ1), but only focused WCF shows significant effects for the participants of this study (RQ2).

A closer examination of when the focused feedback showed effects (in R1, T2, or T4) revealed interesting differences among the three error types. Below is an interpretation of why error types may influence the effects of focused WCF.

Errors in the use of singular/plural nouns and articles can be corrected mechanically without a sufficient understanding of their usage as long as the teacher provides an error code. Errors in verb forms, however, cannot be corrected easily, because choosing the correct verb form among several requires a deep understanding of the usage of verb forms in different sentence structures. The following are some verb form errors that the students made in R1 and T2. In the sentence "We should try to change our billboards to some crowded areas like MTR stations", a student wrongly used "try to change" to indicate a tentative suggestion. Choosing the correct verb form, in this case, requires knowledge of the meanings of "try to do" and "try doing". In the sentence "The table shows that there are nearly half of the teachers choose i-class for e-learning", the student failed to use the -ing form "choosing" as a postmodifier of the noun phrase "the teachers". Selecting the correct verb form, in this case, requires applying the English sentence structure rule of only one main verb per clause. While some students made the mistake of including two base-form verbs in one clause, some others wrote a clause without a main verb in the base form; for example, "Radio is not a cost-effective method of advertising, which accounting for 31% of the advertising expenditure". These three examples show that a simple error code, i.e. "verb form", may not be enough for students to choose the correct form. They need to know how particular verbs take different forms, i.e. the infinitive or gerund. They also need to have good knowledge of English sentence structures in order to use the correct verb form in different structures. The first time the students were required to revise their first drafts in R1, the focused WCF seemed to be immediately effective for errors that could be corrected mechanically. The focused group performed significantly better than the control group in the use of singular/plural nouns and the unfocused group in the use of articles. However, the effect of focused feedback on verb forms, a construction

Figure 1

Comparison of Overall Errors among Groups

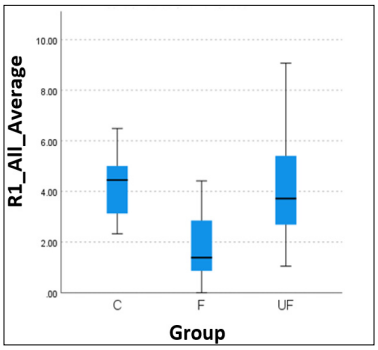
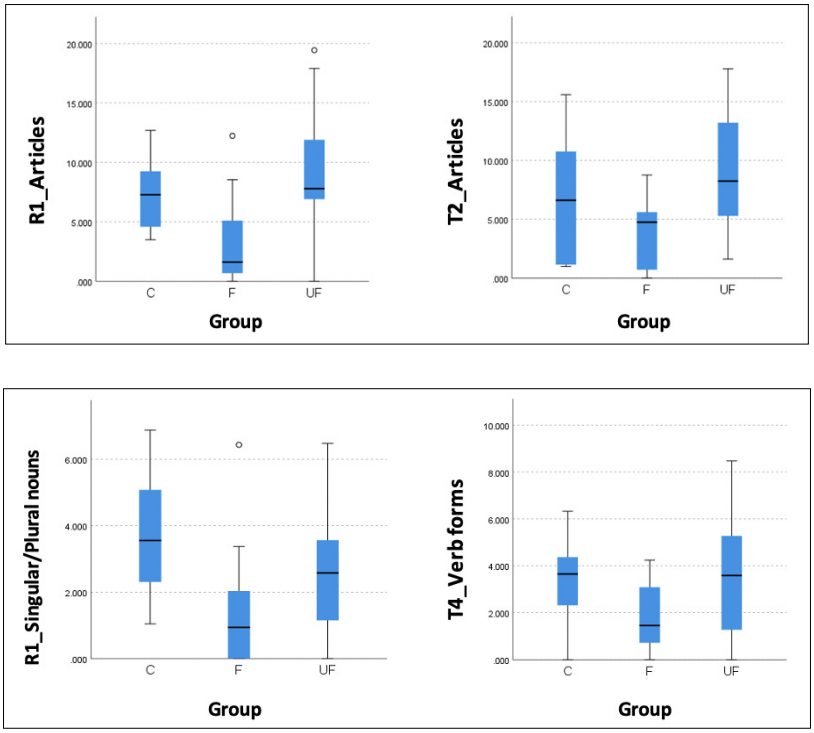


Figure 2

Comparison of Errors of Each Type among Groups



that may not be easily corrected without thorough understanding, was not immediately observed.

Furthermore, the linguistic accuracy in the use of singular/plural nouns or articles that the focused group gained in R1 may not have been carried on to new tasks (T2 and T4). The only exception is that the focused group performed significantly better than the unfocused group on articles in T2, a new task that immediately followed R1; however, the improvement was not maintained in the delayed posttest (T4). Interestingly, with regard to verb forms, although the focused group did not perform significantly better than the unfocused group in the subsequent revision, its performance was better than the unfocused group in T4 (p=.023, *adj.* p=.068). It is possible that some participants in the focused group corrected their errors in singular/plural nouns or articles mechanically, based on error codes. Without a thorough understanding of usage, their errors were not reduced in the new tasks. It seems that the linguistic accuracy gained by mechanical correction cannot be carried on to new tasks. As to verb forms, a grammatical construction that students may not be able to correct mechanically, the participants might have had difficulties choosing the correct verb form in the subsequent revision based on simple error codes. Deeper learning of this grammatical construction might have taken place in the focused group, as they engaged in problem-solving in the tasks later in the intervention, namely in T2, R2, T3 and R3. It is not surprising that this group's improvement was observed in the delayed posttest (T4) but not in T2, as deeper learning takes time.

Effect of Students' Engagement with WCF (RQ3)

This section uses interview data to explain why focused WCF was more effective than unfocused WCF and how learner engagement might have influenced the effects of the two types of WCF. Three major themes emerged from a comparison of the two groups' interview transcripts: (1) engagement strategies, (2) level of learning (deep versus superficial learning) and (3) writing in different conditions.

Engagement Strategies

A specific theme emerging from the data was how students' level of metalinguistic understanding affects the engagement strategies learners employ. Three engagement strategies emerged from this study's data: (1) avoidance, (2) mechanical correction and (3) correction through the application of grammatical rules.

Avoidance

One strategy the students used was avoidance, i.e. avoiding difficult words or grammatical structures. When Tang, a student from the unfocused group who demonstrated a low level of metalinguistic understanding, was asked to read the definitions and examples in the metalinguistic form (Appendix 1), she struggled with the definitions because she could not understand the difficult words or technical terms. When comparing the two drafts of Tang's first task, it was found that she only revised the errors in the first two paragraphs. Tang explained why she did not revise the second part of her writing.

Tang: *At first, I tried to read the codes and examples in the metalinguistic form, but I could not do that with all the mistakes because there were too many errors in my draft.*

Researcher: *Do you mean that you felt overwhelmed?*

Tang: *You can say so. The reason is that it took me quite a lot of time trying to understand the codes.*

Researcher: *What did you do when you stopped checking the codes?*

Tang: *At first, I tried to correct the errors the way I felt right. But there were some errors that I really didn't know how to correct, so I just left them unchanged.*

Mechanical Correction

Some students demonstrated a partial understanding of the WCF. Below is the example of Li (unfocused group). In the first interview, after reading its definition, Li explained the code "fragment" by engaging with the example.

Li: *I think fragment means something is missing.*

Researcher: *Please read the example (on the error code sheet) and explain which part is the fragment.*

Li: *Since I missed last class. I did not know the homework. Since I missed last class, I did not know the homework.*

Researcher: *(Pointing to the sentences in the example). Which one is the fragment?*

Li: *Both are fragments. The meaning is incomplete when one stands alone without the other.*

Li's performance can be interpreted as having developed a partial understanding of this code, i.e. that "fragment" means "something is missing". However, her explanation shows that she only examined whether the meaning was complete and did not successfully employ knowledge of English syntax. Without thorough understanding, Li could not apply the target linguistic form to solve her problem. Below is the comparison of Li's two written drafts:

Task 1: *Radio is not a cost-effective method of advertising, which accounts for 31% of advertising expenditure. But it just 17% of customers <fragment>.*

Revision 1: *Radio is not a cost-effective method of advertising, which accounts account for 31% of advertising expenditure, but it just 17% of customers <fragment>.*

Li explained how she applied the code to solve her problem: "I saw the fragment code and realized that something is missing. The example shows that I can correct it by putting the two parts together". Here, Li can be interpreted as having overgeneralized how to correct a fragment due to a lack of deep understanding of syntax. It appears that the metalinguistic definitions and example(s) may not have been sufficient for some participants to understand and apply grammar rules.

Applying Grammar Rules in Writing

In the exit interview, Leung (focused group) was asked to correct the grammatical error related to the use of verb forms in the sentence "*Read romance novels is relaxing*". Not only did Leung solve the problem, but he also clearly explained how to apply the rule regarding verb forms:

Leung: *"Read" should be changed to "reading" because we cannot use a base form verb as the subject of a sentence.*

Leung further explained how he learned this grammatical structure:

Leung: *I carefully learned all the metalinguistic explanations of the three error codes. When I noticed that I was weak at verb forms, I did some additional study on this item. I checked grammar teaching websites about how to use a verb that ends with -ing or -ed. I also discussed this with my friends. In the past, I did not think about the verb forms carefully. I just used my intuition to write the verbs. After this course, I am more confident in using the correct forms of a verb. Verb form is a grammar item that takes time to learn. I could not apply the knowledge in the first few tasks. But as I practiced more, I gradually made improvements. I was ready to use the right verb forms in the examination.*

Summary

The findings show a connection between learners' metalinguistic knowledge and their manner of engaging with

teachers' feedback. It seems that the more metalinguistic knowledge learners acquire, the more likely they are to apply grammatical rules in their writing. Focused WCF has been observed by this study to be more beneficial due to its more manageable cognitive load, particularly for students with moderate language proficiency.

Deep Versus Superficial Learning

A careful comparison of the interview data for students from the focused and unfocused groups shows that the focused group demonstrated deeper learning than the unfocused group. When asked how they engaged with WCF, all three participants from the focused group mentioned explicitly and repeatedly that they advanced their learning of a specific grammatical structure through additional sources and by various methods.

Ng: *The most significant improvement brought by this course is my much deeper understanding about how to use the definite article "the". In the past, I somehow developed a wrong understanding that I didn't need to use "the" before plural nouns. Teacher's feedback has made me realize that this is not true. I carefully studied how to use "the" by checking grammar books and other resources. One of the tools I have been using is Grammarly, but now I won't totally rely on it as it may not identify the wrong use of "the" sometimes based on the context.*

All three participants from the focused group tried to use additional methods to deepen their understanding of the target linguistic forms, for example by using a portfolio to analyse error patterns, seeking help from peers, checking grammar books, exploiting their grammar knowledge rather than depending on grammar-checking tools, and reflecting on their experiences. All of these strategies worked together to enhance the usefulness of WCF.

By contrast, none of the participants from the unfocused group mentioned specific grammar items when they shared their experiences of WCF; rather, all vaguely mentioned that they used "the codes" or "the metalinguistic form", indicating that they were not deeply engaged in the learning of specific grammatical features.

For example, Li and Tang (unfocused group) did not demonstrate effort other than to check the metalinguistic form. Chan was the only student from the unfocused group who used some additional sources to further her study. However, in the exit interview, she could not explain in depth how to solve problems, as shown in the following example:

> *In fact, I do not know exactly when to use a specific verb form. When the teacher pointed out that there was a verb form problem in a sentence, I would try to use another form, for example, by deleting the -ing, or by adding -s to make it right. However, I sometimes chose the wrong form. Most of the time, I used my intuition to judge.*

Tang and Li struggled with some of the codes until the end of the semester. Chan tried to learn more deeply by using extra resources, but it appeared to be difficult for her to manage so many grammar items during such a short period of time.

Summary

The three interviewees from the focused group all demonstrated deeper learning than those from the unfocused group. This can be interpreted to mean that learners from the focused group were more likely to pay attention to feedback directed at a limited number of linguistic error types, while their counterparts may have been cognitively overloaded by a wide range of linguistic problems.

Engagement in Different Writing Conditions: Revision Versus New Tasks

This section examines whether students from different groups interacted differently with teacher feedback in different writing conditions. Both groups reported that they paid more attention to grammar in revision, while they had to maintain a balance between language accuracy and content in a new task.

Revision

Table 5 summarizes the number of errors found in the pretest (T1) that students were required to revise in Class 9 (R1). The revision was obviously much more manageable for the

Table 5

Number of Errors on the Pretest

Focused group			Unfocused group		
Name	**No. of error types out of 3**	**No. of errors found in the marked script**	**Name**	**No. of error types out of 15**	**No. of errors found in the marked script**
Leung	3	13	Chan	11	37
Ma	2	7	Li	13	43
Ng	2	11	Tang	12	42

students from the focused group, who had significantly fewer errors and error types. By contrast, the three interviewees from the unfocused group had to work with more than 35 errors representing more than 10 error types.

In the first retrospective interview, when asked about his experience with the revision task, Ma said the following:

Ma: *Teacher's feedback helped me identify the specific types of errors I was not aware of. In the past, I did not have a specific focus about what areas I needed to improve because most of my teachers just selectively circled my errors without giving me metalinguistic support. I now notice that I need to pay attention to articles because I have three article errors in this task. I did not experience difficulties in writing the revision task because all the errors were coded, so I had a clear direction to work on.*

It seems that the focused group (of which Ma was a representative) was in a privileged position for using the teacher's feedback because the group had "a clear direction to work on". By contrast, the workload was much heavier for the unfocused group.

New Tasks

In retrospective interview 2, when asked how they worked with a new writing task (T2), Leung and Tang both referred to their efforts at balancing different assessment components in writing a new task. While Leung could manage a good balance, Tang reported difficulties in doing so.

Leung: *After last writing, I know better about how to write a business report. In this writing, I allocated half the time to consider organization and content, the other half of the time to apply the three grammar rules in my writing. After revising the first task, I have developed better understanding about how to use articles and how to use the right verb forms in different sentences. After completing this task, I carefully proofread my writing to correct the verb form, article and singular and plural noun problems.*

Tang: *I had some organization, format and content problems in my first in-class writing. I spent time in thinking about how to use headings and bullet points, and how to place some content in the right sections. I am aware that I should also write accurate sentences in the right tone. Because there were too many grammar items that needed my attention, it was difficult to keep a good balance for all these areas. I gave priority to content and organization.*

Similar findings emerged about writing a new task in the examination. All students (from both groups) reported a certain degree of anxiety about the closed-book examination. But, due to their heavier workload, the unfocused group's anxiety was more pronounced:

Tang: *I was very nervous before and during the examination because I feared that I could not remember the long list of error codes in the form.*

Summary

Focused WCF was found consistently to benefit the learning process in all three writing conditions (R1, T2 and T4); the more manageable workload it entailed allowed learners to direct their focus towards revising grammar in a revision task or allocating efforts to different components of a new task.

DISCUSSION

This section begins by answering a fundamental question regarding whether WCF is beneficial to the accuracy of L2 writing (RQ1). The quantitative data analyses found that students who received coded focused feedback produced significantly fewer errors than students in the other two groups. Meanwhile, no significant differences were observed between the unfocused and control groups across all four writing samples. Certain types of WCF, then (coded focused WCF, but not unfocused WCF, in this case), can be considered conducive to the improvement of L2 writing accuracy. In other words, Ferris's (1999) argument that effective WCF can help at least some student writers, providing that the right WCF is managed properly, is supported.

Regarding the question of whether focused or unfocused WCF is more beneficial to L2 writers (RQ2), feedback scope and error types were both found to potentially play a role. In contrast to Lalande's influential 1982 study, which reported success using a large number (12) of error categories, the present study's findings suggest that L2 learners with limited language proficiency can only cope with a few (3) error categories at a time. While it is clear that the focused group outperformed the unfocused group, the question of which error types are more effectively addressed in which writing conditions (redrafting, new writing or both) seems to be a complex one. Article errors were significantly reduced by the focused group in revision (R1, *Adj.p*=.004) and open-book in-class writing (T2, *Adj.p*=.011), but not in a more stressed condition (T4). By contrast, contrary to Ferris and Roberts' (2001) findings about the significant improvement of verb forms in revision, students in the present study did not seem to be able to reduce the error counts of verb forms in the first two writing attempts (R1, T2). The error counts were reduced by the end of the semester, though not to the point of statistical significance (T4, *Adj.p*=.068). Interestingly, despite greater pressure in the delayed post-test, which was a high-stake examination, the students could still use the targeted grammatical item more accurately, which may strongly demonstrate the efficacy of indirect focused WCF. On the other hand, the fact that the students did not show progress in using these items in the revision and first new

writing tasks may suggest the complexity of learners' development of linguistic skills (Benson & DeKeyser, 2019). The present study reinforces Mao and Lee's (2020) findings that the nature of errors can affect learners' uptake of feedback.

The qualitative data herein identifies two salient factors that could facilitate or constrain the effect of WCF (RQ3): (1) the level of metalinguistic understanding and (2) the ways in which learners engage with WCF. The revision of a singular/plural noun error is obvious because students can simply use the other form when the marked form was incorrect. Conversely, the grammatical rule acquisition of verb forms appears to require more time and effort. The ability to apply a grammatical rule in a new piece of writing requires an even more thorough metalinguistic understanding. In the final examination, many participants in this study mistakenly used the plural noun "users" in the phrase "user forecast", where "user" is a modifier and not a typical plural noun. In order for deep metalinguistic understanding to occur, learners' attention and engagement must be directed to specific grammar features. This kind of deep learning was observed in the focused group (Leung, Ng and Ma), where learners could interact intensively with a limited number of specific grammatical forms, but not in the unfocused group (Chan, Li and Tang).

This resonates with Sheen et al. (2009) and Bitchener and Knock (2008) in that learners who received focused feedback developed a deeper understanding of the linguistic nature of specific error types. Cognitive theories of L2 acquisition (Gass, 1997; Schmidt, 2001) have also provided solid theoretical reasons for focused WCF by establishing a strong link between understanding and L2 development. Learners' language proficiency is another main factor which effects students' intake of WCF. The theoretical assumption is that focused WCF is likely to benefit learners with limited capacities, as it imposes a less heavy cognitive load and thus provides more scaffolding for grammar acquisition (Van Pattern, 2004). Our results echo the above cited literature in that although the students from both treatment groups appeared to have raised linguistic awareness, the unfocused group did not demonstrate deeper learning of new linguistic features due to the constraints of the heavy cognitive load brought about by the large number of errors in their writing.

All participants in the present study reported that metalinguistic information increased their awareness of the targeted linguistic forms. However, students from the unfocused group found the metalinguistic information difficult to apply in solving specific problems, suggesting that merely providing learners with metalinguistic explanations does not necessarily guarantee their deep understanding. These findings suggest that, when designing and conducting metalinguistic feedback, especially for EFL learners with limited proficiency, teachers must carefully consider the following issues: (1) whether the explanations contain difficult terminology; and (2) whether the examples are typical and clearly exemplify the targeted error category. To avoid of the problem of learners' overgeneralising the examples, a variety of examples can be provided to demonstrate various possible forms and corrections of the error. It is also desirable that the students be provided with opportunities to ask teachers questions to clarify their understanding of the metalinguistic feedback, as suggested by the literature (Chen et al., 2016; Ferris et al., 2013).

CONCLUSION

This study has found that coded and focused WCF with explicit metalinguistic support can significantly enhance writing accuracy in terms of the use of articles and singular/plural nouns among L2 learners with low to intermediate language proficiency. A combination of circumstances, for example, the nature of the target grammatical structures and learners' understanding and ways of engaging with WCF, is also necessary for WCF to become a tool for learning.

Despite these insightful findings, some limitations must be acknowledged. First, the study was of short duration, and its sample was relatively small. Therefore, future research should investigate larger samples over longer periods of time. Second, although the three intact classes had a similar English proficiency level, the interviewees from the unfocused group had weaker proficiency than those from the focused group. Future qualitative studies should use participants with equivalent language proficiency to examine the extent to which language proficiency mediates the effectiveness of WCF.

Finally, this study has some implications for classroom pedagogy, addressed briefly here. Because not all errors deserve equal attention, teachers and students should consider how feedback can be used more effectively, particularly in areas where comprehensive feedback is considered obligatory. When teaching students with limited language proficiency, it is recommended that, rather than providing a wide range of error corrections, teachers provide focused feedback complemented with carefully designed metalinguistic support.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

Ch. Deng: Conceptualization, Methodology, Data collection, Data analysis (qualitative), Original Draft preparation, Revision.

X. Wang: Conceptualization, Methodology, Literature review, Original Draft Preparation, Reviewing and Editing.

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REFERENCES

Benson, S., & DeKeyser, R. (2019). Effects of written corrective feedback and language aptitude on verb tense accuracy. *Language Teaching Research, 23*(6), 702-726. https://doi.org/10.1177/1362168818770921

Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research*, *12*(3), 409–431. https://doi.org/10.1177/1362168808089924

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing*, *14*(3), 191–205. https://doi.org/10.1016/j.jslw.2005.08.001

Bruton, A. (2009). Improving accuracy is not the only reason for writing, and even if it were… *System*, *37*(4), 600–613. https://doi.org/10.1016/j.system.2009.09.005

Bruton, A. (2010). Another reply to Truscott on error correction: Improved situated designs over statistics. *System*, *38*(3), 491–498. https://doi.org/10.1016/j.system.2010.07.001

Chen, S., Nassaji, H., & Liu, Q. (2016). EFL learners' perceptions and preferences of written corrective feedback: a case study of university students from Mainland China. *Asian-Pacific Journal of Second and Foreign Language Education*, *1*(1), 1–17. https://doi.org/10.1186/S40862-016-0010-Y/TABLES/10

Ellis, R. (2010). Epilogue: A framework for investigating oral and written corrective feedback. *Studies in Second Language Acquisition*, *32*(2), 335–349. https://doi.org/10.1017/S0272263109990544

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, *36*(3), 353–371. https://doi.org/10.1016/J.SYSTEM.2008.02.001

Evans, N. W., James Hartshorn, K., & Strong-Krause, D. (2011). The efficacy of dynamic written corrective feedback for university-matriculated ESL learners. *System*, *39*(2), 229–239. https://doi.org/10.1016/J.SYSTEM.2011.04.012

Fathman, A., & Whalley, E. (1990). Teacher response to student writing : Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). Cambridge University Press. https://cir.nii.ac.jp/crid/1573950399744829184

Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing*, *8*(1), 1–11. https://doi.org/10.1016/S1060-3743(99)80110-6

Ferris, D. (2004). The "Grammar Correction" debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the meantime …?). *Journal of Second Language Writing*, *13*(1), 49–62. https://doi.org/10.1016/J.JSLW.2004.04.005

Ferris, D. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, *32*(2), 181–201. https://doi.org/10.1017/S0272263109990490

Ferris, D., Liu, H., Sinha, A., & Senna, M. (2013). Written corrective feedback for individual L2 writers. *Journal of Second Language Writing*, *22*(3), 307–329. https://doi.org/10.1016/j.jslw.2012.09.009

Ferris, D. R. (2012). Written corrective feedback in second language acquisition and writing studies. *Language Teaching*, *45*(4), 446–459. https://doi.org/10.1017/S0261444812000250

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing*, *10*(3), 161–184. https://doi.org/10.1016/S1060-3743(01)00039-X

Frear, D., & Chiu, Y. H. (2015). The effect of focused and unfocused indirect written corrective feedback on EFL learners' accuracy in new pieces of writing. *System*, *53*, 24–34. https://doi.org/10.1016/J.SYSTEM.2015.06.006

Gass, S. (1997). *Input, interaction, and the second language learner*. Lawrence Erlbaum Associates.

Han, Y., & Hyland, F. (2015). Exploring learner engagement with written corrective feedback in a Chinese tertiary EFL classroom. *Journal of Second Language Writing*, *30*, 31–44. https://doi.org/10.1016/J.JSLW.2015.08.002

Hyland, F. (2003). Focusing on form: Student engagement with teacher feedback. *System*, *31*(2), 217–230. https://doi.org/10.1016/S0346-251X(03)00021-6

Kang, E., & Han, Z. (2015). The Efficacy of Written Corrective Feedback in Improving L2 Written Accuracy: A Meta-Analysis. *The Modern Language Journal*, *99*(1), 1–18. https://doi.org/10.1111/MODL.12189

Lalande, J. F. (1982). Reducing Composition Errors: An Experiment. *The Modern Language Journal*, *66*(2), 140–149. https://doi.org/10.2307/326382

Lee, I. (2013). Research into practice: Written corrective feedback. *Language Teaching*, *46*(1), 108–119. https://doi.org/10.1017/S0261444812000390

Lee, I. (2017). Working hard or working smart. In J. Bitchener, N. Storch, & R. Wette (Eds.), *Teaching writing for academic purposes to multilingual students* (pp. 168–180). Routledge. https://doi.org/10.4324/9781315269665-11/WORKING-HARD-WORKING-SMART-ICY-LEE

Mao, Z., & Lee, I. (2020). Feedback scope in written corrective feedback: Analysis of empirical research in L2 contexts. *Assessing Writing*, *45*, 100469. https://doi.org/10.1016/J.ASW.2020.100469

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

Rahimi, M. (2021). A comparative study of the impact of focused vs. comprehensive corrective feedback and revision on ESL learners' writing accuracy and quality. *Language Teaching Research*, *25*(5), 687–710. https://doi.org/10.1177/1362168819879182

Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly*, *20*(1), 83–96. https://doi.org/10.2307/3586390

Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3-32). Cambridge University Press.

Semke, H. D. (1984). Effects of the Red Pen. *Foreign Language Annals*, *17*(3), 195–202. https://doi.org/10.1111/J.1944-9720.1984.TB01727.X

Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, *37*(4), 556–569. https://doi.org/10.1016/J.SYSTEM.2009.09.002

Storch, N. (2018). Written corrective feedback from sociocultural theoretical perspectives: A research agenda. *Language Teaching*, *51*(2), 262–277. https://doi.org/10.1017/S0261444818000034

Storch, N., & Wigglesworth, G. (2010). Learners processing, uptake, and retention of corrective feedback on writing: Case studies. *Studies in Second Language Acquisition*, *32*(2), 303–334. https://doi.org/10.1017/S0272263109990532

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, *46*(2), 327–369. https://doi.org/10.1111/J.1467-1770.1996.TB01238.X

van Beuningen, C. (2010). Corrective Feedback in L2 Writing: Theoretical perspectives, empirical insights, and future directions. *International Journal of English Studies*, *10*(2), 1–27. http://dx.doi.org/10.6018/ijes.10.2.119171

Xie, Q. & Lei, Y. (2019). Implementing formative assessment in primary English writing classrooms: A case study from Hong Kong. *The Asian EFL Journal, 23*(5), 55-95.

APPENDIX 1

Metalinguistic Form (Focused Group)

ACCURACY (GRAMMAR, LEXIS, SPELLING) **Please check your accuracy carefully and correct the errors in the next draft.**			
Code number	**Code**	**Meaning**	**Example**
1	**VF**	**V**erb **F**orm is wrong.	VF: Take care of pets is an obligation of a pet owner. Cor: **Taking** care of pets is an obligation of a pet owner. VF: Billboard advertising presenting a good value for money. Cor: Billboard advertising **presents** a good value for money. VF: My priority is to focused on my career. Cor: My priority is **to focus** on my career. VF: I believe this solution should applied to Hong Kong by the relevant Hong Kong government department. Cor: I believe this solution **should apply** to Hong Kong by the relevant Hong Kong government department.
2	**Art**	**Art**icle is incorrect, unnecessary, or missing. (Article: a, an, the)	Art: It was an humbling experience. Cor: It was **a** humbling experience.
3	**N-S/P**	**S**ingular and **p**lural form of nouns	S/P: Both solution have positive and negative aspect. Cor: Both **solution**s have positive and negative aspect.

APPENDIX 2:

Metalinguistic Form (Unfocused Group)

ACCURACY (GRAMMAR, LEXIS, SPELLING) **Please check your accuracy carefully and correct the errors in the next draft.**			
Code number	**Code**	**Meaning**	**Example**
1	**VF**	**V**erb **F**orm is wrong.	VF: Take care of pets is an obligation of a pet owner. Cor: **Taking** care of pets is an obligation of a pet owner. VF: Billboard advertising presenting a good value for money. Cor: Billboard advertising **presents** a good value for money. VF: My priority is to focused on my career. Cor: My priority is **to focus** on my career. VF: I believe this solution should applied to Hong Kong by the relevant Hong Kong government department. Cor: I believe this solution **should apply** to Hong Kong by the relevant Hong Kong government department.
2	**Art**	**Art**icle is incorrect, unnecessary, or missing. (Article: a, an, the)	Art: It was an humbling experience. Cor: It was **a** humbling experience.
3	**N-S/P**	**S**ingular and plural form of nouns	S/Pl: Both solution have positive and negative aspect. Cor: Both **solution<u>s</u>** have positive and negative aspect.
4	**WC**	**W**ord **C**hoice is incorrect, inappropriate or unnecessary.	WC: Gas prices are likely to raise next month. *(*Misused words) Cor: Gas prices are likely to **rise** next month. WC: I sprayed the ants in their private places. *(Incorrect words with unwanted connotations or meanings)* Cor: I sprayed the ants in their **hiding** places. WC: The dialectical interface between neo-Platonists and anti-disestablishment Catholics offers an algorithm for deontological thought. *(Jargon or technical terms that are not suitable for readers)* Cor: The **dialogue** between neo-Platonists and certain Catholic thinkers is **a model** for deontological thought. WC: Another second way is to sound out staff. *(Unnecessary words that lead to wrong phrases/structures)* Cor: **Another** way is to sound out staff.

ACCURACY (GRAMMAR, LEXIS, SPELLING) **Please check your accuracy carefully and correct the errors in the next draft.**			
Code number	**Code**	**Meaning**	**Example**
5	**Run-ons**	**Run-on** sentences include (1) fused sentences (no punctuation at all between two independent sentences) and (2) comma splices (two independent sentences are divided by a comma).	Run-on: I like listening he likes talking. *Or* I like listening, he likes talking. Cor: I like listening**;** he likes talking. I like listening**.** He likes talking. I like listening **while** he likes talking. I like listening**, bu**t he likes talking.
6	**Pron**	**Ca**se	Ca: Dan and me were late. Cor: Dan and **I** were late. (Subjective case needed)
		Pronoun **agr**eement means that a pronoun must agree in number with the word or words it replaces.	Pron Agr: The students must submit his assignments next week. Cor: The students must submit **their** assignment next week.
		Pronoun **ref**erence means the relationship between the pronoun and the noun to which it refers. A sentence may be confusing if a pronoun appears to refer to more than one noun or does not appear to refer to any specific noun.	Pron Ref: Because Mr. and Mrs. Jones didn't love their children, they didn't give them gifts at Christmas. (*It is not clear who, the parents or the children, didn't give gifts.*) Cor: … they didn't give **the kids** gifts …
7	**UC/LC**	**Upper Case**	cap: He's coming on monday Cor: He's coming in **M**onday
		Lower **C**ase	lc: I had always planned to get a University education. Cor: I had always planned to get a **university** education.
8	**WF**	**W**ord form is wrong	wf: He looked at me strange. Cor: He looked at me **strangel**y.
9	**Voice**	A wrong **voice** is used for a verb; or the form of the voice is wrong.	Voice: The *police have been watched* that house for weeks. Cor: The police have been **watching** that house for weeks.
10	**V-T**	**Verb t**ense is wrong	V-T: I have not met her yesterday. Cor: I **did not see** her yesterday.
11	**Prep**	**Prep**ositions: wrong, unnecessary or missing	Prepositions: This essay will discuss about the issue up. Cor: This essay will **discuss** the issue.
12	**Comp.**	The **comp**arative or superlative form of an adjective or adverb is wrong.	Adj. Comparative form Comp: This is more easier. Cor: This is **easier**. **Adv. Comparative form** Comp: She spoke quicklier. Cor: She spoke **more quickly**.

ACCURACY (GRAMMAR, LEXIS, SPELLING) **Please check your accuracy carefully and correct the errors in the next draft.**			
Code number	**Code**	**Meaning**	**Example**
13	**be**	Be is incorrect, unnecessary, or missing	Be. This girl beautiful. Cor: This girl **is** beautiful.
14	**Frag**	**Frag** **Fra**gment happens when a group of words lack a subject or a verb or fails to express a complete thought.	Frag: Since I missed last class. I did not know the homework. Cor: Since I missed last class**,** I did not know the homework.
15	**S-V Agr**	**S**ubject-**v**erb **agr**eement	s-v agr: There wasn't many students in class today. Cor: There **weren't** many students in class today.
16	**Others**	Errors not listed above	/

APPENDIX 3

Post-Revision Retrospective Interview (Sample)

Name of interviewee: Carrie

Discussed areas: Comparison of Task 1 and Revision 1

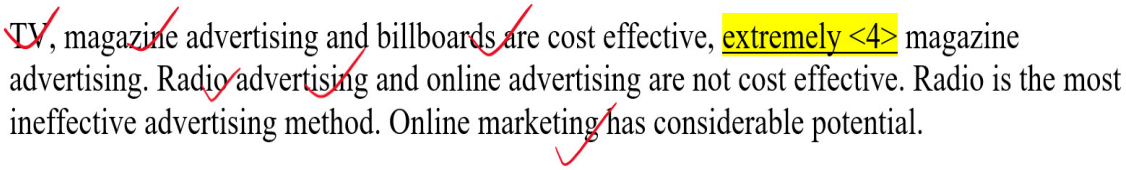
Part I. Overall experience with coded feedback

1. How did you feel immediately after receiving the teacher's written feedback on your draft?
2. Do you want the teachers to point out all the grammar errors in your writing, or just focus on a few types of errors at once? Why?
3. To what extent do you think writing multiple drafts can help you enhance grammar accuracy?
4. In your opinion, what is the most effective way for a teacher to give feedback on the grammar errors in your writing? Please elaborate.
5. Did you encounter any difficulties when revising the language errors? How did you resolve the problems?

Part II. Compare the two drafts of your writing and explain how you used teacher feedback to revise the errors.

1. Accurate correction

Codes
2. articles
3. noun-singular/plural
4. word choice
7. upper/lower case letter
16. other errors



TV, magazine advertising and billboards are cost effective, extremely <4> magazine advertising. Radio advertising and online advertising are not cost effective. Radio is the most ineffective advertising method. Online marketing has considerable potential.

The <2> TV advertising, Megazine <16, 7> advertising and billboard <3> are cost effective, extremely<4> the <2> Megazine <16, 7>. The <2> radio advertising and online advertising are not cost effective. The <2> radio <16> is the most ineffective advertising method. The <2> online marketing has considerable potential.

- **Question:** I notice that you have revised many of the errors in this paragraph. Can you explain how you used teacher's feedback to make revision? For example, what is wrong in the expression "the TV advertising"? What does code 16 mean in "Megazine"? How about code 7 here? (The teacher asked the students to go through the errors and give explanations one by one.)

2. Incorrect correction

Codes
4. word choice
5. run-on
10. verb tense
14. fragment

Radio is not cost effective,<5> it cost 31% of budget, but generated <14> 17% of customers. According to the well-informed sources, the most ineffective advertising method is radio.

Radio is not cost effect, <4, 5> it cost 31% of budget, but generate <10, 14> 17% of customers. According to the well-informed sources, the most ineffective advertising method is radio.

- **Question:** Do you understand Code 5? What is wrong with this sentence? Do you know why your revision is inaccurate? Now, you have one more problem, Code 5, in your revision. What difficulties did you encounter? Can you solve this problem again?

3. Unchanged

Codes:
6. pronoun
16. other errors

The aim of this report is to assess which methods of advertising are the most effective. These <6> information list below is the first heard of customer <16> about Century villas.

- **Question:** Why didn't you revise the coded errors in these two sentences?

Part III. Think aloud

Read the excerpt of the marked draft of your Task 1. Explain how you used the teacher feedback to revise the writing.

Recommendation

I recommend that we should expand the megazine <16> advertisement <4> since it is the most cost effective method. The <2> TV advertising should maintain <16>. The <2> radio advertising should stop using because it is the most cost ineffective <16>. Besides, the <2> billboard <16> should expand the expenditure <16> and move to the different locations. It <6> can attract more customers to see it <6>.

APPENDIX 4

Exit Reflective Interview (Short Version)

1. To what extent could you understand the teacher's written feedback on the language / grammar errors in your writing?

2. Did you read the metalinguistic form in the rubrics?
   i. If no, why?
   ii. If yes, what do you think about the error code list (i.e., its usefulness)?

3. How did you revise the 2nd draft?
   i. How did you use the teacher's feedback on your first draft to revise the 2nd draft?
   ii. Did you try to correct all the language errors when you revised the first drafts? Why?
   iii. Did you encounter any difficulties when revising the language errors? How did you resolve the problems?

4. Did you read the teacher's feedback on the final drafts? Why?

5. Overall, how do you feel the feedback technique, namely:
   - (For Unfocused Group) The teacher underlined all language errors in your compositions, wrote an error code above each mistake, and then you read the attached error code list to figure out the error type and the way to correct it.
   - (For Focused Group) The teacher underlined a few major types of language errors in your compositions, wrote an error code above each mistake, and then you read the attached error code list to figure out the error type and the way to correct i.

6 To what extent do you think the above feedback technique can help you
   i. to revise your draft?
   ii. to avoid making the same types of mistakes in other English writing tasks?
   iii. to enhance your general English grammar knowledge and skills?
   iv. Would you like your teacher to change the way she gave feedback on language errors to you? How and why?

7. To what extent did the writing practices in lesson 8-13 help you prepare you for your final examination? Did you learn some grammar knowledge that could be helpful for your exam? To what extent did you apply some of the grammar knowledge you learned from the course to write your new tasks in the final examination?

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Towards Understanding Teacher Mentoring, Learner WCF Beliefs, and Learner Revision Practices Through Peer Review Feedback: A Sociocultural Perspective

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ABSTRACT

Background. The existing literature has focused on learner perceptions or beliefs about peer review tasks over the recent decade. However, little has been known about the relationships among learner beliefs about written corrective feedback (WCF), related teacher mentoring process, and learner revision practices.

Purpose. We thus aimed at addressing the gap by exploring how teacher mentoring and learner WCF beliefs may inform learner revision practices in the peer-reviewed process.

Method. We included four Chinese EFL students majoring in English as the participants and collected their WCF belief survey data. We also collected their actual practice data through *PeerCeptiv*, an online writing and rewriting platform. In addition, we traced the teacher mentoring practices and interviewed the participants about their beliefs and practices in the peer review and back-evaluation process.

Results. Through the mixed-methods design, we reported our major findings: the student participants believed empathy and resonance was the primary advantage of peer feedback, and teacher mentoring facilitated them in understanding and performing the peer review and revision tasks; we also found the student review process consisted of evaluating, resonating, learning, and reflecting practices and the student revision process included crediting, arguing, correcting, and polishing practices.

Implications. From a sociocultural perspective, we centered our discussion on these research findings by claiming that scaffolding in different forms work together enhance learner performance, and student beliefs appear in a complex manner with student actual revision practices. We also offered insights for future studies and practical implications for language teachers.

KEYWORDS

teacher mentoring, learner beliefs, learner practices, sociocultural theory, a mixed-method study

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INTRODUCTION

Considerable studies have revealed the merits of peer feedback in learner writing performance (Hyland, 2003; Liu & Hansen, 2002; Sato, 2016). Specifically, peer review is an important instructional activity to raise learners' awareness of their strengths and weaknesses, and promote collaborative learning (Chang, 2012). If students master peer review skills, they can figure out peers' writing issues and also improve their own writing skills (Chaktsiris & Southworth, 2019; Law & Baer, 2020; Woodhouse & Wood, 2022). Peer review research has thus attracted much attention in literacy or writing education (Cho & Schunn, 2007), and second language writing education (Bui & Kong, 2019; Sánchez-Naranjo, 2019). However, Kim and Mostafa (2021) reported: "Within the research domain of

perceptions of written CF (corrective feedback), the examination of learners' perspectives is the least explored area." (p. 574, cf., Nassaji & Kartchava, 2021). In fact, learner beliefs about feedback activities can significantly affect how they engage in the process of giving and receiving feedback (Yu & Hu, 2017). With the perceived research gap, studies on learner WCF beliefs require scholars' attention and efforts.

In addition, studies report that teaching mentoring may inform learners' beliefs and peer review performance. Sato (2013) found that learners' active responses and willingness to give peer feedback had been greatly improved after receiving CF training. He also found teacher corrective feedback training had enhanced students' confidence in giving feedback. In fact, teacher mentoring is of great importance to both teachers and students, as divergences or inconsistencies between teachers' intentions and learners' interpretation of those intentions may result in negative effects on learning (Kim & Han, 2007; Lasagabaster & Sierra, 2005). However, there is scant research on how teacher training or mentoring assist learners to re/form their beliefs, improve their willingness to give peer back, and improve their revision practices. With all these considerations, the study attempts to address the gap by further explore EFL learners' WCF beliefs and unpack how their WCF beliefs together with teacher mentoring may inform their revision practices through peer review tasks.

LITERATURE REVIEW

Learner Beliefs about WCF

Learner beliefs are defined as learners' metacognitive knowledge about learning (Wenden, 1999). Learner beliefs serve as a complex learner characteristic that greatly impacts the second language (L2) learning process (Han, 2017). The way that learners go through the task of learning is one socio-cognitive factor that determines their journey of the language learning process (Sato & Storch, 2022). While some learner beliefs are unique among individuals, certain beliefs appear to be shared in common (Campbell *et. al.*, 1993). In second language acquisition, learner beliefs have been studied in a socio-cognitive orientation, emphasizing how learner beliefs were influenced and shaped by many factors including past learning experience, cultural background, and social and political contexts of language learning ((Barcelos, 2003; Yasmin, 2021).

Most recent studies in the field have yielded findings on how psychological factors could shape learner beliefs. Those factors include motivation (Wang & Zhan, 2020), anxiety (Rahimi & Zhang, 2019), self-regulation (Cho, Yough & Levesque-Bristol, 2020), and learner autonomy (Yasmin & Sohail, 2018). A few other studies also explored how gender (Iwaniec, 2019), language proficiency (Wong, 2020), and strategy use (Tang & Tian, 2015) may also influence or inform learner beliefs. In addition, recent studies show that certain beliefs are common among learners, teachers, target languages, cultures, instructional settings, and age groups (Aslan & Thompson, 2021). Dörnyei and Ryan (2015) highlighted research about learner beliefs can help to explain factors behind learners' motivation and aptitude, so to understand learner belief is important for teachers and learners.

Learner beliefs about WCF have yielded some key findings. For example, Chen, Nassaji, and Liu (2016) found that learners overall expressed a favorable attitude toward error corrections and comments, especially feedback on the content and the organization of their written assignments. Their finding was consistent with studies on WCF (e.g., Amrhein & Nassaji 2010; Ashwell 2000; Brown 2009; Karim & Nassaji 2015; Lee 2008; Montgomery & Baker 2007; Schulz 2001) that show the acceptance of WCF in both ESL and EFL contexts. Chen, Nassaji, and Liu (2016) also found that the students liked explicit feedback and direct correction over indirect correction. This was in line with reported statistical comparisons of the learners' performance, which showed a clear advantage for explicit feedback over implicit feedback for the delayed imitation and grammaticality judgment (Ellis, Loewen, & Erlam, 2006). Moreover, Kong and Teng (2020) found that self-efficacy plays an important role in the peer-review process for L2 young learners. To be exact, those with high self-efficacy could follow the instructions according to the training session and learned a lot from the the peer reviews. However, students with low self-efficacy ignored the guidelines and promoted their skepticism of peer review in the end.

In addition, the existing literature yields findings on learner perceptions of different types of feedback. In general, students preferred teacher feedback due to its reliability (Abedi et al., 2015; Ertmer et al., 2007), and believed that peer-feedback is only effective in a friendly and co-operative environment (Kavaliauskiene & Anusiene, 2012). Similarly, Zhang and Rahimi (2014) investigated teacher, peer and self-correction feedbacks and showed that students value teachers' Rollinson (2005) reported peer feedback is less authoritarian and more informal, which may encourage and motivate learners to write and revise. However, peer feedback may also be lengthy, student personality-oriented and requires teachers to give direction or organize the peer feedback tasks.

To sum up, the existing literature on learner WCF beliefs derives from studies focusing on how students and teachers perceive the WCF effects (e.g., Amrhein & Nassaji 2010; Brown 2009; Chen, Nassaji, Liu, 2017; Diab 2005; Karim and Nassaji 2015; Lee 2008; Montgomery and Baker 2007; Simard et al. 2015) and also those on the comparison among different sources or types of WCF (Ertmer et al., 2007; Van den Boom, Paas, & Van Merriënboer, 2007). However, there is still a dearth of literature extending this line of inquiry. One of the reasons might be WCF is complex in nature, as

it includes different forms of interactions among tasks, individuals and writing texts (Bitchener & Ferris, 2012; Chen, Nassaji, & Liu, 2017). Therefore, further studies examining learner WCF perceptions and beliefs in the peer review process are highly needed.

Teacher Modeling in Student Peer-Reviewed Process

The importance of teacher modeling or mentoring has long been discussed in the existing literature.

Van Steendam *et al.* (2010) argued that instructional methods comprising modeling, practice, and feedback are ''very powerful'' and can help learners ''acquire new, complex cognitive skills, such as writing, revision and learning the different steps in a strategy'' (p. 318). Despite the persuasiveness of this argument, many scholars have focused on the effects of whole training programs, and only a few of them have explored the influences of these methods on the classroom-based peer review training. For example, Berg (1999) examined the influence of 11 peer-review training activities on peer revision and revision quality and found that the trained group significantly outperformed the untrained group in revising for meaning and improving the quality of texts. Hu (2005) reported (un)successful experiences through trial and error in a three-year peer review training program in his action research. Min (2006) investigated the effect of in-class teacher modeling and after-class individual teacher-student conference and pointed out that a positive peer review training has an influence on student writers' revision types and quality. Liou and Peng (2009), Lam (2010), and Rahimi (2013), adopting and adapting Min's (2006) peer review training procedure, explored the effect of training on Taiwanese university students' comments through web blogs, Hong Kong university students' comments, and Iranian university students' comments in traditional writing classrooms, respectively, reported similar successful peer reviewing training effects on peer reviewers' comment focus and quality. In conclusion, instructional methods play an important role in the peer-reviewed process and more explorations are needed to better understand this process. However, most of the existing literature focuses on the primary, teacher-led training rather than the peer review training or mentoring process. As the peer review process is inherently a constructivist process that follows a learner-centered philosophy, we argue that studying how teaching mentoring as a facilitating factor is necessary.

Theoretical Framework: A Sociocultural Perspective

A fit theoretical framework is highly useful to examine constructs that we propose in the study. We looked for a framework that may help us depict a general picture of teacher mentoring, learner WCF beliefs, peer review process. We then found the Vygotskian theoretical framework of sociocultural theory (SCT) a suitable justification to explain relations among our proposed constructs. An SCT framework argued that cognitive development, a result of social interaction, can improve individual learners' competence under the guidance of a more experienced individual as a way to advance their zone of proximal development or ZPD (Liu & Hansen, 2005). The premise offers two-folded insights to study teacher mentoring and peer review process. One the one hand, teachers or instructors as experts in the writing classroom are more experienced individuals that guide and direct the students in the writing and revision process. On the other hand, learning and knowledge construction are mediated through interaction with others (Doolittle, 1997). Students who engage in collaboration during peer feedback sessions can negotiate meaning and construct their understanding of language mechanics, or local aspect, and discursive features, or global aspect (Mao & Lee, 2022).

In addition, previous studies have identified peer collaboration as a useful approach to give a strong boost in their foreign language development through interaction (Donato, 2004; Lantolf, 2000; Lantolf & Thorne, 2006). One significant finding is that collaboration among peers "allows students to use language to mediate their language learning because in collaboration students use language to reflect on the language they are learning" (Shrum & Glisan, 2005, p. 25). In second language writing, Hu (2005) argued that a collaborative activity involved "students reading, critiquing, and providing feedback on each other's writing, both to secure immediate textual improvement and to develop, over time, stronger writing competence via mutual scaffolding" (pp. 321-322).

Scholars have long acclaimed that social interaction and negotiation of meaning lay the foundation for the construction of knowledge (Doolittle & Hicks, 2003; Lantolf, 2000; Lantolf & Thorne, 2006; Vygotsky, 1978). The process of writing, giving feedback, and revising is a typical embodiment of social interactions among teachers, peers, and learners themselves. The embodiment represents an interactive process that "a more knowledgeable 'other' structures the learning experience in a way that allows the novice to overcome whatever limitations in skill might impede his or her attainment of a desired goal" (Prawat, 1996, p. 217).

Another insight that we got from an SCT perspective for the current study is that the importance of this social mediation is situated in authentic environments and tasks where the individual can interact with others and thus becoming "self-regulated, self-mediated, and self-aware through feedback received from the environment and self-reflection on their understanding and experience" (Doolittle & Hicks, 2003). Writing, reviewing, and revising process simply reflects the insight. Yu (2020) used the framework of Vygotskian sociocultural theory to investigate tutor-tutee interactions carried out in a series of tutoring sessions and the tutee's subsequent revisions to her writing drafts over the

course of a semester. Leontjev and Pollari (2022) applied the Vygotskian sociocultural theory to explore how peers' comments can inform teacher assessment and guidance of second language learners' writing in authentic environments. In conclusion, an SCT perspective is a fit theoretical framework to explore teacher mentoring, learner beliefs, and learner practices in peer review tasks that we attempt to focus on in the current study.

METHOD

Research Aim & Questions

With the perceived research gap and spotted theoretical framework in the section above, we presented our research aim and questions and our rationale of the research design in this section. We also introduced our research site, participants and data collection process as well. Generally, we aimed at exploring Chinese EFL learners' feedback beliefs and how these beliefs inform their actual revision practices through peer review tasks. In the process, we also attempted to see how teacher mentoring works in mediating Chinese EFL learners' beliefs and practices. With the research aim and purposes, we set up the following research questions:

(1) What is the role of teaching mentoring in the WCF?

(2) What WCF beliefs do Chinese EFL learners hold?

(3) How do WCF beliefs together with teacher mentoring inform revision practices?

Research Context & Participants

We carried out the study in the Chinese EFL context, where English is often taught as a required course for students in colleges or universities for different purposes. The research site for the study was supposed to be conducted through a face-to-face medium in a research-based university in a coastal city. However, due to the pandemic, the study was largely carried out through an online writing and rewriting system.

Student Participants

We included four Chinese EFL learners who majored in English in the research site, but they were in different classes or grades. As typical EFLs in China, they all came to this university through *GaoKao* or the Entrance Exam to College. Their average age was about 21 and overall language proficiency was about advanced level, given their entrance exam score for the English subject and their years of academic training. As English major students, most of their courses were delivered through the English medium instruction by instructors most in applied linguistics or TESOL backgrounds. Table 1 presents biographical information of the four participants. For the participants' privacy and ethical consideration, we also provided them with pseudonyms.

Instructor

Instructor for the study graduated with a doctorate degree in TESOL, and his research interests included language teacher beliefs and practices and TESOL methodology. When we conducted the study, he had been teaching the English language courses, linguistics courses, and language teaching pedagogy courses for more than ten years.

Research Method and Design

We adopted a mixed-method design to combine both quantitative methods and qualitative methods. The rationale for choosing such a design fit the research aim and purpose. As we attempted to explore language teacher mentoring practice and learner review/revision practices, we believed qualitative methods including observation, interviews, and inductive analysis met with the aim and purposes. In addition, our exploration of language learner beliefs about WCF would be feasible through surveys or questionnaires and interviews, entailing the necessity of using quantitative research instruments. We depicted our design in the following figure (see Figure 1).

Research Instruments & Measurements

As the study included a mixed-method design, we used a survey as a research tool to solicit language learner beliefs about WCF (see Appendix I). We adapted the survey that

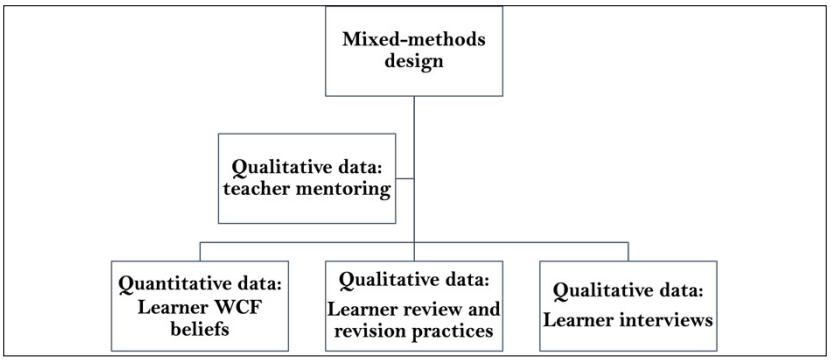
Table 1

Biographical Information of the Participants

Participant	Pseudonyms	Age	Language Proficiency
1	CF	21	Upper-Intermediate
2	FJ	20	Upper-Intermediate
3	QL	20	Upper-Intermediate
8	HY	22	Advanced

Figure 1

Research Design for the Study



had been used in quite a few existing studies (e.g., Schunn *et al.*, 2016), entailing its validity and reliability. Specifically, the survey included question items requesting the participants' biographic information, beliefs about writing, and different forms of WCF beliefs. While we used the survey to collect multiple sources of corrective feedback from the learners, we focused primarily on peer feedback by using teacher feedback data to compare the data on peer feedback. Therefore, the use of the survey was not for finding generalization purposes as typically revealed through a quantitative design; instead, we used the survey as a pilot study or prerequisite for our interviews. We got a general picture of the participants' beliefs through the survey results and then centered around some results for discussion in the interviews through data triangulation.

We then used interviews and observation methods to trace the instructor and the participants during the mentoring, review and revision process through *PeerCeptiv*, formerly SWoRD (Scaffolded writing and reviewing in the discipline). *PeerCeptiv* is an online peer assessment platform (Cho & Schunn 2007; Schunn 2016), with many features resembling features in other intelligent writing systems including but are not limited to Expertiza (Gehringer 2010), EduPCR (Wang et al. 2016), and PigaiNet (Wang, 2022). As its name indicates, the primary feature of *PeerCeptiv* is the systemic peer-review process that gets students involved in the writing and revision tasks (Lorretto, DeMartino, & Godley, 2016; Ruegg, 2017). Existing literature proves interviews as useful tools to find out learners' perceptions of different feedback practices (Hedgcock & Lefkowitz, 1996; Lee, 2008; Mendonca & Johnson, 1994; Tsui & Ng, 2000; Yang, Badger & Yu, 2006).

Data Collection and Analysis

We collected and analyzed data according to the mixed methods scheduled in the study. We collected the learner WCF beliefs through the survey and documented the instructor and the learners' practices through *PeerCeptiv* and interviews. Documentation of the teacher and the learner practices included collected texts, messages, and posts through their social media software (i.e., WeChat) and threads created in *PeerCeptiv* platform. Learner practices occurred in four steps: writing, peer reviews, back evaluation (of the peer reviews), and revision. Specifically, tasks were distributed and assigned in a continuum which starts with a writing task for the participated students, a peer review task that required three peers to give their specific feedback, a back evaluation task that asked for the learner beliefs about the given peer reviews, and then a revision task that helped them polish the writing. In the study, the task continuum appeared twice within one month.

In the interview stage which occurred after the task continuum, we interviewed the four sampled participants, transcribed the interviews, and then analyzed the transcripts. Using the items in the survey and documented data from *PeerCeptiv*, we guided the learner participants to provide rich information for their responses about their WCF beliefs, peer review tasks, and revision practices.

In terms of the data analysis, we firstly reviewed four participants' answers and compiled a profile of each participant to track their belief during the process. Secondly, we conducted a cross-case comparison to compare and integrate the findings generated from each case in order to form a deeper and fuller understanding of the participants' belief in the program. To ensure the validity and reliability of our research, we returned to our interviewees to further check their answers. The whole process was conducted in Chinese as all our participants were Chinese students and they can better express their thoughts in Chinese.

Ethical considerations were seriously taken into consideration when conducting this empirical study. Specifically, we informed the participants of the research objectives and ensured them of the confidentiality. We also let them know the participation was totally voluntary and they might leave anytime in the process. We kept all the data and transcripts confidential and acknowledged the participants' time and contribution to the study.

RESULTS

As we aim at exploring how teacher mentoring and learner WCF beliefs may inform learner revision practices, we frame this section in three primary parts, that is, we report our findings and analyses on teacher mentoring and involvement in the peer review process first, and then we describe our findings of learner WCF beliefs including learners' overall WCF beliefs, and learners' specific beliefs about teacher feedback, peer feedback, and the *PeerCeptiv* platform. We finally report our findings of learners' review and revision process.

Teacher Mentoring and Involvement in the Peer Review Process

We explored how the instructor participants designed, implemented, and evaluated the whole process through a mentoring rather than an intervention process. The instructor got involved in the peer review process through five stages, each of which serves a different function. The five stages included session & tech training, Q&A, task reminders, task completion monitoring, and the stage of encouragement, compliment, & praise (see Figure 2).

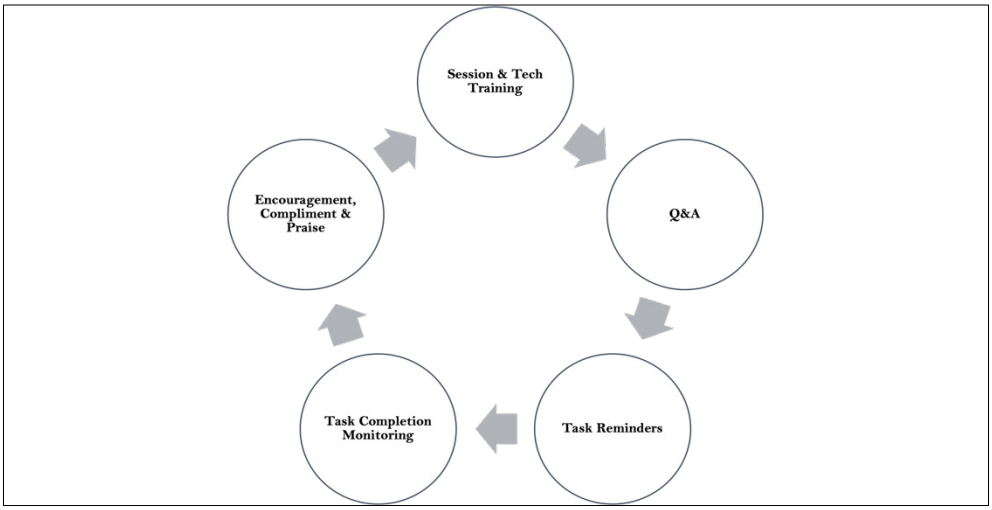
Specifically, the instructor scheduled an online training session due to the pandemic for the students involved in the process. He demonstrated how to use *PeerCeptiv* platform and the timeline of completing the writings, reviews, and revisions. He set up a social media chat group through WeChat and left the students to pose questions there. Then, he checked the chat group on a regular basis, responding to the students queries about technology, tasks, and deadlines for different tasks. He also sent reminders typically prior to the deadline of each task, pushing the students towards their writing and review completion. After each deadline, the instructor checked the students' completion of these tasks. Then, the instructor credited the students for their works and kept encouraging them to move forward in the process.

All the four participants reported through their interviews that the whole teacher mentoring process greatly facilitated their writing, reviewing, and revising process. CF and QL typically reported that the teacher mentoring saved them from missing the deadlines for their tasks, especially in the second round of review tasks when they were preoccupied with other stuff or assignments. FJ also credited the instructor for the demo he made at the beginning of the process, giving her a clear picture of the whole process. QL reported that she was somewhat concerned with the mentoring at first, as she thought there might be some more work to do through attending the training session and checking the reminders. However, she ended up with acknowledging the mentoring process which facilitated her to complete all the tasks successfully and satisfactorily. HY found that the teacher mentoring process actually left her great power in sticking to the process, as she argued the instructor had already set up a good example for her to deliberate his endeavor and stamina in the process.

It is worth mentioning that the instructor worked as a facilitator and guide rather than an interventionist or lecturer in the teacher mentoring process. He organized the process in a constructivist way to enable students to analyze and complete the tasks. By doing so, the process left the peer review tasks and peer feedback as the primary constructs that we focused on, meeting with the research aim and purposes. In addition, some positive psychology tenets (Seligman, 1990) appeared in the mentoring stage. For example, the incorporation of compliments, encouragements and praises into the mentoring process saved the students from concerns and fears and stimulated them to move forward in the learning process (Seligman, 1990; Jordan & Sorell, 2019).

Figure 2

Teacher Mentoring in the Writing, Review, and Revision Process



Learner WCF Beliefs

Overall WCF Beliefs

In the study, two of the participants, CF and FJ reported they prefer teacher feedback to peer feedback, as they believe teacher feedback, if provided in a great manner, may save them from going through different types of feedback. However, they also credited peer feedback in terms of grammar errors. QL and HY believed different types of feedback may serve for different purposes, complementing each other in one way or another. For example, HY reported that

> *I believe teacher feedback and peer feedback are both useful. Specifically, teacher feedback might be quite helpful in examining the overall quality of my paper, typically for coherence and structure. Peer feedback might be given prior to teacher feedback, as it is quite helpful in spotting grammar issues. (Excerpt 1, interview from HY)*

The finding can also be revealed through their surveyed question item when being asked what they expect the teacher or instructor to do for their feedback. Three of the four participants responded that they expected the teacher or instructor to correct major but not minor errors in their writing. However, even for the participants who did not hold a strong preference of one single type over the other, they also believed, teacher feedback might be their choice if only given one type of feedback.

Beliefs about Teacher Feedback

All the four participants through their interviews reported that teacher feedback was quite useful in pointing out logical, coherent, or organizational issues in their writings, which served as the first primary feature of teacher feedback. The participants understood teachers might be busy with teaching, research, or service work, so most of the participants expected teachers to give them suggestions from macro instead micro perspectives to save teachers' time. For example, HY reported:

> *Teacher feedback might offer macro suggestions, including suggestions for improving our writing logic, coherence, content, etc. Because teachers are professional, their suggestions are strict and conventional. Grammatical errors could be offered through peer reviews or intelligent grading systems, considering the big grading work teachers might do. (Excerpt 2, interview from HY)*

Likewise, FJ reported: "For teacher feedback, I used to think all the errors should be highlighted through teacher feedback; but now I might expect more feedback on logics, structure and organization (if teachers don't have enough time)." The time issue might also cause the participants to believe teacher feedback more general than peer feedback. CF reported: "Peer feedback is more detailed, but this might be because our peers are assigned randomly to grade only a limited number of papers. For example, my peers only grade my paper. Teachers usually grade tons of papers."

Another feature of teacher feedback is the professionalism. The participants believed in their instructors and hardly challenged any teacher feedback. For example, FJ argued that: "I prefer teacher feedback for its authority and professionalism. I sometimes might challenge my peers' feedback, because I really don't know his/her language proficiency." This kind of professionalism may provide the participants with a sense of security. QL, for example, reported: "The teacher's review makes me feel more secure (than my peers'), and I feel that this (issue or error) really needs to be revised or corrected".

Together with the professionalism as the teacher feedback feature comes the third feature of teacher feedback, namely, is the authority. Authority of teacher feedback, according to the participants, indicated a sense of irresistibility and undoubtedness. The participants might take it for granted all the feedback from teachers would work and they hardly challenge any feedback. With the teacher professionalism and authority, the participants actually expected teachers to correct all their errors. For example, QL stated that "If teachers may have enough time to grade our papers, I still expect teachers or instructors correct all errors in my writing. Instructors are authoritative, experienced, and professional."

We also found through the participants' interviews that they were more concerned with teacher knowledge input than teacher feedback in their writing process. Specifically, they expected teachers to give more about content knowledge, writing skills or writing ethics than teacher feedback. For example, QL reported that "when I was taking practical writing courses the instructor taught us so professional and helpful knowledge on how to write resume, cover letter, or job application letters. For me, their professional knowledge shared is way more important than feedback to give."

Beliefs about Peer Feedback

Different from the participants' expectation of teacher feedback on logic and coherence, all the participants believed their peer feedback should focus on grammar errors or typos from micro perspectives. For example, CF reported that peer feedback was more "detailed". FJ also expected peer feedback to focus on "minor issues like grammar errors". Of the three functions that HY summarized for her peer reviews, spotting minor issues including grammar errors or wording issues was the primary one.

The most important feature or advantage from peer reviews, according to the participants, was the empathy and resonance. All the participants reported their peers fully understood what had been conveyed, typically through their shared stories or the events or phenomena occurring or prevailing in their generation. For example,

> *I think the primary feature of peer feedback is the empathy between the author and the reader. It seems that my peers know me and can understand my situations. This might be the generation gap issue. While instructors are more experienced, they sometimes fail to understand my generation or what we are most concerned with or interested in. For example, one example I shared in my writing is how young lovers in different cities suffered from missing each other in the pandemic time. Some peer reviewers were suffering from the same issue as mine when they read my writing. (Excerpt 3, interview from QL)*

Similarly, FJ also reported:

> *But one thing I like most for peer review is the empathy and resonance. For example, I shared my story about my grandma's passaway. Reviewers were resonated with me. One reviewer expected more to learn about our story, because s/he thought the clarification for the example in my writing was not detailed enough or full to casual readers. (Excerpt 4, interview from FJ)*

Reading through the assigned papers and doing the peer reviews for these participants works as a way to do mental exchanges between readers and writers. HY stated: "peer feedback is a way to exchange ideas between readers and authors. I got to know my peer reviewers really know me through their reviews. I also like reading their writings as their peer reviewer."

However, unlike the authority and professionalism from teacher feedback, uncertainty is one primary feature or even disadvantage of peer feedback. The participants might be uncertain about the accuracy of their peer feedback, especially for these suggestions on content or coherence. They might also challenge their peers' suggestions or feedback, so they believed some suggestions might come from misunderstanding. For example, CF reported: "For peer feedback that I may not agree with, I may share some points or even argue with the reviewer in my back evaluation." Likewise, FJ stated "When I receive peer review, I sometimes challenge some peers' feedback. I feel that what s/he said is not fully correct, while I rarely refute it directly."

Also, the quality of peer feedback might vary among reviewers due to language proficiency and comprehension. For example, in the survey item asking, "Do you think the linguistic competence of peers will influence the quality of peer review?", three of the participants chose "strongly agree" for the item. The participants through the interviews also reported that sometimes they were concerned with the reviewers' abilities or performance. For example, HX reported

> *I wrote three paragraphs, which were progressively advanced; but the reviewer did not see it (my design) and felt that the three paragraphs were not logically organized or even redundant. He finally gave me a low score for the review. (Excerpt 5, interview from QL)*

Beliefs about PeerCeptiv Platform

The participants in the study reported that they found *PeerCeptiv* platform useful, as it provided the participants with a way to do human-machine interaction or internet-assisted communication for the review process. Instead of doing simply grammar checking or proofreading work for the submitted writings, *PeerCeptiv* as the participants reported, delivered real communications between the participants and their reviewers. For example, QL compared another frequently-used platform with *PeerCeptiv* and argued the other platform replied on the technology and algorithm too much, lack of real communications between authors and reviewers.

Another feature that the participants reported about *PeerCeptiv* was the clear rating rubric, which provided the participants with directions and items to grade upon. CF reported: "it was user-friendly, but with the mentoring from the instructor." The other participants also stated that it took them longer for the first round of reviews through *PeerCeptiv* than the second round. They needed to be accustomed to the platform. However, in the second round, it become easier to operate.

In addition, CF stated: "we (as authors) also enjoyed reading and commenting on others' works so that we know the difference of language proficiency among all our peers". *PeerCeptiv* in this vein, provided the participants with access to learn from their peers' writings and getting to know their peers. HY suggested: "If possible, we may go through another proofreading platform for the first round of reviews, *PeerCeptiv* for the second, and then instructors for the third. I know that might be time consuming."

Learner Review and Revision Practices

In the study, all the four participants were highly engaged in their writing, review, and revision process. The participants submitted their first writing assignments through PeerCeptiv. As required, the participants were writing their reviews to other participants, while waiting for their reviews. Three random, anonymous reviews were then delivered to the participants through the platform. It is worth mentioning the four participants were selected from a pool of 23 students, which indicates their anonymous reviews were not typically from each other. After receiving the reviews, they analyzed the reviews and then responded to their reviews by indicating how they had addressed issues in the reviews. The responding process was termed as back-evaluation. Then, the participants submitted their revisions through PeerCeptiv. As stated previously in Data Collection and Analysis section, the steps and procedures resemble a task continuum which occurred twice in the whole process.

Review Practices

We analyzed the actual writings and reviews of the four participants, together with the transcriptions of their interviews. We found that the participant review process generally comprised of four different practices, including evaluating, resonating, learning, and reflecting. However, the four different practices may not occur in sequence or together.

Evaluating. All the participants evaluated their randomly assigned papers through the platform as the primary task for their review process. With the mentoring and rubric from the instructor, the participants evaluated their assigned papers from dimensions of unity, support, coherence, and wording & sentence skills. For example, CF reported that the training and mentoring did help her save time for the review, as she referred to some wording and sample review sentences from the review rubric and template that the instructor had given to her. Also, FJ found the review process led her to better understand what defined a professional peer-review task and get to know how she could write a review report.

Resonating. We found the primary feature or advantage of the peer review process was the sense of empathy and resonance generated from the participants' reading of the reviewed writings. Different from the teacher feedback that is rational, professional, and systemic, peer feedback may be emotional and personal. As reported in Excerpt 3, QL shared her example of how peers in her generation from different cities could not date or meet and suffered from pandemic successfully aroused her peer reviewers' emotion. Likewise, FJ's reported life story about her grandma's death resonated with her peer reviewers. Behind the empathy and resonance lies the fact that peer review is a way of communication and emotion exchange, connecting readers with authors.

Learning. In the study, HY reported she enjoyed learning from reading the assigned articles and believed she could learn some vocabulary and wording from the reading. She even reported she sometimes held some admiration of the authors when she read sentences and structures of great craftsmanship. Similarly, FJ also reported she did learn something from reading the assigned writings, regardless of the wording or paragraph developing techniques. Lundstrom and Baker (2009) found that learners could seize what their peers were able to do better than them and pay attention to those aspects in their own writing. In addition, Ruegg (2017) found that learners overwhelmingly saw the advantage of reading others' essays more than that of receiving peer feedback.

Reflecting. HY in the study reported that reading through others' writings helped her realize weaknesses or shortcomings in her writing. She continued: "I might be unable to see the whole picture. I mean I cannot see my own errors in the writing. however, when reading my peers' writings, I may reflect and recall if I've made similar errors or mistakes." However, this reported finding only occurred in HY's case. When we checked the survey item that explored participants' perception about learning from the peers' writings, only HY reported she did learn from the reviewed writings. However, the other three participants either chose "I don't know" or "disagree" as the response to the item.

Revision Practices

In the study, we included back-evaluation and rewriting practices in the revision practices. Specifically, the participants, having received their peer reviews, were required to respond to the peer reviewers on how they had addressed their feedbacks. The process was a back-evaluation process. Based on the peer reviews and the back-evaluation, the participants then rewrote the paper and submitted it through *PeerCeptiv*. We found the actual revision process in the study may include the following four practices.

Crediting. We found that all the participants first acknowledged their peer reviewers' contribution while doing the back-evaluation. CF and FJ reported in the interview they learned this strategy to give compliment or acknowledgment before arguing their points from the teacher mentoring. The instructor set up a good example in the sample review in which compliment and recognition precede the actual suggestions and comments. HY used different strategies to do the crediting or acknowledgement: in some back-evaluation, she expressed her thanks directly (e.g., Thank you for the advice.); in others, she confirmed the review and expressed her beliefs that the review had been quite helpful (e.g., The review is very helpful.). There were also some back-evaluations that she used a mixture of these strategies (e.g., Thanks for the suggestion! Your review is helpful and instructive.).

Arguing. As revealed from the participants' stated beliefs about peer feedback, the participants, on some occasions, may not totally accept their peer feedback. Because they did not believe some peers really understand their intentions or examples in the writing, or they believed there might be some misunderstanding or miscommunication. Therefore, when doing back-evaluation, the participants may argue with the reviewers or clarify their points with their explanations (see Table 2).

Correcting. For the correcting practices, all the participants in the study corrected their typos, grammatical errors, or wording issues in the revised manuscripts (see Table 3). However, compared to these grammatical errors or wording issues, the participants paid less attention to coherence or cohesion feedback in their revisions. This could be revealed through the participants' interviews or stated beliefs, as they reported they were not sure of the reviewers' feedback accuracy and were concerned they might give inaccurate feedback.

Table 2

Sample Reviewer Feedback and Participant Responses for Arguing

Sample Reviewer Feedback	At the end of the first paragraph of the article, the author put forward her topic sentence, which can summarize the content of her article well. In addition, the author focuses on her regret in the subject paragraph. At the end, the author quoted the sentence in the book to express her feelings. But to be honest, I don't think this sentence is related to the theme of the article. (Anonymous)	In terms of grammar, punctuation, and style, the authors have done a good job. Only one suggestion for you is that "in order to" could be replaced with" to". (Anonymous)
Sample Participant Responses	Thank you very much for your comment. The last quoted sentence means that these lost years cannot come back, which expresses regret in a more poetic expression. Perhaps this quotation alone will make people confused, so I will carefully consider the sentence at the end of the introduction again and give a simple explanation to let readers understand it more intuitively, so as to achieve the purpose of summarizing the whole paper. (QL)	Thank you for the advice. I was trying to make the words more diversified by choosing "in order to". I suppose I can try to make some changes according to your advice. (HY)

Table 3

Sample Reviewer Feedback and Participant Responses for Correcting

Sample Reviewer Feedback	As for the wording, the language of this article is vivid, the emotions are sincere, and the text is mostly very specific. But there are also some expressions that are a bit general. For example, "I could see them try their best to do their job", it can be more specific if the space allows. The sentence structure of the article is also rich. I didn't find any errors in terms of punctuation, spelling, capitalization in the writing. (Anonymous)	There is one thing I wanted to emphasize. At the second paragraph, the sentence that I have highlighted. It would be better if you use the subordinate clause. Like 'But this is a dream, which is imprisoned in the epidemic.'(Anonymous)
Sample Participant Responses	Thanks for the suggestion! Your review is helpful and instructive. I will make further adjustments according to your advice. I suppose the narration will be more vivid if some changes are made according to your suggestion. (HY)	Thank you very much for your correction. I find it very helpful. You gave specific examples to help me increase the diversity of sentences in my article. I will definitely go back and make corrections to make my article better. (QL)

Polishing. The participants generally polished their revised writings and resubmitted them through the platform to finalize the whole process. The polishing work primarily includes the proofreading of the writings which might be done through other platforms or the participants themselves. As reported in their interviews, the participants also used other technologies or platforms (Grammarly or Pigainet) to help them with the proofreading work. From the submission of the first draft to the resubmission of the draft, the participants spent more than one month completing the whole task continuum.

DISCUSSION

In the study, we reported our findings on how teacher mentoring and learner WCF beliefs had informed the learner review and revision process through *PeerCeptiv*, an online peer-review platform. Generally, the teacher mentoring process was systemic and well-organized in five stages, including session & tech training, Q&A, task reminders, task completion monitoring, and the stage of encouragement, compliment, & praise. Learners' overall beliefs about teacher and peer feedback varied, as learners believed different types of feedback might serve different functions. In addition, all the learners believed the platform was useful in helping them with their review and revision process. With the instructor's and peers' help, the learners' review and revision process went smoothly through different steps and stages.

Teacher Mentoring as the Appetizer, Peer Feedback as the Main Course, and Revision as the Dessert

A sociocultural perspective may offer substantial insights on aligning feedback with learner's writing development (Yu, 2020; Leontjev & Pollari,2022). One of the typical insights is feedback provides writers with scaffolding opportunities (Nassaji, 2021). In the study, scaffolding in different forms work together may enhance learner performance. It is through such collaborative support that feedback can further learners' interlanguage growth and ability (Aljaafreh & Lantolf, 1994). In the study, teacher mentoring facilitates students to understand and perform the peer-review tasks. All the participants reported their benefits from the teacher mentoring, either as a push to help them complete the task continuum or as a guide to simplify their review procedures. However, the teacher mentoring is not the crucial factor that leads to the completion of the whole process.

The second tenet we may gain from an SCT perspective is the mediation, which highlights higher-order mental activities are all socially mediated (Vygotsky, 1978). Mediation is achieved through the various forms of physical and symbolic tools and artifacts that equip people with some connection between themselves and the world (Wells, 2007). In this study, the development of learners' feedback beliefs and their revision practices was achieved through teacher mediator, peer mediator, and *PeerCeptiv* mediator. However, some mediators may play a more significant role than others in the process. Metaphorically, we may compare the mentoring as an appetizer to stimulate the participants' motivation, but the peer review is the main course that helps the participants complete the information exchange, communication delivery, and learning process. Having said that, student beliefs about WCF together with teacher mentoring may inform student practices of these peer-reviewed tasks.

Complex Relationships between Learner Beliefs and Actual Practices towards Peer Reviews

In the study we found student beliefs appear in a complex manner with student actual revision practices. We found it irrational to link learner beliefs and practices in a linear way, as the two constructs are internally dynamic and may appear in different tensions (Gao, 2021; Gao *et al.*, 2022; Gao, Qin, & Gu, 2022). Specifically, we found some learner beliefs about their peer feedbacks helped them correct their writings, under the condition that these feedbacks fit the participants' feedback preferences and epistemology. Writers and authors actually hold their own ideology and epistemology, and they get recognition and a sense of fulfillment from readers who get resonated with their ideology. Wang and Zhang (2020) suggested increased learner beliefs of self-efficacy and perceived value of English learning promoted learning motivation and self-regulation.

In addition, learner beliefs are often consistent with their revision practices in terms of grammatical or wording issues, which fall into linguistic or language dimensions. However, for content and logic dimensions, learner beliefs about may not necessarily be consistent with their actual revision practices, as learners may be unsure of or concerned with the peer feedback. These uncertainty and concerns may result from language proficiency gaps, miscommunication, or misunderstandings. This finding was against the existing literature typically in the 1990s entailing that learners from collectivist cultures are unwilling to be critical of each other (Allaei & Connor, 1990; Carson & Nelson, 1994; Nelson & Carson, 1998). The finding in a way indicates that EFL learners in the current generation (2020s) even in the collectivist culture have developed their critical thinking further than the previous generations. The finding is consistent with the existing literature exploring linguistic features and ideology, and critical thinking of the current generation learners in China (Gao & Zeng, 2021). Further studies may attempt to examine if gender factor would make differences in learner beliefs and revision practices, as a significant difference in the strength of links between self-regulation and instrumentality, self-efficacy beliefs, and English self-concept has already been reported in research (Iwaniec, 2019).

While Hedgcock and Lefkowitz (1994) found that learners in EFL contexts focus primarily on accuracy rather than the development of ideas. In this study, we may challenge this focus by arguing it might not be the de-emphasis on the development of ideas but be the learners' preference to take accuracy issues over the idea issues in peer review feedback. This could be explained through the existing literature reporting learner perception of teacher feedback and peer feedback. Rollinson (2005) reported peer feedback is less authoritarian but more informal, so students may believe peer feedback serves better for accuracy purposes than for conceptual or ideational purposes.

CONCLUSION

In conclusion, this paper explored EFL learner beliefs, teacher mentoring, and revision practices through peer review feedback from the sociocultural perspective. Findings show that EFL learners believed empathy and resonance was the main advantage of peer feedback, and teacher mentoring facilitated them in understanding and performing the peer review and revision tasks. Moreover, student review process included evaluating, resonating, learning, and reflecting practices and the student revision process comprised crediting, arguing, correcting, and polishing practices. Lastly, scaffolding in different forms work together may enhance learner performance and student beliefs appear in a complex manner with student actual revision practices.

We wrap up the paper by offering some research and pedagogical implications to the reader who might be interested in WCF studies or improving their actual practices. While prolific literature has been conducted over the years on feedback studies, there remains more to explore in the field. For example, we may propose a further step for future research in exploring tensions between learner beliefs about different forms of feedback and their actual writing and revision practices. We also found room for exploration on personal or contextual factors mediating learners' preferences of one type of feedback over another.

One of the curriculum design or pedagogical implications for the study is the possibility of using an ensemble of different grading platforms together with teacher feedback in writing curricula. In the study, the participants reported different platforms may serve different functions, considering writing is no longer defined simply as a language skill but a medium to exchange or communicate between readers and writers.

While we acknowledged the devotion from the four participants in the study, we understand the limited participant size and sampling method is not flawless. We thus expect scholars conducting similar research in the future may improving the design or sampling method of the current study. That is how we as authors treat our peer feedback, the recurring theme of the study.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

Y. Gao: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing, other contribution.

X. Wang: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization , Writing – original draft, Writing – review & editing, other contribution.

REFERENCES

Allaei, S. K., & Connor, U. M. (1990). Exploring the dynamics of cross-cultural collaboration in writing classrooms. *Writing Instructor, 10*(1), 19-28. http://hdl.handle.net/1805/2659.

Aslan, E., & Thompson, A. S. (2021). The interplay between learner beliefs and foreign language anxiety: Insights from the Turkish EFL context. *The Language Learning Journal, 49*(2), 189-202. https://doi.org/10.1080/09571736.2018.1540649

Barcelos, A. M. F. (2003). Researching beliefs about SLA: A critical review. *Beliefs about SLA*, 7-33. https://doi.org/10.1007/978-1-4020-4751-0_1

Berg, E. C. (1999). The effects of trained peer response on ESL students' revision types and writing quality. *Journal of Second Language Writing, 8*(3), 215-241. https://doi.org/10.1016/S1060-3743(99)80115-5

Bui, G., & Kong, A. (2019). Metacognitive instruction for peer review interaction in L2 writing. *Journal of Writing Research, 11*(2), 357-392. https://doi.org/10.1016/S1060-3743(99)80115-5

Campbell, J. Y., Grossman, S. J., & Wang, J. (1993). Trading volume and serial correlation in stock returns. *The Quarterly Journal of Economics, 108*(4), 905-939. https://doi.org/10.2307/2118454

Carson, J. G., & Nelson, G. L. (1994). Writing groups: Cross-cultural issues. *Journal of second language writing, 3*(1), 17-30. https://doi.org/10.2307/2118454

Chaktsiris, M. G., & Southworth, J. (2019). Thinking beyond Writing Development in Peer Review. *Canadian Journal for the Scholarship of Teaching and Learning, 10*(1), article1. https://eric.ed.gov/?id=EJ1218774

Chang, C. (2012), Peer Review via Three Modes in an EFL Writing Course. *Computers and Composition, 29*(1), 63-78. https://doi.org/10.1016/j.compcom.2012.01.001

Cho, K., & Schunn, C. D. (2007). Scaffolded writing and rewriting in the discipline: A web-based reciprocal peer review system. *Computers & Education, 48*(3), 409-426. https://doi.org/10.1016/j.compedu.2005.02.004

Cho, H. J., Yough, M., & Levesque-Bristol, C. (2020). Relationships between beliefs about assessment and self-regulated learning in second language learning. *International Journal of Educational Research*, 99, 101505. https://doi.org/10.1016/j.ijer.2019.101505

Donato, R. (2004). 13. Aspects of collaboration in pedagogical discourse. *Annual Review of Applied Linguistics, 24*, 284-302. https://doi.org/10.1017/S026719050400011X

Doolittle, P. E. (1997). Vygotsky's zone of proximal development as a theoretical foundation for cooperative learning. *Journal on Excellence in College Teaching, 8*(1), 83-103. https://eric.ed.gov/?id=EJ577702

Doolittle, P. E., & Hicks, D. (2003). Constructivism as a theoretical foundation for the use of technology in social studies. *Theory & Research in Social Education, 31*(1), 72-104. https://doi.org/10.1080/00933104.2003.10473216

Dornyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited.* Routledge. https://doi.org/10.4324/9781315779553

Gao, Y. (2021). *EFL teachers' beliefs and actual practices about reading and teaching reading: A complex dynamical system perspective*. Brill. https://doi.org/10.1163/9789004506541

Gao, Y. & Zeng, G. (2021) Exploring linguistic features, ideology, and critical thinking in Chinese news commentary. *Humanities & Social Sciences Communications, 8*, Article Number 39, https://doi.org/10.1057/s41599-021-00715-y

Gao, Y., Qin, L., & Gu, Q. (2022). Unpacking language teacher beliefs, agency, and resilience in the complex, unprecedented time: a mixed-method study. *Frontiers in Psychology*, *12*, 1-18 https://doi.org/10.3389/fpsyg.2022.958003

Gao, Y., Zeng, G., Wang, Y. Khan, A.A., & Wang, X. (2022). Exploring educational planning, teacher beliefs, and teacher practices during the pandemic: A study of science and technology-based universities in China. *Frontiers in Psychology*, *11*,1-13 https://doi.org/10.3389/fpsyg.2022.903244

Gehringer, E. F. (2010). Expertiza: Managing feedback in collaborative learning. In *Monitoring and assessment in online collaborative environments: Emergent computational technologies for e-learning support* (pp. 75-96). IGI global. https://doi.org/10.4018/978-1-60566-786-7.ch005

Han, Y. (2017). Mediating and being mediated: Learner beliefs and learner engagement with written corrective feedback. *System, 69*, 133-142. https://doi.org/10.1016/j.system.2017.07.003

Hansen, J. G., & Liu, J. (2005). Guiding principles for effective peer response. *ELT Journal, 59*(1), 31-38. https://doi.org/10.1093/elt/cci004

Hedgcock, J., & Lefkowitz, N. (1992). Collaborative oral/aural revision in foreign language writing instruction. *Journal of Second Language Writing, 1*(3), 255-276. https://doi.org/10.1016/1060-3743(92)90006-B

Hedgcock, J., & Lefkowitz, N. (1994). Feedback on feedback: Assessing learner receptivity to teacher response in L2 composing. *Journal of Second Language Writing, 3*(2), 141-163. https://doi.org/10.1016/1060-3743(94)90012-4

Hedgcock, J., & Lefkowitz, N. (1996). Some input on input: Two analyses of student response to expert feedback in L2 writing. *The Modern Language Journal, 80*(3), 287-308. https://doi.org/10.1111/j.1540-4781.1996.tb01612.x

Hu, G. (2005). Contextual influences on instructional practices: A Chinese case for an ecological approach to ELT. *Tesol Quarterly, 39*(4), 635-660. https://doi.org/10.2307/3588525

Hyland, F. (2003). Focusing on form: Student engagement with teacher feedback. *System, 31*(2), 217-230. https://doi.org/10.1016/S0346-251X(03)00021-6

Iwaniec, J. (2019). Language learning motivation and gender: The case of Poland. *International Journal of Applied Linguistics, 29*(1), 130-143. https://doi.org/10.1111/ijal.12251

Jordan, J., & Sorell, M. (2019). *Why reverse mentoring works and how to do it right.* Harvard Business Publishing.

Kim, Y., & Mostafa, T. (2021). Teachers' and students' beliefs and perspectives about corrective feedback. *The Cambridge handbook of corrective feedback in second language learning and teaching* (pp. 561-580). Cambridge.

Kong, A., & Teng, M. F. (2020). The operating mechanisms of self-efficacy and peer feedback: An exploration of L2 young writers. *Applied Linguistics Review.* https://doi.org/10.1515/applirev-2020-0019

Lam, R. (2010). A peer review training workshop: Coaching students to give and evaluate peer feedback. *TESL Canada Journal, 27*(2), 114-114. https://doi.org/10.18806/tesl.v27i2.1052

Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning* (vol. 78, no. 4). Oxford University Press.

Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and genesis of second language development.* Oxford University Press.

Law, S., & Baer, A. (2020). Using technology and structured peer reviews to enhance students' writing. *Active Learning in Higher Education, 21*(1), 23-38. https://doi.org/10.1177/1469787417740994

Lee, I. (2008). Understanding teachers' written feedback practices in Hong Kong secondary classrooms. *Journal of Second Language Writing, 17*(2), 69-85. https://doi.org/10.1016/j.jslw.2007.10.001

Leontjev, D., & Pollari, P. (2022). Guiding and assessing development of L2 writing process: The role of peer collaboration. *Innovation in Language Learning and Teaching,* 1-13. https://doi.org/10.1080/17501229.2022.2058514

Li, S. (2017). Student and teacher beliefs and attitudes about oral corrective feedback. In *Corrective feedback in second language teaching and learning* (pp. 143-157). Routledge.

Liu, J., & Hansen, J. G. (2002) *Peer response in second language writing classrooms.* Michigan University Press.

Liou, H. C., & Peng, Z. Y. (2009). Training effects on computer-mediated peer review. *System, 37*(3), 514-525. https://doi.org/10.1016/j.system.2009.01.005

Loretto, A., DeMartino, S., & Godley, A. (2016). Secondary students' perceptions of peer review of writing. *Research in the Teaching of English, 51*(2), 134-161.

Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of second language writing, 18*(1), 30-43. https://doi.org/10.1016/j.jslw.2008.06.002

Mao, Z., & Lee, I. (2022). Researching L2 student engagement with written feedback: Insights from sociocultural theory. *TESOL Quarterly, 56*(2), 788-798. https://doi.org/10.1002/tesq.3071

Mendonca, C. O., & Johnson, K. E. (1994). Peer review negotiations: Revision activities in ESL writing instruction. *TESOLQquarterly, 28*(4), 745-769. https://doi.org/10.2307/3587558

Min, H. T. (2006). The effects of trained peer review on EFL students' revision types and writing quality. *Journal of second language writing, 15*(2), 118-141. https://doi.org/10.1016/j.jslw.2006.01.003

Nassaji, H. (2021). Corrective Feedback from a Sociocultural Perspective. In *H. Nassaji & E. Kartchava (Eds.), The Cambridge handbook of corrective feedback in second language learning and teaching* (pp. 85-108). Cambridge University Press.

Nassaji, H., & Kartchava, E. (Eds.). (2021). *The Cambridge handbook of corrective feedback in second language learning and teaching.* Cambridge University Press.

Nelson, G. L., & Carson, J. G. (1998). ESL students' perceptions of effectiveness in peer response groups. *Journal of second language writing, 7*(2), 113-131. https://doi.org/10.1016/S1060-3743(98)90010-8

Prawat, R. S. (1996). Constructivisms, modern and postmodern. *Educational Psychologist, 31*(3-4), 215-225. https://doi.org/10.1080/00461520.1996.9653268

Rahimi, M. (2013). Is training student reviewers worth its while? A study of how training influences the quality of students' feedback and writing. *Language Teaching Research, 17*(1), 67-89. https://doi.org/10.1007/s11145-018-9887-9

Rahimi, M., & Zhang, L. J. (2019). Writing task complexity, students' motivational beliefs, anxiety and their writing production in English as a second language. *Reading and Writing, 32*(3), 761-786. https://doi.org/10.1007/s11145-018-9887-9

Ruegg, P. L. (2017). A 100-Year Review: Mastitis detection, management, and prevention. *Journal of dairy science, 100*(12), 10381-10397. https://doi.org/10.3168/jds.2017-13023

Sánchez-Naranjo, J. (2019). Peer review and training: Pathways to quality and value in second language writing. *Foreign Language Annals, 52*(3), 612-643. https://doi.org/10.1111/flan.12414

Sato, M. (2013). Beliefs about peer interaction and peer corrective feedback: Efficacy of classroom intervention. *The Modern Language Journal, 97*(3), 611-633. https://doi.org/10.1111/j.1540-4781.2013.12035.x

Sato, M., & Storch, N. (2022). Context matters: Learner beliefs and interactional behaviors in an EFL vs. ESL context. *Language Teaching Research, 26*(5), 919-942. https://doi.org/10.1177/1362168820923582

Seligman, M. E. (1990). Why is there so much depression today? The waxing of the individual and the waning of the commons. In *Contemporary psychological approaches to depression* (pp. 1-9). Springer. https://doi.org/10.1007/978-1-4613-0649-8_1

Schunn, C., Godley, A., & DeMartino, S. (2016). The reliability and validity of peer review of writing in high school AP English classes. *Journal of Adolescent & Adult Literacy, 60*(1), 13-23. https://doi.org/10.1002/jaal.525

Shrum, J. L., & Glisan, E. W. (2005). *Teacher's handbook, contextualized language instruction.* Mass.

Tang, M., & Tian, J. (2015). Associations between Chinese EFL graduate students' beliefs and language learning strategies. *International Journal of Bilingual Education and Bilingualism, 18*(2), 131-152. https://doi.org/10.1080/13670050.2014.882882

Tsui, A. B., & Ng, M. (2000). Do secondary L2 writers benefit from peer comments? *Journal of Second Language Writing, 9*(2), 147-170. https://doi.org/10.1016/S1060-3743(00)00022-9

Van Steendam, E., Rijlaarsdam, G., Sercu, L., & Van den Bergh, H. (2010). The effect of instruction type and dyadic or individual emulation on the quality of higher-order peer feedback in EFL. *Learning and Instruction, 20*(4), 316-327. https://doi.org/10.1016/j.learninstruc.2009.08.009

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children, 23*(3), 34-41.

Wang, W., & Zhan, J. (2020). The relationship between English language learner characteristics and online self-regulation: A structural equation modeling approach. *Sustainability, 12*(7), 3009. https://doi.org/10.3390/su12073009

Wang, Y. (2022). The Effect of Automated Corrective Feedback on L2 Writing in POS Categories. In *2022 3rd International Conference on Language, Art and Cultural Exchange (ICLACE 2022)* (pp. 492-495). Atlantis Press. https://doi.org/10.2991/assehr.k.220706.093

Wang, Y., Liang, Y., Liu, L., & Liu, Y. (2016). A multi-peer assessment platform for programming language learning: considering group non-consensus and personal radicalness. *Interactive Learning Environments, 24*(8), 2011-2031. https://doi.org/10.1080/10494820.2015.1073748

Wenden, A. L. (1999). An introduction to metacognitive knowledge and beliefs in language learning: Beyond the basics. *System, 27*(4), 435-441. https://doi.org/10.1016/S0346-251X(99)00043-3

Wells, G. (2007). Semiotic mediation, dialogue and the construction of knowledge. *Human Development, 50*(5), 244-274. https://doi.org/10.1159/000106414

Woodhouse, J., & Wood, P. (2022). Creating dialogic spaces: developing doctoral students' critical writing skills through peer assessment and review. *Studies in Higher Education, 47*(3), 643-655. https://doi.org/10.1080/03075079.2020.1779686

Wong, Y. K. (2020). Effects of language proficiency on L2 motivational selves: A study of young Chinese language learners. *System*, *88*, 102181. https://doi.org/10.1016/j.system.2019.102181

Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of second language writing, 15*(3), 179-200. https://doi.org/10.1016/j.jslw.2006.09.004

Yasmin, M., & Sohail, A. (2018). A creative alliance between learner autonomy and English language learning: Pakistani university teachers' beliefs. *Creativity Studies, 11*(1), 1-9. https://doi.org/10.3846/23450479.2017.1406874

Yasmin, S. (2021). Understanding the construct of learner beliefs about language learning. *The Discourse, 7*(1), 25-39. https://discourse.org.pk/index.php/discourse/article/download/116/106

Yu, L. (2020). Investigating L2 writing through tutor-tutee interactions and revisions: A case study of a multilingual writer in EAP tutorials. *Journal of Second Language Writing, 48*, 100709. https://doi.org/10.1016/j.jslw.2019.100709

Yu, S., & Hu, G. (2017). Understanding university students' peer feedback practices in EFL writing: Insights from a case study. *Assessing Writing, 33*, 25-35. https://doi.org/10.1016/j.asw.2017.03.004

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Writing Task Complexity, Task Condition, and the Efficacy of Feedback

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ABSTRACT

Background. Task-based language teaching (TBLT) is still attracting considerable interest from second language teachers and researchers, partly due to unresolved issues of task sequencing and task complexity. Moreover, in spite of burgeoning attention to writing at the present stage of evolution of TBLT, the interaction of task complexity and corrective feedback in writing performance of language learners has not been explored well.

Purpose. To fill in this research gap, the present study aimed to explore the role of task complexity and task condition in learners' gain from corrective feedback in second language writing.

Method. A pretest-immediate posttest-delayed posttest design was adopted in this study. The participants of the study were 114 English as foreign language learners, randomly assigned to one of the five groups: four experimental groups and a control group. The four experimental groups differed in (a) whether they carried out the simple or complex version of a task (b) whether they did the writing task individually or collaboratively. They received feedback on their writing in three treatment sessions.

Results. Statistical analyses revealed that task condition played a larger role than task complexity in the linguistic performance of language learners who received feedback on their writing.

Implications. The findings add support to the view that selecting appropriate levels of task complexity and suitable task implementation conditions alongside providing corrective feedback enhances the different dimensions of the written performance of language learners.

KEYWORDS

writing, task type, collaborative learning, corrective feedback, accuracy

INTRODUCTION

Writing is one of the most complex skills taught in English as a foreign language (EFL) classes, and many students find it a daunting undertaking. However, this demanding activity—as Widdowson (1978) describes it—is often an inseparable part of language programs. Weigle (2002) sees education and opportunities for learning as factors of paramount importance in writing development. Task-based language teaching (TBLT) is one of the innovative language teaching methods which aims to provide this opportunity for learners by involving them in meaningful activities using the target language. TBLT has drawn ample support from second language acquisition (SLA) researchers (e.g., Ellis, 2003; Prabhu, 1987; Skehan, 1998), but designing suitable tasks with valuable gains for EFL learners remains a serious challenge for syllabus designers and curriculum developers (Baralt et al., 2014). This challenge becomes more serious in the case of L2 writing, which is a somewhat neglected modality in research on TBLT.

The studies on TBLT to date have mainly focused on oral production and explored the role of task design features such as task complexity and task implementation condition separately, often without taking into account the accurate picture of language classes. This neglect has occurred in spite of the fact that writing tasks, characterized by their problem-solving nature and their meaning-making characteristic, are potential-

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ly useful activities to be employed in task-based language teaching and research. Primary focus on speaking in much TBLT-oriented theory and research has caused setbacks in expanding the theoretical, empirical, and educational horizons of TBLT. Adequate attention to other language skills (e.g., writing) in TBLT framework can help overcome these limitations (Byrnes & Manchón, 2014).

Among task design features, task complexity is a factor whose manipulation can bring considerable changes in linguistic output (Robinson, 2001; Skehan, 1998). Moreover, the situation under which a task is implemented may have a considerable effect on the performance of learners in a particular task (Robinson, 2007). Likewise, the interaction of task complexity and task condition may affect learners' performance, which is an under-researched area in SLA studies (Kang & Lee, 2019), particularly in the written mode. In the present study, the task condition is manipulated by having participants perform individual and collaborative writing tasks. Manchón (2014) argues that performing writing tasks individually or collaboratively may have differential effects on language learners' written performance.

In addition, it is now generally accepted that the primary focus of tasks should be on meaning, together with proportionate timely attention to linguistic forms (Ellis, 2003; Long, 2000). Corrective feedback is a common methodological procedure to fulfill this objective in EFL classes. Many studies have been carried out to investigate the role of corrective feedback in second language learners' written performance; however, to the best of our knowledge, the interaction of task complexity, task condition, and corrective feedback in writing performance of foreign language learners has not been studied yet. Manchón (2014) asserts that the prominent position of corrective feedback as a critical component of interaction in writing should be recognized in TBLT-framed theoretical accounts and empirical TBLT studies, which is a neglected area in SLA research.

The effect of different task types (simple/complex), task conditions (individual versus collaborative writing), and corrective feedback on the written performance of language learners has been investigated in some studies (e.g., Bitchener, 2008; Kuiken & Vedder, 2008; Wigglesworth & Storch, 2009). However, the majority of these studies have tackled just one aspect of the topic and left other aspects untouched. The present study considers the whole picture of language classes and attempts to examine the effect of task complexity and task condition together with corrective feedback on foreign language learners' writing. To this end, the following research questions are formulated:

1. Do task complexity and task condition (individual and collaborative writing) mediate the efficacy of written feedback in affecting the accuracy of language learners' written performance?
2. Do task complexity and task condition (individual and collaborative writing) mediate the efficacy of written feedback in influencing the syntactic complexity of language learners' written output?

LITERATURE REVIEW

Task Complexity

One of the challenges facing SLA researchers concerned with gauging the influence of task design features and conditions on language learners' performance is how to determine the complexity or difficulty of tasks. Although various models and frameworks have been proposed to give guidelines on designing and sequencing pedagogic tasks, the cognition hypothesis (Robinson, 2001, 2003, 2009) and the trade-off hypothesis (Skehan, 1998, 2009) are two rather competing theoretical models in vogue today.

Skehan's (1998, 2009) trade-off hypothesis, assuming the single resource model of attention, predicts that enhancing task complexity will jeopardize the accuracy or complexity of learners' production due to the limited attentional capacity which they are able to bring to the task. He argues that complexifying the task, by itself, can lead to improvement in either accuracy or syntactic complexity of linguistic performance—but not both. Skehan (2014) elucidates that simultaneous fostering of the accuracy and syntactic complexity of the performance can occur together with complexifying the tasks, but this dual improvement happens due to different task design factors or characteristics of their implementation—not just thanks to increasing the cognitive complexity of tasks.

On the other hand, Robinson's (2001, 2003) cognition hypothesis presents a relatively novel model for task designing. Following the multiple-resource model of attention, he devalues capacity constraints. The distinguishing characteristic of Robinson's (2001) hypothesis is drawing an important theoretical distinction between resource-directing and resource-dispersing variables of task complexity. Resource-directing variables such as immediacy, number of elements, and reasoning make cognitive and conceptual demands. Robinson (2003) predicts that increasing task complexity along these dimensions directs learners' attention and memory resources to L2 structures and code concepts, so leading to interlanguage development and improvement in the accuracy and complexity of production. In contrast, increasing task complexity along the resource-dispersing variables (e.g., absence of planning time or prior knowledge) disperses attentional resources and affects production negatively.

Skehan (1998) and Robinson (2003) seem to agree up to a point with regard to the effect of the resource-dispersing variables on language production. Stated differently, both

believe that making tasks more complex along these variables (e.g., taking away planning time) is likely to exercise a detrimental effect on the accuracy, complexity, and fluency (CAF) of production. However, they appear to diverge when it boils down to the role of the resource-directing variables. Unlike Robinson's prediction, Skehan (1998)—not having divided task complexity variables into the resource-directing and resource-dispersing types—is of view that increasing task complexity will not lead to more accurate and complex output simultaneously. He argues that task characteristics and task conditions can have selective and directing effects.

The role of task complexity in the written performance of language learners has been examined in a few studies carried out by SLA researchers (Ishikawa, 2007; Kuiken & Vedder, 2008). Johnson (2017), in a research synthesis and quantitative meta-analysis, reviewed some of the studies carried out on the effect of cognitive complexity on L2 writing. Although he found significant changes in the written performance of L2 learners as a result of the manipulation of the cognitive demands of tasks along resource-directing and resource-dispersing variables, he concluded that these findings did not support the predictions of the cognition hypothesis (Robinson, 2001, 2011). Rahimi and Zhang (2018) studied the effect of increasing task complexity on L2 writing of upper-intermediate Iranian students. They reported more complex (subordinate use) and less accurate performance in the writings of the participants who carried out cognitively complex tasks. The findings of Zhan et al. (2021) showed a significant effect of task complexity on the syntactic complexity of EFL learners' writing but not on the lexical complexity of their writing.

Operationalization of Task Complexity

We manipulated the number of elements that learners considered while performing the writing tasks to operationalize the cognitive complexity of the treatment tasks. According to the cognition hypothesis (Robinson, 2001), identifying few easily distinguished elements within a task is simpler than identifying many similar elements. Skehan (2014), viewing task difficulty inherent in tasks themselves, accepts that some features of tasks (e.g., number of elements) can account for the difficulty of tasks. However, he elaborates that the effect of these features on task difficulty may be influenced by other task features and even by the context in which the task is implemented. He suggests interconnectedness between elements in the task as a predictor of task difficulty. Ellis (2003) classifies the number of elements as a task design variable that can elicit more complex language use. Ellis (2003) considers the number of different elements and their relationship important in complexifying a task. For instance, he conceptualizes that a static task requiring learners to describe a diagram with few elements of a similar size makes less cognitive demand on them, compared to where learners are asked to describe a diagram with many elements of varying sizes.

Halford et al. (2007) assert that our attention and working memory can process four variables and above this level processing becomes demanding for learners. In the current study, participants carried out the simple version of a writing task having three criteria in mind, and they performed the complex version of the writing task considering seven criteria. They had to take into account five criteria (medium in terms of cognitive complexity) while completing the assessment tasks. Kuiken and Vedder (2008, 2011) examined the role of task complexity operationalized by the number of elements in the oral and written mode of language learners and found support for Robinson's (2001, 2003, 2009) cognition hypothesis.

Task Condition

Different aspects of task-based language teaching, including the condition under which a task is performed, have been the focus of interest for SLA researchers and practitioners in recent years. Task condition affects task performance, as the same task implemented under different conditions may yield different outcome (Larsen-Freeman & Long, 1992). Robinson (2007) in his triadic componential framework (TCF) has classified these sets of variables into two groups: participation variables (e.g., open/closed solution) which make interactional demands as well as participant variables (e.g., same/different gender) which make interactant demands.

On the other hand, Skehan's (1998) model of task complexity has included factors such as time pressure, scale, modality, and opportunity for control under the category of communicative stress. Skehan recognizes that these factors along with learners' characteristics (e.g., intelligence), interacting with the code complexity and cognitive complexity of the task, may influence the performance of the individual learner. Skehan (2014) in his framework for second language task performance has regarded task conditions as factors related to the implementation of tasks such as availability of planning time, task repetition, post-task activities, and interaction (monologue/dialogue).

In the current study, task implementation condition was manipulated by involving language learners in individual and collaborative writing. Coauthoring of a text is utilized in educational settings to help learners enjoy the benefits of the scaffolding and collaboration emphasized by Vygotsky's (1978) sociocultural theory of learning, Long's (1996) interaction hypothesis, and Swain's (1985) output hypothesis. Collaborative tasks that engage learners in a shared goal-oriented activity can provide a suitable context for learning and language development (Storch, 2013). Most studies to date have reported the positive impact of collaborative writing on accuracy (e.g., Fernández Dobao, 2012; Storch, 2005; Wigglesworth & Storch, 2009) and complexity (Storch, 2005). Shehadeh (2011), using the holistic rating procedure, reported a significant effect of collaborative writ-

ing and feedback on content, organization, and vocabulary, but not on grammar and mechanics of written performance.

Interaction of Task Complexity and Corrective Feedback

Despite a few disagreements among researchers over the definition of task and its grading, a growing consensus has emerged that the primary focus of tasks should be on meaning, together with proportionate attention to linguistic forms (Ellis, 2005). Emphasis on focus on form in TBLT has drawn on two grounds. First, the limited attentional capacity of human beings, including L2 learners, puts constraints on them, pushing them to allocate their attention to one area and neglect other areas (Schmidt, 2001). Second, when L2 learners are subject to the constraints of attentional resources, they naturally prioritize meaning at the expense of form (VanPatten, 1990). Negative feedback (e.g., written feedback) is one of the methodological procedures to invite learners' attention to linguistic forms.

Considering the interaction of task complexity and corrective feedback, Skehan's (1998) trade-off hypothesis, emphasizing the limited information processing capacity of human beings, predicts that more complex tasks allow less attention to language and, by implication, to the provided feedback. Conversely, Robinson (2001), advocating the multiple-resource model of attention, hypothesizes that communicating more complex ideas requires more syntactic resources. He argues that learners, while performing a cognitively complex task, cater to the demands of the task by employing specific linguistic features. This may lead them to be more tuned to and receptive of the feedback that addresses those features (Robinson & Gilabert, 2007).

Although the impact of task variables on language learning has been the focus of interest for SLA researchers over the past three decades, the interaction of task variables with negative feedback has not received considerable attention in this period (Révész & Han, 2006). To date, few studies have been carried out to examine this issue—limited to oral mode. For instance, Révész (2009) explored the effect of providing recasts in two types of oral tasks (simple/complex). She found greater L2 gains for learners who received recasts in cognitively complex tasks. Baralt (2013) examined the impact of cognitive complexity on feedback efficacy during on-line versus face to face interaction tasks. She found that performing cognitively complex tasks in the FTF mode while receiving recasts was the most beneficial condition for language learning. However, in the CMC mode, the cognitively demanding task plus recast was not effective (Baralt, 2013). Révész et al. (2014) investigated the effect of task complexity and input frequency on ESL learners' gain from recast. The analyses of the data obtained from assessment tasks indicated that the participants performing simple tasks enjoyed a considerable advantage in using the target linguistic form. Vahdat and Daneshkhah (2019) compared the effects of corrective feedback and task complexity on the grammatical accuracy of EFL learners' writing and found a significant positive role of direct corrective feedback in increasing the grammatical accuracy of their writing.

Corrective Feedback in Individual and Collaborative Writing

Many studies have been conducted to assess the role of corrective feedback in the written performance of language learners, and most of them have reported the positive effect of this kind of feedback at least on the accuracy of writing (Liu & Brown, 2015). However, the role of written corrective feedback (WCF) in different writing task conditions has not been studied enough. Regarding the role of corrective feedback in individual and collaborative writing, Vygotsky's (1978) sociocultural view of learning assumes teacher's feedback as a form of assistance (scaffolding) which helps learners, especially those who process this feedback collaboratively, develop the meditation of corrective feedback within the zone of proximal development (ZDP). Long's (1996) interaction hypothesis, Swain's (1985) output hypothesis, and Kellogg's (1996) model of writing also provide a convenient rationale for the positive impact of WCF on the linguistic performance of learners in collaborative writing.

Kellogg's (1996) influential cognitive model of writing demonstrates how cognitive and motivational factors influence composing processes. His model is composed of three basic recursive and interactive systems, with each system involving two components: formulation (planning and translation), execution (programming and executing), and monitoring (reading and editing). Formulation involves setting goals by the writer and his lexical and syntactic choice to express his intended ideas. The term execution is used by Kellogg (1996) to refer to converting the output of translation into production schema for the appropriate motor systems involved and the actual act of writing (Ellis & Yuan, 2005). Monitoring involves reading and correcting the errors of the written output in micro (linguistic) and macro (organizational) levels. Interaction and shared decision-making in different stages of writing— proposed by Kellogg (1996)—may improve the writing performance of learners who practice writing in collaboration. The key role of collaborative writing in L2 development is highly valued by SLA researchers (Storch, 2013).

Few studies have examined the effect of collaborative processing of WCF on the writing of language learners. Storch and Wigglesworth (2010) and Kassim and Luan (2014) have reported positive effects for this kind of processing on the revision and generating new texts. Kim and Emeliyanova (2019) studied ESL learners' writing accuracy while performing individual and collaborative processing of written feedback. Although the writing accuracy of both groups improved after three treatment sessions, no noticeable difference was found between them. Of course, in their study,

the participants just processed the teacher's feedback collaboratively, but they performed the writing tasks individually in the treatment sessions. Recently, Mujtaba et al. (2021 investigated the impact of individual and collaborative processing of WCF on second language writing and found better written performance, in terms of accuracy and revision behavior, for participants who processed the WCF collaboratively. In the current study, writing tasks in the treatment sessions were performed in two different conditions (individually and collaboratively). Also, the syntactic complexity of the written products of the participants was measured to check a possible deleterious effect of WCF on other dimensions of writing.

METHOD

Design

A pretest-posttest-delayed posttest design was adopted to examine the interaction of task complexity and negative feedback in the written mode under different conditions. Cognitive demands of tasks and their implementation condition—each with two levels—were manipulated as the independent variables of the study. The dependent variables were gains made through time, i.e., from the pretest to the immediate posttest and to the delayed posttest in the accuracy and syntactic complexity of writing. The participants were divided into five groups: a control group that did not receive feedback on their writing and four experimental groups who performed the simple or complex version of the same task individually or collaboratively and received WCF.

Participants

The participants of the study were 114 undergraduate university students learning English as a foreign language at universities of Iran. One hundred and twenty-two students who scored one standard deviation above and below the mean in a language proficiency test were selected from a total of 180. Five students were excluded due to absence in treatment or assessment sessions, and three students were identified as outliers. Therefore, the final number of participants was 114 (48 male and 66 female). Their comparability was examined by the analysis of the data obtained from the pretest. Their age ranged from 19 to 30 years (M = 22.36, SD = 2.70). Their native language was Azari Turkish (n = 84) and Persian (n = 30). There was no significant difference between groups regarding the number of years studying English, $F(4, 109) = .60$, $p = .65$. None of the participants had the experience of living in an English-speaking country.

Assessment Tasks

Three writing tests were utilized as the pretest, immediate posttest, and delayed posttest. In each test, the participants were asked to write on a hypothetical topic (e.g., offering a mobile phone to a person called John). They were given a leaflet of eight mobile phones. None of the mobile phones in the leaflet met all John's five criteria (reasonable price, design, camera, battery life, display device). The learners had to offer John the most suitable mobile phone based on his likes, discuss their selection, and justify it. They had to complete the writing tasks in 40 minutes using at least 150 words. Three comparable writing tasks were used in the pretest and posttests. These tasks were medium in terms of the cognitive demands they imposed on the participants because the learners had to consider five criteria in performing the assessment tasks, but they had to consider three and seven criteria in the simple and complex versions of the treatment tasks, respectively. The comparability and validity of the tests were checked and assured by three experts in the field of language teaching and testing.

Treatment Tasks

The participants in the four experimental groups received three treatment sessions. In these sessions, the students were presented with writing prompts. These treatment tasks were similar to the pretest and posttests in terms of instructions given and stages followed. However, the complexity of the tasks varied by decreasing or increasing the number of the criteria that participants had to consider while writing. In the simple task (see appendix A), they offered a product to Jack considering three criteria (a hypothetical situation). In the complex task (see appendix B), the participants carried out a similar task, taking into account Jack's seven criteria. Moreover, in the simple version of the task, the students were presented with information on five types of the product in question (e.g., automobile) in a table, but in the complex task, the participants had to consider the information about eight types. As Robinson (2001) asserts, identifying few easily distinguished elements within a task is simpler than identifying many similar elements. The students in all experimental groups received corrective feedback. The validity of these tasks was checked by a group of experts in material development for EFL learners.

Procedure

First, the comparability of the participants' level of English proficiency was checked by Nelson English Language Proficiency Test. The learners recruited were randomly assigned into four experimental groups and a control group. The four experimental groups differed as to (a) whether they performed the simple or complex version of the writing task (b) whether they carried out the writing task in pairs or in isolation during the treatment sessions. In other words, the participants were placed in one of these five groups:

Group 1: performed simple tasks individually and received WCF on their errors (simple individual)

Group 2: performed complex tasks individually and received WCF on their errors (complex individual)

Group 3: performed simple tasks in pairs and received WCF on their errors (simple collaborative)

Group 4: performed complex tasks in pairs and received WCF on their errors (complex collaborative)

Group 5: performed free writing activities and just took part in the pretest and posttests (control group)

The participants in five groups took a writing pretest. Then, all the experimental groups involved received three treatment sessions. In each treatment session, the participants wrote a text based on a simple or complex writing prompt. The first author read their written outputs and underlined their erroneous structures (indirect unfocused corrective feedback). Prior to the next treatment session, he returned the texts to the participants. They were supposed to pay enough attention to the underlined parts and provide their correct forms in 15 minutes. The participants in the individual groups had to do this job by themselves, but those placed in the collaborative groups could discuss the errors and reach a consensus on the correct form. The control group did some free writing activities and followed the conventional syllabus of the university. The same stages were followed in two other treatment sessions.

After three treatment sessions, the participants took the posttest. The control group received the posttest, too. The accuracy and syntactic complexity of the participants' written production were coded and analysed. After two weeks, another posttest was administered, and their written products were coded and analysed to assess the retention of any possible treatment effect. The collected data were analysed using SPSS20. Table 1 demonstrates the summary of the steps taken to carry out the study.

Measures

Following the guidelines of Wolfe-Quintero et al. (1998) and consulting the measures adopted in the previous studies on writing (e.g., Kuiken & Vedder, 2008; Skehan & Foster, 1999; Tavakoli & Rezazadeh, 2014), we measured accuracy by the proportion of error-free T-units to all T-units. Any error in syntax, morphology, and lexical choice (if the word obscured meaning) was considered, but errors in spelling, punctuation, or capitalization were ignored. Syntactic (structural) complexity was judged by the average number of clauses per T-unit. The participants' written products were coded and scored by the first author who had a Ph.D. in teaching English as a foreign language (TEFL) and has taught English at universities of Iran for about 17 years. To ensure the reliability of coding and scoring, 20% of the written products of the participants were coded and scored by an independent expert colleague who held a master degree in TEFL. He was briefed on the procedure and guidelines to be taken in coding and scoring the texts. Inter-coder and inter-rater reliability coefficients were .92 and .94, respectively.

Data Analysis

The collected data were analyzed using SPSS 20. The normality of the collected data was confirmed by normality tests (Kolmogorov-Smirnov statistic) and graphical assessments (Histograms, Normal Q-Q plot, box plot). Therefore, parametric tests were employed to analyze the data. To assess the effect of task complexity (simple/complex), task condition (individual/collaborative), written feedback, and their interaction on the accuracy and syntactic complexity of language learners' written performance, first, descriptive statistics were calculated for each group's pretest, immediate posttest, and delayed posttests performance. Then, considering the design of the study and having checked the assumptions underlying ANOVA tests, including normality and homogeneity of variance, we conducted three separate

Table 1

Data Collection Procedure

Week	Activity
1	Proficiency test
2	Pretest
3	First timed writing
4	Returning the first writing +Feedback processing
5	second timed writing Returning the second writing +Feedback processing
6	Third timed writing Returning the third writing +Feedback processing
7	Immediate posttest
9	Delayed posttest

one-way ANOVAs for two measures of written performance to compare the participants' performance in the pretest, immediate posttest, and delayed posttests. Post-hoc comparisons are also conducted to find out which groups are significantly different from one another. Next, a two-way ANOVA was conducted for the posttests in order to explore the role task complexity and task condition combined with WCF in the possible changes in the written production of the participants. In all analyses run, the significance level was set at .05 and Cohen's (1988) guidelines were used to decide on the effect size. Cohen (1988) has suggested benchmarks to identify small (η^2 = 0.01), medium (η^2 = 0.06), and large (η^2 = 0.138) effects.

RESULTS

Results for the First Research Question

To answer the first research question, descriptive statistics, including means and standard deviations, were computed for the accuracy measure. As shown in Table 2, the group that performed the simple task collaboratively and received written feedback had the highest mean in the posttests. Contrarily, students who received corrective feedback while doing the complex task individually had the worst performance in this measure.

Three One-way ANOVAs were performed for the pretest and posttests after examining the assumptions underlying ANOVA tests. Results of the pretest for the accuracy measure of the written products did not show a statistically significant difference between groups, $F(4, 109) = .12$, $p = .97$, indicating the comparability of the five groups at the outset of the study. Therefore, any probable difference between the control and experimental groups in the posttests can be attributed to the treatment. The results of the one-way ANOVA indicated a statistically significant difference for five groups in the posttests, $F(4, 109) = 13.84$, $p = .00$ for the immediate posttest and $F(4, 109) = 12.73$, $p = .00$ for the delayed posttest.

In order to compare the difference between groups in the immediate posttest, the Tukey HSD test was run. The results indicated that the mean score of the accuracy of writing for the simple individual group (M=.75, SD= .09) was significantly different from the simple collaborative (M=.85, SD=.09) and control (M=.65, SD=.11) groups. The participants in the simple individual group who received WCF on their writing showed less gain in their accuracy of their writing than the participants of the simple collaborative group who got the same feedback. Nevertheless, the participants in the simple individual group made more gain than the control group who did not receive WCF. Moreover, the writing accuracy of the complex individual group (M=.69, SD=.11) was significantly less than the writing accuracy of the simple collaborative and complex collaborative (M=.81, SD=.08) groups. The accuracy of simple collaborative group was significantly higher than the accuracy of the control group. Also the participants in the complex collaborative group produced significantly more accurate texts than the control group in the immediate posttest. The other two by two comparisons

Table 2

Descriptive Statistics for the Measure of Accuracy in the Pretest and Posttests

Group	N	Test	Mean	SD
Simple individual	23	Pretest	.61	.17
		Posttest 1	.75	.09
		Posttest 2	.72	.10
Complex individual	23	Pretest	.60	.18
		Posttest 1	.69	.11
		Posttest 2	.69	.10
Simple collaborative	22	Pretest	.58	.14
		Posttest 1	.85	.09
		Posttest 2	.82	.09
Complex collaborative	22	Pretest	.59	.11
		Posttest 1	.81	.08
		Posttest 2	.78	.07
Control	24	Pretest	.59	.14
		Posttest 1	.65	.11
		Posttest 2	.63	.10

between groups did not show statistically significant difference.

The Tukey HSD test was also run to compare the means of the accuracy of the five groups in the delayed posttest. The results showed a significant difference between the simple individual (M=.72, SD=.10) and simple collaborative (M=.82, SD=.09) groups as well as between the simple individual and control (M=.63, SD=.10) groups. The learners who performed the simple treatment tasks individually and received WCF on their writing produced less accurate texts than the simple collaborative group who got the same feedback, but these learners (simple individual group) wrote more accurate texts than the control group who did not receive WCF on their writing. The analysis also showed the mean score for complex individual group (M=.69, SD=.10) was significantly different from the simple collaborative and complex collaborative (M=.78, SD=.07) groups. The learners who conducted the complex tasks individually had less gain in the accuracy of their writing, compared to those who performed the simple collaborative and complex collaborative tasks. The difference between the simple collaborative and control groups as well as between the complex collaborative and control groups was statistically significant, showing better performance of collaborative groups in comparison with the control group. There was no statistically significant difference between the other pairs of groups.

In addition, a two-way ANOVA was conducted to assess the impact of independent variables (task complexity and task condition) along with WCF on the accuracy of the participants' writing in the posttests, as the assumptions had not been violated. In the immediate posttest, the interaction effect between task complexity and task condition was not statistically significant, $F(1, 86) = .29$, $p = .58$, $\eta^2 = .003$. The effect size for the interaction was small; therefore, it was not surprising that the analysis did not show statistically significance for this interaction. However, there was a significant main effect for task complexity, $F(1, 86) = 5.51$, $p = .02$, $\eta^2 = .06$, indicating the medium effect of cognitive complexity of tasks on the accuracy of the participants' writing . Also a significant effect was found for task condition, $F(1, 86) = 25.31$, $p = .00$, $\eta^2 = .22$, which shows a large effect size for this variable. Regarding the delayed posttest, again the interaction between task complexity and task condition was not significant, $F(1, 86) = .02$, $p = .86$, $\eta^2 = .00$. The analysis of main effects provided a significant statistical effect just for task condition $F(1, 86) = 22.20$, $p = .00$, $\eta^2 = .20$ (a large effect size). The main effect of task complexity did not reach statistical significance, $F(1, 86) = 1.85$, $p = .17$, $\eta^2 = .02$. This finding shows that the participants could not preserve the positive effect of receiving WCF in less complex tasks for a longer time.

Results for the Second Research Question

To answer the second research question, means and standard deviations of the syntactic complexity of the participants' written performance are presented in Table 3.

Again, a one-way ANOVA was run to compare the performance of the participants in this measure. Like the accuracy measure, the structural complexity of the written products were comparable at the pretest, $F(4, 109) = 1.32$, $p = .26$. How-

Table 3

Descriptive Statistics for the Measure of Syntactic Complexity in the Pretest and Posttests

Group	N	Test	Mean	SD
Simple individual	23	Pretest	1.32	.13
		Posttest 1	1.28	.10
		Posttest 2	1.30	.15
Complex individual	23	Pretest	1.37	.11
		Posttest 1	1.36	.12
		Posttest 2	1.34	.13
Simple collaborative	22	Pretest	1.31	.14
		Posttest 1	1.33	.11
		Posttest 2	1.35	.11
Complex collaborative	22	Pretest	1.40	.17
		Posttest 1	1.44	.14
		Posttest 2	1.47	.16
Control	24	Pretest	1.34	.18
		Posttest 1	1.32	.17
		Posttest 2	1.38	.15

ever, their performance changed in the posttests and the difference reached statistical significance, $F(4, 109) = 4.20$, $p = .003$ in the immediate posttest and $F(4, 109) = 4.17$, $p = .003$ in the delayed posttest. Table 3 shows that the participants in the experimental group who performed the complex treatment tasks collaboratively and received feedback on their writing produced written outputs with the highest syntactic complexity in both posttests.

Next, the Tukey HSD test was conducted to assess the pairwise difference of the means of the five groups in the immediate posttest. Results showed a significant difference between the simple individual (M=1.28, SD=.10) and complex collaborative (M=1.44, SD=.14) groups as well as between the complex collaborative and control (M=1.32, SD=.17) groups. The learners who performed complex tasks collaboratively during treatment sessions and received feedback on their writing produced more complex structures than the participants who were placed in the simple individual and control groups. The other two by two comparisons between groups in the immediate posttest did not show significant difference. The results of post-hoc comparisons using the Tukey HSD for the syntactic complexity of learners' writing in the delayed posttest indicated a significant difference for the pairwise comparison of the simple individual (M=1.30, SD=.15) and complex collaborative (M=1.47, SD=.16) groups and also between the complex individual (M=1.34, SD=.13) and complex collaborative groups. The participants who were placed in the complex collaborative group and were given WCF feedback on their writing produced significantly more syntactically complex texts than those who were placed in the simple individual and complex individuals groups. The difference between other pairwise comparisons was not statistically significant.

Furthermore, a two-way ANOVA was run to evaluate the impact of task complexity, task condition, and their interaction on the efficacy of written feedback in affecting the syntactic complexity of writing. In the immediate posttest, a significant effect was not found for the interaction between task complexity and task condition, $F(1, 86) = .30$, $p = .58$, $\eta^2 = .004$, allowing us to examine the main effect of the independent variables on the written performance of the participants. A significant effect was found for the effect of task complexity, $F(1, 86) = 13.24$, $p = .00$, $\eta^2 = .133$, showing a medium effect size for this variable. Likewise, there was a significant effect for task condition, $F(1, 86) = 5.74$, $p = .01$, $\eta^2 = .06$ (a medium effect size). Similar results were obtained for the delayed posttest. Again, the interaction between task complexity and task condition was not significant, $F(1, 86) = 1.14$, $p = .28$, $\eta^2 = .01$. Tests of main effects revealed a significant effect for task complexity and condition, $F(1, 86) = 7.33$, $p = .008$, $\eta^2 = .07$ for task complexity and $F(1, 86) = 8.95$, $p = .004$, $\eta^2 = .09$ for task condition. These results indicated that task complexity and task condition affected the syntactic complexity of the participants' writing who received WCF on their output. Of course, the effect size of these variables was medium.

DISCUSSION

Findings regarding the role of task complexity and task condition in learners' gain from written feedback (research question 1) revealed that task complexity affected the accuracy of the participants in the immediate posttest but not in the delayed posttest. However, in both posttests, the learners who performed cognitively simple tasks during the treatment sessions had the highest means in the accuracy of their writing. The other independent variable (task condition) yielded a significant effect on the accuracy of the participants' writing in the two posttests. Simple collaborative tasks combined with written feedback provided more gains for language learners in terms of accuracy.

Similar to our findings, Révész et al. (2014) have reported higher oral production gains for English language learners performing simple tasks. Nevertheless, our findings are not consistent with the study of Révész (2009). She has found more gains for learners who received recasts in complex tasks. Baralt (2013) has found the same results in the FTF mode. However, her study has revealed that learners performing cognitively simple tasks enjoyed the benefits of receiving recasts in the CMC mode. Taking the similarities of the CMC mode and the written mode explored in this study, the findings seem similar in this case. Our findings were not similar to those of Kim and Emeliyanova (2019) who did not find a noticeable difference between the written products (in terms of accuracy) of the language learners who processed corrective feedback individually or collaboratively. Of course, in their study, all participants involved in the treatment sessions carried out the writing tasks individually, and just the correcting of errors was done in pairs.

It seems that the findings do not provide strong support for Skehan's (1998, 2009) trade-off hypothesis and Robinson's (2001, 2009) cognition hypothesis, although better performance (in terms of accuracy) of students placed in the simple groups partially backs up Skehan (1998, 2009). Emphasizing the limited attentional capacity of learners, he argues that learners performing complex tasks have to divide their attention to the writing task prompted by many elements and the points that they have learned through feedback. They prioritize meaning at the expense of form and they don't benefit considerably from the feedback. Ellis & Yuan (2005), taking Kellogg's (1996) model of writing (formulation, execution, monitoring) in view, argue that when learners experience simple task implementation condition, there is a little pressure on formulation processes, as learners are required to retrieve a few ideas from their long-term memory and combine them to provide a proposition. They also engage in the translation processes with relative ease where they choose relevant vocabularies and grammar to encode their ideas. Consequently, learners will have more attentional resources available in the other two stages to reflect on the provided corrective feedback, revise their product, and have an accurate linguistic output.

These findings also corroborate the social constructivist (Vygotsky, 1978) view of language learning and Swain's output hypothesis (1985), which underscore the role of collaboration and social interaction in language learning. Learners who performed the writing tasks collaboratively had the opportunity to deliberate on teacher's feedback together and also get immediate feedback from their peers. These negotiations and interactions between pairs in collaborative writing helped them engage more deeply with the feedback and enjoy the benefits (Wigglesworth & Storch, 2012). As Mujtaba et al. (2021) state, learners who perform the treatment tasks individually and receive unfocused WCF (as with the current study) may encounter problems in effective processing and internalizing the WCF and consequently have little gains from this feedback. The cognitive complexity of the writing tasks might exert more pressure on the attentional capacity of these learners and makes them prioritize targets during conducting cognitively demanding tasks.

The second research question addressed the impact of task complexity and task condition combined with corrective feedback on the syntactic complexity of the written performance of the language learners. The statistical analyses showed a significant effect of task complexity and task condition on the structural complexity of EFL learners' writing. Students who performed complex writing tasks during the treatment sessions and received feedback on their writing did better in the following posttests in terms of their writing complexity. Moreover, participants put in the collaborative groups produced texts with more structural complexity in the posttests, compared to those who performed the treatment tasks with the same level of complexity (simple/complex) in isolation.

Cognitively demanding tasks can encourage learners to use more complex structures in their written performances. A task that requires considering many elements is expected to invite more syntactically complex structure and more varied and specific lexis because learners have to distinguish and compare all the different elements (Michel, 2011). The beneficial effect of task complexity on the structural complexity of the learners' output can also be explained by the arguments put forward by Givón (1985) and Robison (2001). They argue that demanding tasks and contexts encourage higher levels of awareness and elicit a production characterized by greater use of morphology and syntactic subordination. Of course, this small amount of increase in the structural complexity of the texts produced by the learners performing complex tasks and even decrease in the output of the learners performing simple tasks can be due to avoidance strategy exploited by the participants. In other words, language learners who received written feedback tried to yield short and simple sentences in the following tests, thereby receive less feedback on their accuracy.

These findings again support the social constructivist (Vygotsky, 1978) view of language learning, Swain's output hypothesis (1985), and limited attentional capacity of learners advocated by Skehan (1998) and Schmidt (2001). From the cognitive perspective, it can be said that easing the load of attention of learners in collaborative tasks and having two minds in different stages of writing postulated in Kellogg's (1996) model, particularly in the formulation and monitoring stages, leave more attentional resources available for learners to produce more complex sentences and get the benefits of given feedback. The learners who performed the treatment tasks individually had to rely on their own attentional resources and could not get a big advantage form these treatment sessions to improve the structural complexity of their written outputs. It can be argued that each of these variables (task complexity, task condition and WCF) has their own effect on writing performance. Asking learners to write cognitively demanding texts individually along with processing unfocused WCF pushes them to use lots of attentional resources to complete the assigned tasks. Consequently, these learners might lack attentional capacity to notice and process linguistics forms. Schmidt (2001), admitting the limitations of the working memory and human beings' attentional capacity, argues that giving attention to one area leaves less free attentional resources to be exploited in other areas. Collaboration between students in small groups can compensate for these limitations.

CONCLUSION

This study has highlighted the impact of task complexity and task condition on the efficacy of written feedback in affecting the written performance of EFL learners. Theoretically, it lends support to Vygotsky's (1978) social constructivism and Kellogg's (1996) model of writing. Specifically, the results indicate that the synergy between simple tasks and collaborative condition helps language learners make more gain from written feedback and thereby improve the accuracy dimension of their writing. Less pressuring contexts created by simple tasks are optimized by the advantages of using partner's attentional capacity in different stages of writing (formulation, execution, monitoring). This combination provides a suitable context for language learners to make use of the opportunities of focus on form and advance their L2. A similar synergic relationship between complex tasks and collaborative conditions sets the scene for the improvement of language learners in the structural complexity of their writing.

Given the paucity of research on the interaction of task complexity and corrective feedback in the written mode, the findings of the study might have important implications for educational theoreticians and practitioners involved. Writing educators, curriculum developers, and syllabus designers can benefit from these findings. Carefully controlling task complexity and task condition in writing classes may lead to the balanced development of different aspects of writing. For instance, engaging learners in simple collabo-

rative tasks and giving feedback to them is an ideal mix to foster the accuracy of their written product.

It is plausible that a number of limitations have influenced the results obtained. To begin with, only one general measure is used to operationalize the constructs of accuracy and syntactic complexity. Skehan (2014) prefers these general measures, especially for detecting the influence of variables on language learning and development. The second limitation relates to our collaborative groups. The participants in the pair groups chose their partners freely. While performing the treatment tasks, in spite of our instructions and efforts, we noticed that some participants in the pairs were active and dominant. Nevertheless, few learners were standing on the sidelines and didn't involve themselves in collaboration as we expected. Controlling other factors such as "willingness to communicate" might compensate for this drawback. Rather small sample size is the other limitation of this study, which makes it difficult to generalize the findings to the target population.

We are currently in the process of investigating the role of individual differences in the written performance of language learners engaged in performing simple/complex tasks in different conditions (individual/collaborative) while receiving feedback. Further studies might concentrate on other types of writing or use different criteria to make changes in the complexity of the tasks. The moderating role of other individual differences (e.g., willingness to communicate) of learners as well as learning styles and strategies alongside task complexity, task condition, and feedback in writing can be fruitful and promising areas for future studies.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

E. Ghaderi: Conceptualization, Investigation, Formal Analysis, Data Curation, Writing-Original Draft.

A. Rouhi: Conceptualization, Project Administration, Validation.

A. R. N. Tabrizi: Methodology, Resources.

M. Jafarigohar: Supervision, Writing-Reviewing and Editing.

F. Hemmati: Writing-Reviewing and Editing.

REFERENCES

Baralt, M. (2013). The impact of cognitive complexity on feedback efficacy during online versus face-to-face interactive tasks. *Studies in Second Language Acquisition, 35,* 689–725. https://doi.org/10.1017/S0272263113000429

Baralt, M., Gilabert, R., & Robinson, P. (2014). An introduction to theory and research in task sequencing and instructed second language learning. In M. Baralt, R. Gilabert, & P. Robinson (Eds.), *Task sequencing and instructed second language learning* (pp. 1–34). Bloomsbury. http://dx.doi.org/10.5040/9781472593665.ch-001

Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing*, *17*, 102–118. https://doi.org/10.1016/j.jslw.2007.11.004

Byrnes, H., & Manchón, R. M. (2014). Task-based language learning: Insights from and for L2 writing: An introduction. In H. Byrnes & R. M. Manchón (Eds.), *Task-based language learning: Insights from and for L2 writing* (pp. 1–23). John Benjamins.

Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Ellis, R. (2005). Planning and task-based performance: Theory and research. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 1–34). John Benjamins. https://doi.org/10.1075/lllt.11.03ell

Ellis, R., & Yuan, F. (2005). The effects of careful within-task planning on oral and written performance. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 167–192). John Benjamins. https://doi.org/10.1075/lllt.11.11ell

Fernández Dobao, A. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing*, *21*(1), 40–58. https://doi.org/10.1016/j.jslw.2011.12.002

Givón, T. (1985). Function, structure, and language acquisition. In D. Slobin (Ed.), *The cross-linguistic study of language acquisition* (pp. 1008–1025). Lawrence Erlbaum.

Halford, G. S., Cowan, N., & Andrews, G. (2007). Separating cognitive capacity from knowledge: A new hypothesis. *Trends in Cognitive Sciences*, *11*, 236–242. https://doi.org/ 10.1016/j.tics.2007.04.001

Ishikawa, T. (2007). The effect of manipulating task complexity along the [+/–Here-and-Now] dimension on L2 written narrative discourse. In M. P. Garcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 157–176). Multilingual Matters. https://doi.org/10.21832/9781853599286-010

Johnson, M. D. (2017). Cognitive task complexity and L2 written syntactic complexity, accuracy, lexical complexity, and fluency: A research synthesis and meta-analysis. *Journal of Second Language Writing*, *37*, 13–38. https://doi.org/10.1016/j.jslw.2017.06.001

Kang, S., & Lee, J. (2019). Are two heads always better than one? The effects of collaborative planning on L2 writing in relation to task complexity. *Journal of Second Language Writing*, *45*, 61–72. https://doi.org/10.1016/j.jslw.2019.08.001.

Kassim, A., & Luan, N. (2014). The roles of collaborative dialogue in enhancing written corrective feedback efficacy. *Malaysian Journal of ELT Research*, *10*, 16–30. https://doi.org/10.1177%2F1362168819831406

Kellogg, R. T. (1996). A model of working memory in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences and applications* (pp. 57–71). Lawrence Erlbaum.

Kim, Y., & Emeliyanova, L. (2019). The effects of written corrective feedback on the accuracy of L2 writing: Comparing collaborative and individual revision behavior. *Language Teaching Research*. 1–22. https://doi.org/10.1177/1362168819831406.

Kuiken, F., & Vedder, R. (2008). Cognitive task complexity and written output in Italian and French as a foreign language. *Journal of Second Language Writing, 17*(1), 48–60. https://doi.org/10.1016/j.jslw.2007.08.003

Kuiken, F., & Vedder, I. (2011). Task complexity and linguistic performance in L2 writing and speaking: The effect of mode. In P. Robinson (Ed.), *Second language task complexity: Researching the cognition hypothesis of language learning and performance* (pp. 91–104). John Benjamins. https://doi.org/10.1075/tblt.2.09ch4

Larsen-Freeman, D., & Long, M. (1992). *An introduction to second language acquisition research*. Longman.

Liu, Q., & Brown, D. (2015). Methodological synthesis of research on the effectiveness of corrective feedback in L2 writing. *Journal of Second Language Writing, 30*, 66–81. https://doi.org/10.1016/j.jslw.2015.08.011

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie & T. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.

Long, M. H. (2000). Focus on form in task-based language teaching. In R. Lambert & E. Shohamy (Eds.), *Language policy and pedagogy: Essays in honor of A. Ronald Walton* (pp. 179–192). Benjamins. https://doi.org/10.1075/z.96.11lon

Manchón, R.M. (2014). The internal dimension of tasks: The interaction between task factors and learner factors in bringing about learning through writing. In H. Byrnes & R. M. Manchón (Eds.), *Task-based language learning: Insights from and for L2 writing* (pp. 27–53). Amsterdam: John Benjamins. https://doi.org/10.1075/tblt.7.02man

Michel, M. (2011). Effects of task complexity and interaction on L2 performance. In P. Robinson (Ed.), *Second language task complexity: Researching the cognition hypothesis of language learning and performance* (pp. 141–174). John Benjamins.

Mujtaba, S. M., Reynolds, B. L., Parkash, R., & Singh, M. K. M. (2021). Individual and collaborative processing of written corrective feedback affects second language writing accuracy and revision. *Assessing Writing*, *50*, 100566. https://doi.org/10.1016/j.asw.2021.100566

Prabhu, N. S. (1987). *Second language pedagogy*. Oxford University Press.

Rahimi, M., & Zhang, L. J. (2018). Writing task complexity, students' motivational beliefs, anxiety and their writing production in English as a second language. *Reading and Writing, 32*(3), 761–786. https://doi.org/10.1007/s11145-018-9887-9

Révész, A. (2009). Task complexity, focus on form, and second language development. *Studies in Second Language Acquisition*, *31*, 437–470. https://doi.org/10.1017/S0272263109090366

Révész , A., & Han, Z. (2006). Task content familiarity, task type, and efficacy of recasts. *Language Awareness*, *3*, 160 –179. https://doi.org/10.2167/la401.0

Révész, A., Sachs, R., & Hama, M. (2014). The effects of task complexity and input frequency on the acquisition of the past counterfactual construction through recasts. *Language Learning*, *64*(3), 615–650. https://doi.org/10.1111/lang.12061

Robinson, P. (2001). Task complexity, cognitive resources, and syllabus design: A triadic framework for examining task influences on SLA. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 285–316). Cambridge University Press. https://doi.org/10.1075/tblt.1.12tas

Robinson, P. (2003). The cognition hypothesis, task design, and adult task-based language learning. *Second Language Studies*, *21*(2), 45–105.

Robinson, P. (2007). Criteria for classifying and sequencing pedagogic tasks. In M. P. Garcia-Mayo (Ed.), *Investigating tasks in formal language settings* (pp. 7–26). Multilingual Matters. https://doi.org/10.21832/9781853599286-004

Robinson, P. (2009). Syllabus design. In M. H. Long & C. J. Doughty (Eds.), *Handbook of second and foreign language teaching* (pp. 294 –310). Blackwell.

Robinson, P. (2011). Task-based language learning: A review of issues. *Language Learning*, *61*(S1), 1–36. https://doi.org/10.1111/j.1467-9922.2011.00641.x

Robinson, P., & Gilabert, R. (2007). Task complexity, the cognition hypothesis, and second language learning and performance. *International Review of Applied Linguistics*, *45*(3), 161–176. https://doi.org/10.1515/iral.2007.007

Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3–32). Cambridge University Press. https://doi.org/10.1017/CBO9781139524780.003

Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of Second Language Writing*, *20*, 286–305. https://doi.org/10.1016/j.jslw.2011.05.010

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.

Skehan, P. (2009). Modeling second language performance: Integrating complexity, accuracy, fluency and lexis. *Applied Linguistics*, *30*(4), 510–532. https://doi.org/10.1093/applin/amp047

Skehan, P. (2014). The context for researching a processing perspective on task performance. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 1–26). John Benjamins. https://doi.org/10.1075/tblt.5.01ske

Skehan, P., & Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. *Language Learning*, *49*(1), 93–120. https://doi.org/10.1111/1467-9922.00071

Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing*, *14*, 153–173. https://doi.org/10.1016/j.jslw.2005.05.002

Storch, N. (2013). *Collaborative writing in L2 classrooms: New perspectives on language and education*. Multilingual Matters.

Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing. *Studies in Second Language Acquisition*, *32*, 303–334. https://doi.org/10.1017/S0272263109990532

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensive output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House.

Tavakoli, M., & Rezazadeh, M. (2014). Individual and collaborative planning conditions**:** Effects on fluency, complexity and accuracy in L2 argumentative writing. *Journal of Teaching Language Skills*, *5*(4), 85–110. https://doi.org/10.22099/jtls.2014.1857

Vahdat, S., & Daneshkhah, N. (2019). Comparison of the effects of written corrective feedback and task-complexity manipulation on the grammatical accuracy of EFL learners' writing. *Journal of Teaching Language Skills*, *37*(4), 167–194. https://doi.org/10.22099/jtls.2019.33549.2688

VanPatten, B. (1990). Attending to form and content in the input: An experiment in consciousness. *Studies in Second Language Acquisition, 12*(3), 287–301. https://doi.org/10.1017/S0272263100009177

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Weigle, S. C. (2002). *Assessing writing.* Cambridge University Press.

Widdowson, H. (1978). *Teaching language as communication*. Oxford University Press.

Wigglesworth, G., & Storch, N. (2009). Pair versus individual writing: Effects on fluency, complexity, and accuracy. *Language Testing*, *26*, 445–466. https://doi.org/10.1177%2F0265532209104670

Wigglesworth, G., & Storch, N. (2012). What role for collaboration in writing and writing feedback. *Journal of Second Language Writing*, *21*, 364–374. https://doi.org/10.1016/j.jslw.2012.09.005

Wolfe-Quintero, K., Inagaki, S., & Kim, H. (1998). *Second language development in writing: Measures of fluency, accuracy, and complexity***.** University of Hawaii Press.

Zhan, J., Sun, Q., & Zhang, L. J. (2021). Effects of manipulating writing task complexity on learners' performance in completing vocabulary and syntactic tasks. *Language Teaching Research*, 1–22. https://doi.org/10.1177/13621688211024360

APPENDIX A

A Simple Version of the Writing Task

Jack wants to buy an automobile. He wants to buy an automobile which has a **high** engine capacity, **low** fuel consumption, and a **reasonable** price. Look at the information about some automobiles in the following table. No automobile meets all Jack's criteria; however, a reasonable choice has to be made. Which automobile, do you think, is the most suitable one for Jack, considering all of his criteria? **Why**? Write a paragraph using at least 150 words and discuss your answer. Try to convince the reader that your choice is right and support it with arguments.

Automobile	engine capacity (CC)	fuel consumption (liter)	Price ($)
A	1800	8.5	21400
B	2400	8.5	25350
C	2200	8	24520
D	2000	10	22400
E	1600	7	27420

APPENDIX B

A Complex Version of the Writing Task

Jack wants to buy an automobile. He wants to buy an automobile which has a **small** size, a **high** engine capacity, a **fairly heavy** weight, **low** fuel consumption, **high** safety, a **reasonable** price, and **high** speed. Look at the information about some automobiles in the following table. No automobile meets all Jack's criteria; however, a reasonable choice has to be made. Which automobile, do you think, is the most suitable one for Jack, considering all of his criteria? **Why**? Write a paragraph using at least 150 words and discuss your answer. Try to convince the reader that your choice is right and support it with arguments.

automobile	size(mm)	engine capacity (CC)	weight (kg)	fuel consumption (liter)	number of airbags	Price ($)	top speed (km/h)
A	4157×1781×1449	1800	1350	8.5	6	21400	185
B	4045×1675×1597	2000	1450	10	6	25350	195
C	3935×1700×1457	2200	1437	8	4	24520	200
D	4165×1676×1456	2400	1389	7	4	22400	190
E	4007×1776×1519	1600	1502	8.5	4	27420	210
F	4155×1674×1423	2000	1423	7.5	2	26380	220
G	3990×1690×1490	2200	1522	9	2	29450	200
H	4155×1700×1450	1800	1490	6	4	28340	205

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The Effectiveness of Direct and Metalinguistic Written Corrective Feedback to Deal With Errors in the Use of Information-Structuring Connectors

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ABSTRACT

Background. Writing is a complex skill, even more so, if the student does not handle the generic structure of the institutionalized practices imposed on Higher Education.

Purpose. The purpose of this study is to determine the effectiveness of direct and metalinguistic focused written corrective feedback (WCF) on information structuring connectors.

Method. This quantitative study compares focused WCF effectiveness in 39 subjects who are divided into three groups: the first one is the control group, which did not receive feedback, the second is the experimental group 1 that was corrected through direct WCF and the third one corresponds to experimental group 2 that received feedback through metalinguistic cues.

Results. The findings indicate that WCF is effective for the experimental groups. There is a significant decrease in the number of errors of information-structuring connectors in experimental group 2, while experimental group 1 shows a reduction, but without statistical significance. As for the control group, it did not present improvements. In addition, the development of writing tasks corrected through metalinguistic WCF strategies led to textual cohesion improvement with the accurate use of connective devices.

Conclusion. It is important to reflect on the use of focused feedback as part of the writing process, firstly, because writing cannot be taught without reviewing a student's writing, and secondly, considering that focused feedback supports the noticing of errors and decreases teacher correction time.

KEYWORDS

written corrective feedback, information structuring connectors, news

ABBREVIATIONS

WCF (Written corrective feedback), CF (Corrective feedback), L2 (Second language), SLA (Second language acquisition), WC (Written comments), DCF (Direct corrective feedback), ICF (Indirect corrective feedback), L1 (First language), CG (Control group), EGD (Experimental group direct), EGM (Experimental group metalinguistic)

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INTRODUCTION

Corrective feedback (CF) arises as negative evidence from exposure to a language other than the mother tongue, i.e., a learner who is facing the process of learning a Second Language (L2). It is worth mentioning that such evidence in the context of writing practice can be positive or negative; in the former, it only provides learners with models of what is possible and grammatically acceptable; whereas, in the latter, it provides learners with information about what is unacceptable in L2 (Long 1996). At a later stage, Lightbown and Spada (2006) argue that it is not only the teacher who is in charge of making these relevant observations, but also other native or non-native speakers. From the above, it is possible to deduce that CF is a method that can be used both

in formal instructional settings and in natural learning environments.

CF represents a response to a student's inaccurate statement (Ellis et al., 2006; Ellis, 2009), an idea that is also shared by Van Beuningen (2010), who emphasizes that the importance of CF lies in its property of inducing the focus of students' attention to form, so that, according to Sheen (2011, p.1) CF would be "an invitation from the teacher to students to pay attention to the grammatical accuracy of something they have said or written". When considering CF in the area of L2 writing, Coyle and Roca de Larios (2014) specify that feedback is understood as a means to help students improve the quality and efficiency of their texts; while in second language acquisition (SLA), is generally seen as error correction that contributes to students' linguistic development.

From the approaches of L2 and SLA, we can identify feedback as a key element, which relates to the improvement of students' written production, in that sense, by understanding WCF as a pedagogical strategy, it is possible, in the words of Salaberry and Altamirano (2001), to design action plans aimed at achieving learning goals consciously and intentionally. In this context, CF studies arise in the learning and acquisition of second languages (Benson & DeKeyser, 2019); however, approaching feedback as a didactic strategy to improve written production also becomes an opportunity to contribute to the didactics of writing in the first language (L1).

WCF studies in Spanish as an L1 have based their work on providing CF to different grammatical structures to favor error reduction (Ferreira, 2017; Kloss and Ferreira, 2019), and they have also incorporated the concept of Written Comments (WC), which is understood as the process of giving comments to the student, not only from a grammatical perspective but also oriented to text genre (Tapia et al., 2016). From this perspective, WC is understood as an annotation made by the teacher to enable the student to improve his/her written production. In this regard, Bazerman (2004) posits that WC is a pedagogical genre that is part of the writing activity.

For the purpose of this research, we worked with the conceptualization of Written Corrective Feedback (WCF) as proposed by Ellis (2009) but operationalized to Spanish as L1 through two focused WCF strategies. The first one refers to direct WCF in which the teacher identifies the error and provides the student with the correct linguistic form. Ferris (2006) points out that direct CF can be performed in several ways, such as: marking an unnecessary word, phrase, or morpheme; inserting a missing word or morpheme, and writing the correct form on or near the error. The second one refers to metalinguistic WCF, in which the learner is corrected through an implicit metalinguistic comment regarding the nature of the errors the student has made. It is worth mentioning that this technique is less used, as it requires the teacher to have sufficient metalinguistic knowledge to be able to write clear explanations for a variety of errors.

Although it is true that the effects of direct and indirect WCF have been widely studied, it has not yet been robustly determined which strategy is more effective. On this basis, this research also addresses direct WCF, but compares it with metalinguistic CF, considering the relevance of the latter to boost grammatical knowledge (Timofeeva-Timofeev, 2021; Balanga et al., 2016), as well as to generate self-regulation by the student, who must think about the mistake and then attempt its correction, without the teacher providing the correct answer. In this way, scaffolding is generated to aid students to move toward a self-review process (Roger, 2015; Boillos, 2021).

The amount of work around WCF has allowed the construction of an advantageous path that has shown the following:

1) Reformulation, direct corrective feedback (DCF), indirect corrective feedback (ICF), and metalinguistic cues have been effective strategies in Spanish as a foreign language and in English as a foreign language (Ortiz and Ferreira, 2014; Ferreira, 2017; Kloss and Ferreira, 2019).
2) The relative benefits of the different types of feedback are still an unresolved issue.
3) The relative effectiveness of feedback strategies depends on multiple variables, including particular aspects of the language being corrected, the teacher's delivery of the correction, and learner characteristics.

Based on the above, progress has been made in linguistic accuracy with the use of feedback strategies, but this is not enough because there is still no clear knowledge of which strategy would be the most appropriate or effective at each educational level or whether they can be helpful to improve the production of particular genres. Moreover, the studies that have been carried out are mostly focused on English as L1 and L2 and address language structures at the micro level, such as the use of prepositions, number or gender grammatical agreement, use of articles, and morphemes, among others. In this context, it is crucial to study the role of WCF in Spanish as L1 and, as well as, to direct these corrective strategies at a deeper text level (Kloss et al. 2020).

According to Van Dijk and Kintsch's (1983) model, the text is organized into three levels of comprehension: microstructure, macrostructure, and superstructure. The microstructure refers to the local and superficial elements that make a text cohesive, the macrostructure is "a representation of the overall meaning structure of a text" (Van Dijk,1978, p.55). Finally, the superstructure corresponds to "a type of abstract schema that establishes the overall order of a text and is composed of a series of categories, whose possibil-

ities of combination are based on conventional rules" (Van Dijk, 1978, p.144).

In relation to the three levels described above, studies on feedback have proliferated at the first level, that is, the microstructure. Unlike this research, in which the WCF strategy will be aimed at the second level, i.e., the macrostructure, using connective elements that favor the organization of ideas. It is relevant to address these textual elements because they mark on the textual surface the logical relationships that occur between sentences, between textual segments, or between macropropositions so that they can be interpreted as belonging to a larger unit, the text (Montolío, 2014). In addition, they allow the articulation of the textual superstructure, through its chronological narrative texture, which serves to characterize the news as an informative journalistic genre.

Information structuring connectors are mechanisms of textual cohesion, which allow sentences to be connected to each other to clearly understand the discourse. Montolío (2015) exemplifies these relationships:

> *"Soon it will be good weather"- "I will go to the gym every afternoon".*

Not being given additional information, we will not know what the logical-semantic relationship established between sentences is. Then, given the fact that connectors guide inference processes, we can point out that they will function in the text as signals that a writer distributes throughout his discourse so that the reader can interpret the path traced without major complications.

There are different typologies for labeling connecting elements, which in Spanish are organized according to certain features, namely: additive connectors, counter-argumentative, consecutive, causal, and organizers (Portolés, 2014; Montolío, 2015). Therefore, connecting elements contribute to the informative structure of the discourse, adding, contrasting and rectifying information.

The present study contributes to two thematic areas, the first one is the use of WCF in Spanish as L1, and the second one corresponds to feedback provision at a macrostructural level, specially the use of information-structuring connectors, whose function is to organize the text, i.e., to present different thematic aspects in a way that facilitates the reader's interpretation of data. Thus, they mark the logical relationships between sentences on the textual surface, between textual segments, or between macropropositions, so that they can be interpreted as belonging to a larger unit, the text.

The objective of this research paper is to compare the effectiveness of direct and metalinguistic focused written corrective feedback (WCF) in the reduction of errors in the use of information structuring connectors elicited through the writing of the news genre in L1. The hypotheses of the study are formulated as follows:

H1. Direct written corrective feedback represents a strategy that favors the reduction of errors in the use of information structuring connectors in journalistic news / H01. Direct written corrective feedback is a strategy that does not favor the reduction of errors in the use of information structuring connectors in journalistic news.

H2. Metalinguistic written corrective feedback with grammatical description represents a strategy that favors the reduction of errors in the use of information structuring connectors in journalistic news / H02. Metalinguistic written corrective feedback with grammatical description does not represent a strategy that favors the reduction of errors in the use of information structuring connectors in journalistic news.

H3. The control group that did not receive written corrective feedback, but only general comments, reduced the number of errors in the use of information structuring connectors in journalistic news / H03. The control group that did not receive written corrective feedback, but only general comments, did not accurately use information structuring connectors in journalistic news.

METHOD

Study Design

This study presents a longitudinal experimental design because it considers three types of measures: pretest, immediate posttest, and delayed posttest (Bitchener, 2008), through a linguistic intervention focused on informative news writing. One of the strengths of this type of study is the way in which the acquisition of structures is measured, as it incorporates a longitudinal measure of improvement in grammatical accuracy.

The linguistic intervention lasted a total of ten weeks, namely: in week one a pre-test was administered, and writing tasks were carried out from week two to week five. While in week six, an immediate post-test was applied and, finally, in week ten, the delayed post-test was conducted.

Participants

The population consisted of 49 first-year journalism students[1]. However, for measurement purposes, participants were selected according to the following inclusion criteria: 1) Incoming first-year students, i.e., taking the writing course for the first time. 2) Writing task sequence completion, i.e., participation in the 10 sessions that were part of the intervention. 3) Their participation was voluntary after signing an informed consent form.

Finally, according to the inclusion criteria, the sample consisted of 39 students, who were organized into three groups of 13 subjects each.

The selection was random, and three groups were identified: Control Group (CG), which did not receive WCF; Experimental Group 1 (EGD), which received direct WCF; and Experimental Group 2 (EGM), which received WCF through metalinguistic cues (see Table 1). The 39 subjects, whose ages ranged from 18 to 20 years old, wrote the papers in a natural language context, namely, in a writing course taught in the first semester of a journalism course at a Chilean university.

Instruments

The instruments corresponded to three tests that were used to measure students' linguistic accuracy in the use of information structuring connectors on three occasions. The pretest consisted of a writing task of a 400-word news item in the field of politics. To do so, students entered the Moodle platform where the activity was displayed, read the instructions, and wrote their text. This task favored the elicitation of the linguistic connective structures, according to the objective of the study.

Concerning the immediate post-test, students were requested to write a 400-word news item on Chilean public health. The immediate post-test was applied in the sixth week to evaluate the learning of information structuring connectors.

To conclude the linguistic intervention, in the tenth week, the delayed post-test was applied to evaluate long-term retention and transfer of the new knowledge acquired during the different interventions of the treatment. In this case, the students wrote a 400-word news item on a science topic on water resources in Chile. Table 2 shows the summary of the three measurement tests.

Description of the Treatment Tasks

The writing tasks were implemented on a Moodle learning management platform. In this environment, activities were devised to encourage news writing. The researchers selected this journalistic genre because it allows, according to its narrative-descriptive discursive texture, to elicit the use of information structuring connectors.

After the pre-test, a five-week treatment process was carried out. Figure1 shows the sequence of each of the writing sessions. It is worth mentioning that the treatment tasks were the same for the three groups and were applied for 5 weeks, following a linear structure of beginning, development, and closing in each class. After the post-test was applied, students work on reading and vocabulary exercises (weeks 7-9). Finally, a delayed post-test was given to students three weeks after the post-test (week 10).

Figure 1 presents the phases of each class session. This was divided into three stages, the initial phase, previous knowledge related to the writing task is activated, and grammatical scaffolding is provided through brief exercises on the platform, such as: rearranging sentences in a text, sentence completion and determining textual cohesion. In the second phase, students wrote a news-type informative text. Finally, in the third phase, students are guided to metacognitive reflection answering questions about what they had learned during the class or about what content had been complex. Some of the questions were: What did you learn today about the function of connective elements? Was there any topic that was difficult for you and that you need to continue working on? What did you learn today? among others. It is worth mentioning that this class cycle was repeated during all the writing sessions, that is, once a week, as part of the linguistic intervention.

Correction of Writing Tasks

During the five-week intervention process, students wrote a weekly news item, which was checked by the teacher in charge of the course and two research assistants. Each of them individually corrected between 12 and 15 texts per week, and then the team met to agree on the criteria for the correction provided to each student, according to the WCF strategies chosen to be applied to this intervention. The pro-

1 These students completed 12 years of formal education (primary and secondary). According to the Ministry of Education (Ministerio de Educación, 2021), these students should be able to: (1) produce coherent and cohesive written texts to communicate their analysis and interpretations of texts, state their position, and explore creatively with language; (2) apply a writing process according to their purposes, the selected discursive genre, topic, and audience; (3) adapt the text to genre convention, and the audience's characteristics (knowledge, interests, cultural conventions). Ministerio de Educación. (2021). Objetivos de aprendizaje de la asignatura Lengua y literatura para 4° medio [Learning objectives for Language and Literature for 4th grade]. https://www.curriculumnacional.cl/614/articles-40135_programa_feb_2021_final_s_disegno.pdf

Table 1
Participant Identification

Groups	Identification	Type of feedback received
CG	Control Group	Received general comments, such as: "well done", "you need to improve", "good idea, keep on working".
EGD	Direct WCF	Received explicit comments regarding the correct connector that was needed in the text, e.g, "there, you should have used however, not but."
EGM	Metalinguistic FCF	Received metalinguistic WCF comments, such as: "you noticed that you used a marker that expresses beginning with a topicalizing function when you need to conclude your writing. Therefore, you need a connector that allows you to perform a discursive closure, such as epilogue or synthesis".

Table 2
Application of Measurement Test (Own Elaboration)

Evaluation moment	Week	Field	Task	Length	Time	Place
Pre-test	1	Politics	Informative text	400 words	90 min	Computer Lab
Post-test	6	Health	Informative text	400 words	90 min	Computer Lab
Delayed post-test	10	Science	Informative text	400 words	90 min	Computer Lab

cedure for delivering the WFC for each of the experimental groups was as follows:

- The three specialists checked the texts and gave direct feedback to experimental group 1, metalinguistic feedback to experimental group 2, and general comments to the control group. It should be noted that all groups performed the same tasks.
- The day before a new writing task was assigned, the correction of the previous task was released on the Moodle platform, which students reviewed, and about which they wrote down their doubts regarding the feedback in the class forum. These concerns were resolved by the responsible researcher on the same day. The review of the feedback was mandatory for all students.
- Students started a new text, and once they did that, they were not allowed to access to the previous assignment or the feedback again.
- This process was repeated in the 5 sessions of treatment, as students wrote new texts in each class.

Data Analysis Procedure

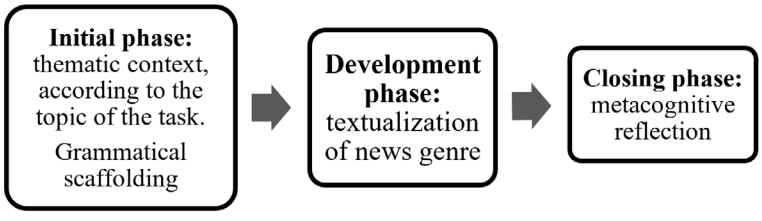
In order to analyze the pre, post and delayed post-test results, errors made by the students were counted. Cassany (2014) points out that the error is the product of a defect in linguistic competence: errors are made when the writer does not know a grammatical rule, a word, among others. Therefore, measuring errors makes it possible to examine the degree of accuracy with which students use a linguistic element. In this case, the measurement of errors shows the level of performance in the use of information structuring connectors.

To ensure the validity of the procedure and avoid bias, the research team agreed on the criteria for error identification, and also met to review the tests together.

RESULTS

The experiment included an independent and a dependent variable; the independent variable corresponds to each of the three groups (two experimental and one control), and

Figure 1
Class Cycle (own elaboration)



the dependent variable refers to the difference in the decrease of the errors focused on in this study, that is, the use of information structuring connectors when comparing the pre-test, the immediate and delayed post-tests.

Counted errors were processed and analyzed with the Statistical Package for the Social Sciences (SPSS) program. This program allows us to examine both the frequency distributions for each variable and the relationships between them. The relevant statistical models for this study correspond to the one-factor ANOVA parametric tests. Once this test was applied, a T-test for related samples was used.

The Measure of Central Tendency, Frequency, and Perentages for the Pre-Test

Once the pretest was applied to each of the sample groups, it could be established that group EGM presented an average of 2.77, with a minimum of 1 and a maximum of 4 errors, and a deviation of 1.23 dispersion units in relation to the average value. Group EGD, meanwhile, obtained an average of 1.92 errors with a minimum of 0 and a maximum of 3. The deviation for this group was 1.08 dispersion units. Group CG, finally, showed an average of 2.08 with a minimum of 1 and a maximum of 4 errors. Its deviation was 1.115 dispersion units. From an analytical point of view, it can be said that, when comparing the three groups based on the standard deviation, the dispersion behavior of the data distribution is similar, which indicates that, despite presenting different averages, recurrence of errors appears regularly in the time and space of the research.

However, when calculating Spearman's variation, which seeks to measure the magnitude of the variability of the distribution between groups, group EGM in comparison with group EGD showed a difference of 1.21%, indicating that there is almost twice that of group EGM over group EGD. Group EGM differed from group CG by 1.20%. Finally, when group EGD and group CG were compared, the difference increased slightly, with a coefficient of 0.99%.

In relation to the frequencies and their graphical expression in percentage, it was observed that out of the 39 participants of the pre-test 15.38% of participants made 4 errors, 30.71% failed 3 times, 23.07% on 2 occasions, 25.64% made 1 error and 5.12% had 0 error. Figure 2 shows the distribution of errors and shows that most of the evaluated individuals made between 1 and 3 errors, which represents 79.47% of the total population.

After the linguistic intervention was administered, the students took an immediate post-test (week six). The results of the central tendency analysis indicated the following: Group EGM presented an average of 0.46 errors with a minimum of 0 and a maximum of 2 faults, with a deviation of 0.660 units of dispersion in relation to the average value. Group EGD, meanwhile, obtained an average of 1.85 errors with a minimum of 0 and a maximum of 4. The deviation for this group was 1.11 dispersion units. Finally, Group CG, showed an average of 2.54 with a minimum of 1 and a maximum of 5 errors. The observed deviation was at 1.26 dispersion units.

When the groups were compared based on the standard deviation, the dispersion behavior in the data distribution was moderately similar, which indicates that despite showing ~~a~~ group EGM distanced from group EGD and GC (EGD and CG tending to be similar), the results were rather homogeneous. However, when calculating Spearman's variance, group EGM in comparison with group EGD shows a difference of 0.42%, indicating that there is a short gap, less than one in the number of times, of group EGM over group EGD. Similarly, group EGM differs from group CG by 0.35%. Meanwhile, when group EGD and group CG are compared, the difference increases, with a coefficient of 0.98%.

When observing the frequencies and their percentual expression (figure 3), of the total of the subjects, 2.56% made 5

Figure 2

Measure of Central Tendency, Frequency, and Percentages for the Pre-Test

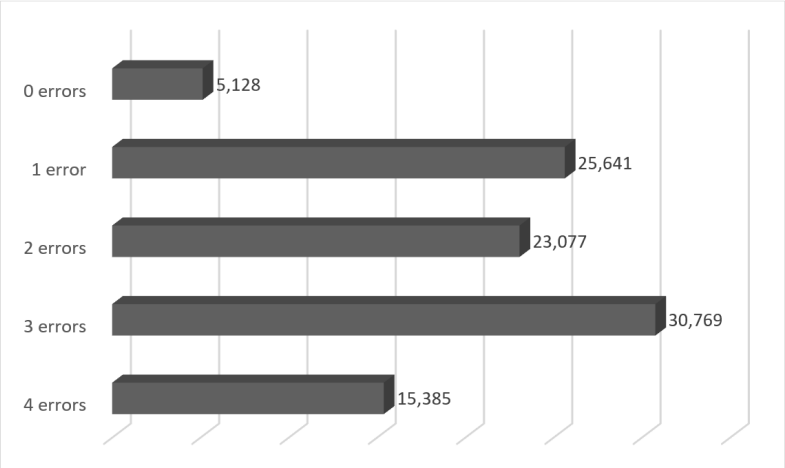
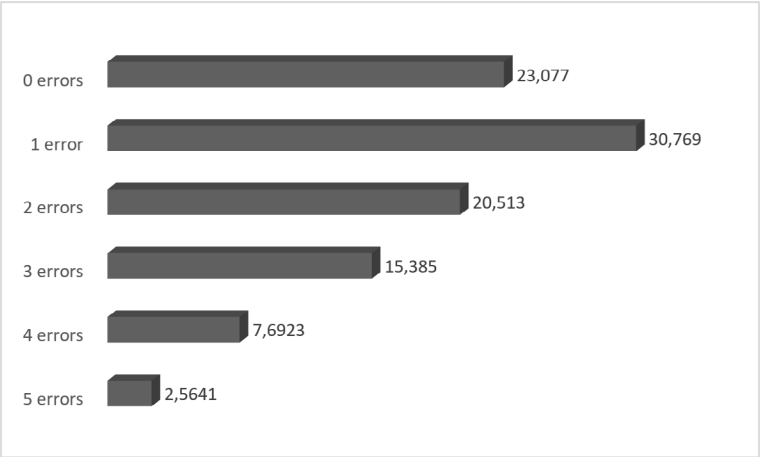


Figure 3

Measure of Central Tendency, Frequency, and Percentages for Immediate Post-Test



errors during the immediate post-test, 7.89% failed 4 times, 15.38% on 3 occasions, 20.51% made 2 errors, 30.76% made 1 error and 23.07% had 0 error. Most of the evaluated participants during this stage of the investigation had between 0 and 2 errors approximately, which represented 74.34%.

With respect to the analysis of central tendency carried out on the data obtained from the application of the delayed post-test to the sample, the results were as follows: Group EGM presented an average of 0.31errors with a minimum of 0 and a maximum of 1, and a deviation of 0.48 dispersion units in relation to the average value. Group EGD, meanwhile, obtained an average of 1.92 errors with a minimum of 0 and a maximum of 3. The deviation for this group was 1.11 dispersion units. Group CG, finally, showed an average of 2.85 with a minimum of 1 and a maximum of 6 errors. Its deviation was 1.51 dispersion units.

When the groups were compared based on the standard deviation, the dispersion behavior of the data distribution showed a difference between Group EGM and Group EGD in the same way that Group EGD distances itself from CG. Group CG dispersed from EGM twice EGD approximately, indicating that the recurrence of errors appears regularly in the time and space of the research. When calculating Spearman's variance group EGM compared to group EGD, it shows a difference of 0.37%. Group EGM differed from group CG by 0.34%, exhibiting a close relationship. When group EGD and group CG were compared, the difference increased by 0.92%.

When observing the frequencies and the percentual expression of the total number of participants, 2.56% made 6 mistakes, 2.56% did in 5 times, 5.12% on 4 occasions, 17.94% 3 times, 23.07% failed 2 times, 20.51% failed 1 time and 28.20% had 0 error. Figure 4 below shows the descriptive distribution of the results, highlighting that most of the individuals evaluated during this stage of the research were found to have between 0 and 2 errors approximately, representing 71.78% of the population.

Analysis of Results in the Use of Information Structuring Connectors

To analyze the presence of information structuring connectors in the news, the measure of analysis used was the counting of errors made by the students. This measure examines the degree of accuracy with which students use the selected linguistic form, i.e., discourse markers with organizational value. Table 3 presents the total number of errors in the use of connective elements used in the writing of news items in the pretest, immediate post-test, and delayed posttest.

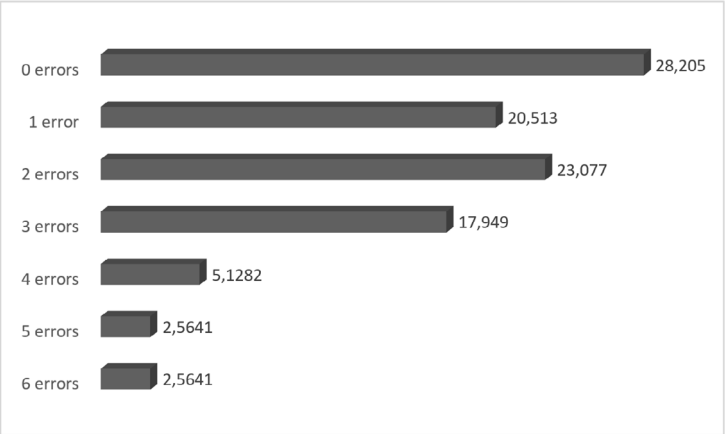
Table 3, in the second row, shows the intervention groups: control group, which received no feedback but a general comment, experimental group GD, which received direct feedback, and group GM, which received feedback through metalinguistic cues.

The total number of errors of the three groups in the pretest corresponded to 88, while, in the second measurement, the errors decreased to 63 and, in the last measurement, the errors increased slightly to 66. This is because GM decreased its errors in the use of connectives, but the control group increased considerably.

The errors committed by EGM decreased from 36 in the first instance to 6 in the post-test, by the end of the intervention, producing only 4 errors (delayed post-test). In this sense, these results are related to those found by Kloss et al. (2020), who indicate that implicit correction is adequate for the student to notice and repair his errors. Therefore, the metalinguistic strategy specifies the importance of reflection within the correction, which ensures that error repair is maintained in the long run.

Figure 4

Measure of Central Tendency, Frequency, and Percentages for Delayed Post-Test



Data Normalization

Once the uses of information structuring connectors were counted, we worked only with the errors made by the students in the three measurements. However, for the purpose of data normalization, a range of values was established that were later introduced into the SPSS statistical software. Ranges: 0 errors: 0/ 1 error: 1/ 2 errors: 2/ 3 errors: 3/ 4 errors: 4/ 5 errors: 5/ 6 errors: 6.

According to the KS normality test the data are normally distributed, therefore, the assumption of normality is confirmed in the three group -group CG- experimental 1 -group EGD- and experimental 2 -group EGM- (Statistics at .071 and .200*; gl:13; p>0.5).

The second assumption of normality corresponds to the independence of the observations: at this point it can be argued that the individuals composing the groups are different. Then, in the third assumption, regarding the equivalence of groups, the sample sizes are equal in each group, which ~~it~~ is an indication that there is an equivalence of groups in the populations. In this sense, the test of independence of observations and the test of equivalence are verified.

Test for Homogeneity of Variance

Once the data were normalized, the test for homogeneity of variance was applied to the pre-test.

The LEVENE homogeneity of variance test indicates that the assumption is met (Statistic .454; gl1:2 and gl2:36; p> a .05).

One-Factor Analysis of Variance

To compare the average of the three groups that make up the experiment, a one-way ANOVA was used to test the difference between the averages of the groups compared.

On the one-way ANOVA test, as the research hypothesis is that there is a difference, then the null hypothesis is that

Table 3

Total Errors of Information Structuring Connectors Used in the Study: Pre-Test, Post-Test, and Delayed Post-Test

Evaluation moment	Pre-test				Immediate post-test				Delayed post-test			
Groups	CG	EGD	EGM	**total**	CG	EGD	EGM	**total**	CG	EGD	EGM	**total**
Nº errors	27	25	36	**88**	33	24	6	**63**	37	25	4	**66**
Total %	**30,7**	**28,4**	**40,9**	**100**	**52,4**	**38,1**	**9,5**	**100**	**56**	**37,9**	**6,1**	**100**

Table 4

Normality Tests

Statistical study groups		Kolmogorov-Smirnov [a]			Shapiro-Wilk		
	Statistics	**gl**	**Sig**	**Statistic**	**gl**	**Sig**	
Pre-test	Group EGM	,225	13	,071	,827	13	,014
	Group EGD	,235	13	,048	,851	13	,029
	Group CG	,181	13	,200*	,938	13	,436

Table 5

Test for Homogeneity of Variance

Levene Statistic	gl1	gl2	Sig.
,454	2	36	,638

Table 6

One-Way ANOVA for the Three Measurements

		Sum of squares	df	Mean square	F	Sig.
Pre-test	Between groups	5,282	2	2,641	2,060	,142
	Within groups	46,154	36	1,282		
	Total	**51,436**	**38**			
Post-test	Between groups	29,077	2	14,538	13,034	,000
	Within groups	40,154	36	1,115		
	Total	**69,231**	**38**			
Delayed post-test	Between groups	42,923	2	21,462	17,024	,000
	Within groups	45,385	36	1,261		
	Total	**88,308**	**38**			

Table 7

Multiple Comparisons

Tukey's HSD			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
Dependent variable	**(I) Study groups**	**(J) Study groups**	**Lower Bound**	**Upper Bound**			
Pre-test	EGM	EGD	,846	,444	,152	-,24	1,93
		CG	,692	,444	,276	-,39	1,78
	EGD	EGM	-,846	,444	,152	-1,93	,24
		CG	-,154	,444	,936	-1,24	,93
	CG	EGM	-.692	,444	,276	-1,78	,39
		EGD	-154	,444	,936	-,93	1,24
Post-test	EGM	EGD	-1,385*	,414	,005	-2,40	-,37
		CG	-2,077*	,414	,000	-3,09	-1,06
	EGD	EGM	-1,385*	,414	,005	,37	2,40
		CG	-,692	,414	,230	-1,70	,32
	CG	EGM	2,077*	,414	,000	1,06	3,09
		EGD	,692	,414	,230	-,32	1,70
Delayed post-test	EGM	EGD	-1,615*	,440	,002	-2,69	-,54
		CG	-2,538*	,440	,000	-3,61	-1,46
	EGD	EGM	1,615*	,440	,002	54	2,69
		CG	-,923	,440	,105	-2,00	,15
	CG	EGM	2,538*	,440	,000	1,46	3,61
		EGD	,923	,440	,105	-,15	2,00

there is no difference between groups. The significance is above .05 (p<.142) in the pretest, which indicates that before the treatment there is no difference. However, in the immediate post-test and delayed post-test, there are differences between the groups, due to the effect of the treatment.

Therefore, the null hypothesis is rejected and the research hypothesis is accepted, i.e., there is a difference between the groups for the immediate post-test (F(13.034); p<.000) and the delayed post-test (F(17.024); p<.000).

A Tukey's post hoc test was applied to determine whose group's means are significantly different from other group means.

According to Tukey's post-hoc test, it is observed that significant differences are found in the metalinguistic group (EGM), which is presented with a significance .152 in the pre-test, .005 in the immediate post-test, and .002 in the delayed post-test.

As it can be seen, differences are found between the groups that received and did not receive treatment. However, significant differences are only present in the metalinguistic group (p<.05).

T-Test for Independent Samples

Once the normality of the data has been evaluated, the t-test for independent samples is carried out.

Table 8 presents the descriptive statistics for each of the groups being compared. In this table, we analyzed whether the group averages are in accordance with the research hypothesis. In this case, the averages of the two groups were consistent with the research hypothesis, i.e., there are differences. Therefore, we proceed to analyze the results of the student t-test to determine the statistical significance of the difference between these averages.

In analyzing table 9, we first proceed to evaluate the assumption of equal variances between the groups being compared. In the pre-test, there is no significant difference between the groups p.05. So, the variances of both samples are equal. Regarding the immediate post-test p<.05. Therefore, the results in favor of the metalinguistic strategy are demonstrated, as well as in the delayed post-test p<.05.

In relation to the hypotheses proposed in this study, we can point out that hypotheses 1 and 2 are proven since there is a difference between groups that received feedback (EGD and EGM). Therefore, metalinguistic feedback has significant results in the short and long term over the control group that did not receive feedback and the experimental group 1 (EGD) that was corrected through direct feedback.

Table 8

Group Statistics

	Study groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	EGM	13	2,77	1,235	,343
	EGD	13	1,92	1,038	,288
Post-test	EGM	13	,46	,660	,183
	EGD	13	1,85	1,144	,317
Delayed post-test	EGM	13	,31	,480	,133
	EGD	13	1,92	1,115	,309

Table 9

Independent Samples Test

		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig	t	df	Sig. (2-tailed)	Mean Differ	Std. Error Differ
Pre-test	Equal variances assumed	,787	,384	1,891	24	,071	,846	,447
	Equal variances not assumed			1,891	23,307	,071	-846	,447
Post-test	Equal variances assumed	3,913	,059	-3,781	24	,001	-1,385	,366
	Equal variances not assumed			-3,781	19,200	,001	-1,385	,366
Delayed-post-test	Equal variances assumed	5,883	,023	-4,797	24	,000	-1,615	,337
	Equal variances not assumed			-4,797	16,305	,000	-1,615	,337

Therefore, to respond to our research objective, it can be argued that the most effective strategy to reduce errors in the use of information structuring connectors in news writing is the focused metalinguistic written corrective feedback. While the direct strategy used in EGD showed some improvement, it did not show statistically significant differences as did the control group.

DISCUSSION

When focusing on the results of the linguistic intervention, they demonstrate the effectiveness of the metalinguistic WCF in the use of information structuring connectors (Bozorgian & Yazdani, 2021; Pourdana, et al., 2021), but before just addressing the statistical significance of the results, it is important to consider that the strategy was favorable in the research context, that is, first-year university students. Because, although some research demonstrates the effectiveness of this type of feedback in elementary education (Timofeeva-Timofeev, 2021); we consider that the success of the metalinguistic strategy was due to the academic context (Valizadeh, 2022) and to the use of writing tasks that elicited a reflective mastery of language.

One recommendation for the metalinguistic WCF strategy to be fully useful is that students who are given feedback through cues should have an adequate grammatical level to understand the information provided, otherwise their linguistic accuracy will not improve because they will probably be unable to understand the feedback. On that basis, we consider it is important not to deliver a strong recommendation on the effectiveness of one strategy over the other, but rather to examine students` characteristics, to know how they feel when they receive the written comments with the purpose of selecting a relevant strategy. This should point towards reflection so that the student develops critical reading of their work, strengthening the process of self-regulation (Gallego et al., 2015). The importance of this point lies in the fact that pedagogical choices should be adjusted to the students`needs as writers (Myhill et al., 2018).

Another element to consider in this research is the use of focused feedback. Specialists in the field (Bitchener & Knoch, 2008; Ellis et al., 2008) state that giving feedback on all the errors in a text is not beneficial, since the student does not fully understand or process all the information provided by the teacher. In addition, developing a focused revision allows working on written production on a constant basis during classes, even when the number of students is too large since the teacher concentrates on reviewing a limited number of grammatical forms. In addition, this focusing strategy allows the teacher to correct errors accurately and in a timely manner, and students are empowered to notice the CF by focusing their attention to those forms that are wrong or inappropriate to promote the necessary linguistic adjustments to facilitate learning.

As for direct WCF, the results show that it is not effective, since students did not reduce errors in the use of information structuring connectors when corrected through this strategy, which is in line with Ferris and Robert (2001) and Sheen (2011), who argue that implicit WCF is more effective because it helps students correct errors in activities that deal with problem-solving, while direct WCF does not favor the retention of the corrected forms in the long term.

Another important aspect when providing feedback is to determine the error or errors to be addressed. In this study, we selected information structuring connectors because they are a key element to guide the organization of informative texts with narrative texture, such as news reports. Thus, we point out that the textual superstructure must be related to the form of treatment that will be selected to facilitate the elicitation of this language structure.

Finally, it is important to mention that the writing tasks were mediated in a technological context because considering the time of isolation suffered by the world due to the COVID-19 pandemic, and the changes to which student training was subjected; working with a digital platform allows for the generation of meaningful learning, despite the modality in which it is taught. Likewise, another advantage of working with the Moodle platform lies in the correction process carried out by the teacher, who can submit written comments to each text, and which in turn can be immediately reviewed by the student.

CONCLUSION

In relation to the objective of this study, we can point out that the results of the effects of WCF are encouraging. The development of writing tasks corrected by means of metalinguistic strategies leads to writing improvement with higher accuracy levels in the use of information structuring connectors in the long-term. This is in line with previous studies (Bozorgian & Yazdani, 2021; Pourdana, et al., 2021), that have compared direct and indirect metalinguistic strategies, concluding the supremacy of the latter.

Regarding the research hypotheses, we were able to verify that the most effective strategy for error reduction of information structuring connectors is the use of metalinguistic cues, therefore, we corroborated that there are differences between groups and that the group that was corrected by means of metalinguistic WCF would present a greater reduction in the number of errors, which was verified with statistical significance. According to the WCF strategies used, we were able to confirm that providing feedback leads to an improvement in the use of the selected grammatical form.

The design of the linguistic intervention corresponds to a work plan which requires students to focus their attention to meaning mainly, by making use of their available linguis-

tic resources (Estaire, 2011), thus joining the students 'need to produce texts in a specific and appropriate context, understanding the natural environment in which a journalism students develop and at the same time fostering connective elements learning to favor text writing. Given the linguistic intervention and the characteristics of the sample, we can point out that the implicit strategy is the most adequate for this discursive genre and for this linguistic form, which was evidenced in the increase in favor of the metalinguistic strategy in the immediate post-test and in the delayed post-test. Regarding the sample, we outline the following reflection, metalinguistic feedback is relevant to this group of university students, who have finished their twelve previous years of schooling, in the form of grammatical scaffolding to understand the clues provided by the teacher. It is worth mentioning that the effectiveness of this strategy should be investigated more accurately in younger students with less grammatical proficiency

It should be noted that the results show the effectiveness of metalinguistic cues as opposed to direct correction. This is interesting because teachers mostly focus their efforts on giving explicit feedback (Lee, 2003; Lee 2004; Quintanilla et al., 2018; Kloss & Ferreira, 2019), that is, they tend to correct the errors by providing the correct answer, which leads us to reflect on two axes: first, the effectiveness of the strategy used, and second, teachers' knowledge regarding error correction.

The empirical evidence obtained in this study suggests that there are statistically significant results that support conclusions generalizable to other settings, i.e., the increase in the means achieved by EGM shows an improvement in the accuracy of the studied form. This result supports the use of implicit WCF as a facilitating technique for improving the use of information structuring connectors in L1, thus providing evidence about the usefulness of the strategy used for learning journalistic writing, thus confirming our research hypothesis about the effectiveness of focused metalinguistic WCF.

The pedagogical contributions of this study evidence that metalinguistic WCF is a technique for correcting written errors that aids in the improvement of the accurate use of information structuring connectors. This methodological strategy allows addressing the grammatical treatment of certain linguistic forms. Also, the development of writing as a productive skill and as a means for learning emerges as a highly pertinent complementary option for large classes. Finally, the focused metalinguistic WCF represents a technique that facilitates the teaching task, since it demands self-repair on the part of the student.

The limitations of this study reveal that WCF is still a controversial topic that can be studied from different fields, whether it is the genre format or the variation of the grammatical form(s) under study. In this sense, as a projection, it would be appropriate to expand this corrective strategy to other contexts. Likewise, the guidelines for feedback should not only focus on teacher correction (Quintanilla et al., 2018; Andújar & Cañada, 2021) but also move towards self-revision and peer evaluation (Gravett & Kinchin, 2020; Kloss & Quintanilla, 2020). Several researchers (Roger, 2015; Boillos, 2021) suggest that peer review is reasonable and successful, so from the didactics of writing these methodological models should be incorporated to be tested and replicated in the classroom.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

S. Kloss: conceptualization, data curation, methodology & writing original draft.

A. Q. Espinoza: conceptualization, conclusions, writing-review & editing.

REFERENCES

Andújar, M., & Cañada, M.D. (2021). Modalidades de retroalimentación correctiva escrita: estudio exploratorio de prácticas docentes en el aula de traducción [Modalities of Written Corrective Feedback: An Exploratory Study of Teaching Practices in the Translation Classroom]. *REDIT: Revista electrónica de didáctica de la traducción y la interpretación*, (14) 50-72. http://dx.doi.org/10.24310/REDIT.2020.v1i14.13726

Balanga, R. A., Fidel, I. V. B., Gumapac, M. V. G. P., Ho, H. T., Tullo, R. M. C., Villaraza, P. M. L., & Vizconde, C. J. (2016). Student beliefs towards written corrective feedback: The case of Filipino high school students. I-*Manager's Journal on English Language Teaching,* 6(3), 22–39. https://doi.org/10.26634/jelt.6.3.8176

Bazerman, Ch. (2004). Speech acts, genres, and activity systems: How texts organize activity and people. In P. Prior & Ch. Bazerman (Eds.), *What writing does and how it does it* (pp. 309-339). Lawrence Erlbaum.

Benson, S., & DeKeyser, R. (2019). Effects of written corrective feedback and language aptitude on verb tense accuracy. *Language Teaching Research*, 23(6), 702–726. https://doi.org/10.1177/1362168818770921

Bitchener, J. (2008). Evidence in support of corrective feedback, *Journal of Second Language Writing, 17*, 102-118. https://doi.org/10.1016/j.jslw.2007.11.004

Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research, 12*(3), 409-431. https://doi.org/10.1177/1362168808089924

Boillos, M. (2021). Incidencia de la revisión por pares en la construcción de textos académicos a nivel Universitario [Incidence of peer review in the construction of academic texts at the university level]. *Revista DELTA*, 37(3), 1-21. https://doi.org/10.1590/1678-460X202153017

Bozorgian, H., & Yazdani, A. (2021). Direct Written Corrective Feedback with Metalinguistic Explanation: Investigating Language Analytic Ability. *Iranian Journal of Language Teaching Research*, 9(1), 65-85. https://doi.org/10.30466/ijltr.2021.120976

Cassany, D. (2014). *Reparar la escritura. Didáctica de la corrección de errores* [Repair writing. Didactics of written error correction]. México: Graó.

Coyle, Y., & Roca de Larios, J. (2014). Exploring the role played by error correction and models on children's reported noticing and output production in a L2 writing task. *Studies in Second Language Acquisition*, *36*(3), 451-485. https://doi.org/10.1017/S0272263113000612

Ellis, R. (2009). A typology of written corrective feedback types. *ELT Journal*, *63*(2), 97-107. https://doi.org/10.1093/elt/ccn023

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in English as a foreign language context. *System*, *36*(3), 353-371. https://doi.org/10.1016/j.system.2008.02.001

Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, *28*, 339-368. https://doi.org/10.1017/S0272263106060141

Estaire, S. (2011). Principios básicos y aplicación del aprendizaje mediante tareas [Basic principles and application of task-based learning]. *MarcoELE: Revista de Didáctica Español como Lengua Extranjera*, *12*, 1-26.

Ferreira, A. (2017). El efecto del Feedback Correctivo para mejorar la destreza escrita en ELE [Corrective Feedback to Improve Students´ Writing Skills in SFL]. *Colombian Applied Linguistics Journal, 19*(1), 37-50. https://doi.org/10.14483/calj.v19n1.10220

Ferris, D. (2006). Does error feedback help student writers? New evidence on the short-and long-term effects of written error correction. *Feedback in Second Language Writing: Contexts and Issues*, 81-104. https://doi.org/10.1017/CBO9781139524742.007

Ferris, D., & Robert, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing, 10*, 161-184. https://doi.org/10.1016/S1060-3743(01)00039-X

Gallego, J., García, A. & Rodríguez, A. (2015). ¿Qué ocurre en la mente del estudiante universitario cuando escribe?: Estudio de caso con alumnado de Magisterio [What does a Teacher College Student think when writing? A Case Study]. *Lengua y Habla*, *19*, 1- 20.

Gravet, K., & Kinchin, I.M. (2020). Referencing and empowerment: exploring barriers to agency in the higher education student experience. *Teaching in Higher Education, 25*(1), 84-97. https://doi.org/10.1080/13562517.2018.1541883

Kloss, S., Quintanilla, A., & Alexandre, M. (2020). La función de la retroalimentación correctiva indirecta en la reescritura de géneros académicos con modalidad narrativa elaborados por estudiantes novatos [The function of Indirect Corrective Feedback in the academics rewriting with narrative modality developed by novice students]. *Nueva Revista del Pacífico,* (73), 306-331. https://dx.doi.org/10.4067/S0719-51762020000200306

Kloss, S., & Ferreira, & A. (2019). La escritura de crónicas periodísticas informativas: una propuesta de avance desde el feedback correctivo escrito [The writing of informative journalistic chronicles: an advance proposal from written corrective feedback]. *Onomázein*, (46), 161–185. https://doi.org/10.7764/onomazein.46.02

Kloss, S., & Quintanilla, A. (2020). Representaciones sociales de estudiantes de periodismo, contextos posibles para favorecer las prácticas de escritura especializada [Social representations of journalism students, possible contexts to favor specialized writing practices]. *Revista Espacios*, *41*(18), Article 8.

Lee, I. (2003). How do Hong Kong English teachers correct errors in student writing? *Education Journal*, *31*(1),153-169.

Lee, I. (2004). Error correction in L2 secondary writing classrooms: the case of Hong Kong. *Journal of Second Language Writing*, *13*(4), 285-312. https://doi.org/10.1016/j.jslw.2004.08.00

Lightbown, P. M., & Spada, N. (2006). *How languages are learned* (3rd ed.). Oxford University.

Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie &Tej K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). Academic Press.

Montolío, E. (2015). *Conectores de la lengua escrita* [Connectors in writing]. Editorial Planeta.

Myhill, D., Jones, S., y Lines, H. (2018). Supporting less proficient writers through linguistically aware teaching. *Language and Education, 32*(4), 333-349. https://doi.org/10.1080/09500782.2018.1438468

Portolés, J. (2014). *Marcadores del discurso* [Discourse markers]. Ariel.

Pourdana, N., Nour, P. & Yousefi, F. (2021). Investigating metalinguistic written corrective feedback focused on EFL learners' discourse markers accuracy in mobile-mediated context. *Asian Journal Second Foreign Language Education*, *6*(7). https://doi.org/10.1186/s40862-021-00111-8

Quintanilla. E., Kloss, S., & Lagos, P. (2018). How do Chilean pre-service teachers correct errors in writing? *Revista Brasileira de Lingüística Aplicada, 18*(3), 561-79. https://doi.org/10.1590/1984-6398201812447

Roger, B. (2015). First-year undergraduate students' perceptions of lecturer and peer feedback: A New Zealand action research project. *Studies in Higher Education*, *40*(5), 933–944. https://doi.org/10.1080/03075079.2014.881343

Salaberri, S., & Altamirano, A. (2001). Instruction in learning strategies. In L. García (Ed.), *Present and future trends in TEFL* (pp. 97-110). Servicio de Publicaciones de la Universidad de Almería.

Sheen, Y. (2011). *Corrective feedback individual differences and second language learning*. Springster.

Tapia-Ladino,M., Arancibia, B., & Correa, R. (2016). Rol de los Comentarios Escritos en la construcción de la tesis desde la perspectiva de estudiantes tesistas y profesores guía [Written comments role in the thesis development from undergaduate students and supervisor teachers' perspective]. *Universitas Psychologica*, *15*(4), 1-14. https://doi.org/10.11144/Javeriana.upsy15-4.rcec.

Timofeeva-Timofeev, L. (2021). Phraseological manipulation as a humour tool in 8–12-year-olds' written narratives in Spanish. *Studies in Psychology*, *42*(2), 462-486. https://doi.org/10.1080/02109395.2021.1911056

Valizadeh, M. (2022). The effect of comprehensive written corrective feedback on EFL learners' written syntactic complexity. *Journal of Language and Education, 8*(1), 196-208. https://doi.org/10.17323/jle.2022.12052

Van Beuningen, C. (2010). Corrective feedback in L2 writing: Theoretical perspectives, empirical insights, and future directions. *International Journal of English Studies*, *10*(2), 1-27. https://doi.org/10.6018/ijes/2010/2/119171

Van Dijk, T. (1978). *La ciencia del texto* [The science of text]. Paidós.

Van Dijk, T., & Kintsch, W. (1983). *Strategies of discourse comprehension*. Academic Press.

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Accuracy Gains from Unfocused Feedback: Dynamic Written Corrective Feedback as Meaningful Pedagogy

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ABSTRACT

Background. A primary question among L2 writing instructors is how to best deliver written corrective feedback (WCF) to support student learning. One promising WCF method is Dynamic Written Corrective Feedback, in which instructors provide unfocused/comprehensive feedback using a coding system coupled with regular rounds of editing on short, in-class student-written

Purpose. While research generally indicates that unfocused WCF may not be the most effective method of supporting linguistic mastery, unfocused WCF that is delivered using a coding system and in manageable portions may result in meaningful uptake of target linguistic forms; however, further research on best practices to deliver WCF is needed. In this study, I explored the impact on student accuracy of unfocused DWCF on brief student-produced texts in intermediate and advanced developmental ESL writing classes.

Method. Utilizing a quasi-experimental research design using *t*-test analyses, I coded, tallied, and contrasted the errors in term-final paragraphs of 130 students who participated in classes that used DWCF with 79 students in control sections that did not include DWCF.

Results. I found statistically significant improvements in the treatment sections at both levels for nearly all error types (including but not limited to verb form/tense, sentence structure, word order, word choice, determiner, noun form, and punctuation errors; the only error type that did not return significance differences was prepositions at the intermediate level).

Conclusion. These results suggest that unfocused written corrective feedback may be effectively used in multilingual writing classrooms, at least given certain parameters to help ensure that feedback is manageable and specific, per the DWCF process.

KEYWORDS

dynamic written corrective feedback, developmental writing instruction, comprehensive grammar feedback, unfocused feedback, L2 writing

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INTRODUCTION

An extensive corpus of research on written corrective feedback (WCF) spanning decades has provided extensive support indicating that WCF can be used to foster increased accuracy, at least in certain contexts and with certain students (Ferris & Kurzer, 2019), despite some concerns about its efficacy and appropriateness (e.g. Bruton, 2009; Truscott, 1996). At this point, a primary question about WCF has become not one of *if* instructors should provide WCF, but rather *how* to most effectively deliver WCF to support meaningful student learning (Ferris & Kurzer, 2019). One specific WCF method that matches many of the best practices identified by WCF research and that has a growing body of supportive research is Dynamic Written Corrective Feedback (DWCF) (Evans et al., 2010).

Teachers can use DWCF to "help L2 learners improve the accuracy of writing by ensuring that instruction, practice, and feedback are manageable, meaningful, timely, and constant" (Hartshorn & Evans, 2012, p. 30) for all involved, by keeping feedback approaches manageable for the instructors and accessible/comprehensible for the students, per this process:

1. An instructor requires students to write short paragraphs (for roughly

10 minutes) during each class period (or at established times throughout the term, roughly equally spaced).
2. The instructor then codes the errors found in the paragraphs using a series of codes that is explicitly explained in class (Appendix A contains the coding system used in this study) and returns the coded first drafts to the students during the next class meeting.
3. The instructor has the students edit these first drafts in class and submit the second drafts to their teacher for further coding of any remaining or new errors. As originally devised, the entire editing process is repeated until the draft is completely error free (resulting in perhaps four or five drafts written for a single round of DWCF on occasion).
4. The instructor also has students record a tally of all present types of errors in a log (Appendix B); this error log allows the students and the teacher to track students' individual error patterns, which may promote increased autonomy (Ferris, 2006; Lalande, 1982).

DWCF as originally developed is accordingly focused exclusively on matters of linguistic/grammatical accuracy, rather than other concerns such as idea development or organization.

DWCF and Second Language Acquisition Theories

Briefly, DWCF may be grounded in various established second language acquisition theories, as is WCF generally. For instance, language learners first develop declarative knowledge (what they actually know) prior to procedural knowledge (application of that declarative knowledge in real-world contexts) (DeKeyser, 2001, 2007). Via DWCF, students can obtain this procedural knowledge from the initial coding stage and in-class instruction and then develop procedural knowledge by automatizing target grammatical features in their L2 via practice from the extensive editing process.

DWCF can also help instructors connect with their students' Zone of Proximal Development and promote internalization (Vygotsky, 1978) and transferability of grammatical concepts. DWCF can be an effective method of scaffolding grammar feedback (Wood et al., 1976) while maintaining comprehensible input—or *i*+1 (Krashen, 1985). Corrective feedback like DWCF has been explicitly promoted as an extension of Krashen's Input Hypothesis as it may facilitate language acquisition for some linguistic features (Long, 1996).

DWCF and Established Best Practices of Written Corrective Feedback

As the primary aim of DWCF is to provide feedback that is "manageable, meaningful, timely, and constant" (Hartshorn & Evans, 2012, p. 30), DWCF aligns with the established WCF research literature on WCF in a number of manners.

DWCF is a type of *indirect* WCF since the existing errors are coded but not corrected (when a correction is provided, it is *direct* WCF); indirect WCF may promote more meaningful long-term acquisition of linguistic features such as grammar mastery (Ferris, 2006) as it likely results in increased internalization (Kurzer, 2018a; Lalande, 1982). Similarly, a coding system like DWCF that utilizes *explicit* codes may trigger previous grammar knowledge of students when compared to *unlabeled* WCF (Bitchener, 2008; Bitchener & Knoch, 2010; Ferris, 2006; Sheen, 2007). DWCF codes may remind multilingual students of prior instruction and connect that declarative knowledge (DeKeyser, 2001) to their produced writing in the target language. Explicit WCF also tends to be appreciated by many multilingual students when compared to unlabeled WCF (Lee, 2005). Additionally, DWCF may result in improvements among grammatical concepts that feature idiosyncratic rules (Hartshorn & Evans, 2012)—*untreatable* errors that are difficult to teach. Some of these untreatable features, like "word order, sentence boundaries, phrase construction, word choice, or collocations" may "obscure meaning" (Ferris, 2010, p. 193) despite being challenging to teach. DWCF may be an effective intervention for those kinds of features in particular, perhaps due to increased focused practice using the target language.

Most salient for the purposes of this special issue, WCF research tends to advocate for *focused* WCF that prioritizes only a single or a narrow range of error types compared to *unfocused* WCF on all types of grammatical errors, as the research indicates increased levels of accuracy when WCF is focused on a single or small number of error types (Bitchener, 2008; Ellis et al., 2008; Sheen, 2007). When we consider that many studies investigated only a single grammatical feature like articles/determiners to identify increases in accuracy (e.g. Bitchener & Knoch, 2010; Ellis et al., 2008), focused WCF seems pedagogically sound. However, this ignores the ecological reality of many classrooms in which instructors do not likely limit grammatical feedback to only a single feature (Ferris & Kurzer, 2019). While unfocused WCF may seem overwhelming to students, the explicit codes on short pieces of student writing and rapid editing approach of DWCF may meaningfully scaffold student learning (Hartshorn & Evans, 2012; Kurzer, 2018a).

Empirical Research on Dynamic Written Corrective Feedback

While DWCF has been featured in a number of prominent publications on WCF in recent years, only 11 articles have presented the results of empirical research specifically on the intervention as of 2021. Table 1 contains an overview of these articles.

The first studies conducted on DWCF identified improvements regarding general linguistic accuracy attributable to the DWCF treatment in an Intensive English Program (IEP) connected to a research university in the Western United

Table 1

Summary of Previous Research on DWCF

Study	Control	Large N (>30)	Context	Longitudinal
Evans et al., 2010	No	No	IEP	No
Hartshorn et al., 2010	Yes	No	IEP	No
Evans et al., 2011	Yes	No	Undergrad	No
Hartshorn & Evans, 2012	Yes	No	IEP	No
Marzban & Arabahmadi, 2013	Yes	No	?*	No
Hartshorn & Evans, 2015	Yes	No	IEP	Yes
Kurzer, 2018a	Yes	Yes	Undergrad	No
Kurzer, 2018b	Yes	Yes	Undergrad	No
Kurzer, 2019	No	No	CC	No
Eckstein et al., 2020	No	No	Grad	No
Messenger et al., 2020	No	No	IEP Instructor	No

Note. *The context of this study was unclear to me, with the authors indicating only that the study was of "two intact intermediate classes at the private institute in Iran" (p. 1001).
Table 1 is also seen in (Kurzer, in print).

States (Evans et al., 2010; Hartshorn & Evans, 2015; Hartshorn et al., 2010) and in elective credit-bearing language support classes for matriculated multilingual students at that same university (Evans et al., 2011). Another study in this IEP context found that DWCF resulted in improvements on these linguistic/grammatical features: lexical, verb, semantic, and mechanical accuracy, determiners, numeric agreement, and sentence structures (Hartshorn & Evans, 2012). One longitudinal study conducted thus far about DWCF has tracked students across two semesters, finding meaningful gains in accuracy (Hartshorn & Evans, 2015). These initial studies all reported medium to large effect sizes attributable to DWCF, although they featured small sample sizes (fewer than 30 student participants).

In a larger study with 325 students from three levels of credit-bearing pre-first-year composition developmental courses, I explored improvements in accuracy more broadly, looking at error categories of global, local (per Bates et al., 1993), and mechanical, finding statistically significant gains in the treatment sections which used DWCF for each category and at each level (Kurzer, 2018a). Students in the treatment sections also demonstrated statistically significant improvements in self-editing skills compared to students in treatment sections; this provides evidence that DWCF can indeed help L2 students develop stronger autonomy (Ferris, 2006; Lalande, 1982).

A final article—the only research study investigating graduate students specifically—reported on a study that contrasted the timing of DWCF (spread throughout the term or lumped together at the end of the term) with 22 multilingual graduate students, finding gains in fluency and complexity in the group that received regular feedback, but no statistically significant improvements regarding grammatical accuracy in either group (Eckstein et al., 2020). These results may identify a ceiling level upon which DWCF may no longer be effective at supporting increased grammatical accuracy in student writing, although it may still be helpful at influencing student writing in other manners.

These studies suggest that DWCF can help many students—in IEP, developmental, and first year composition contexts—produce more accurate writing, at least in short student-produced paragraphs. However, an improvement in accuracy is simply a single aspect of a WCF-based pedagogical intervention to determine if it is meaningful for students' language learning; student and instructor opinions about the target pedagogies should also be considered. In an expansion of the study I explained previously, I investigated the impact of DWCF on students' efficacy regarding writing, finding that treatment students who used DWCF rated the value of peer feedback, quality of grammar feedback, and quality of general class instruction statistically more strongly than the control section students did, although the differences did not include their perceptions of their own grammar abilities (Kurzer, 2018b). Students who used DWCF also ranked it highly in terms of classroom interventions they valued, a finding replicated in a small action research study I conducted in an intermediate L2 writing class I taught at a community college (Kurzer, 2019). Students in that study reported that they found DWCF to be better at matching

their current levels of language master than the course grammar textbook, although they also valued the textbook as a resource, reinforcing the idea that students may best respond to DWCF as a pedagogy that augments traditional grammar instruction, rather than replacing it completely. In addition to students responding positively to the DWCF treatment, one study has investigated five experienced ESL teachers' perspectives via interviews, who reported it to be a promising pedagogy to promote meaningful uptake of grammar although they also offered some suggestions to keep it manageable (Messenger et al., 2020).

Taken collectively, the growing body of research on DWCF paints a promising picture of a pedagogical intervention that is well-received by students and instructors and which has resulted in measurable increases in accuracy, at least in certain circumstances. The research on DWCF also adds nuance to the research on unfocused feedback, indicating that more sound classroom practices like providing unfocused/comprehensive feedback still may prove to be valid. However, while some of the initial studies conducted about DWCF explored the impact on specific error types in an IEP, we have yet to see those results replicated in other contexts or with larger sample sizes. In order to begin to fill this gap, I conducted this study in which I hypothesized that matriculated multilingual students in developmental writing classes that included DWCF to augment traditional composition and grammar instruction would show an increased level of grammatical accuracy across some or most error types on final paragraphs than students who did not use DWCF in their classes.

METHOD

Data collected as a part of this IRB-approved study have contributed to research reports published elsewhere exploring possible impacts of DWCF on self-editing skills and accuracy improvements in global, local, and mechanical error categories broadly defined (Kurzer 2018a) and student perceptions of DWCF as a classroom intervention (Kurzer 2018b). Accordingly, the methodologies of these various reports are quite similar in nature. Also of note, these data were collected from in-person classes that occurred prior to the global coronavirus pandemic.

Research Design and Context

In this study, I explored the impact of unfocused DWCF in credit-bearing developmental writing classes for multilingual domestic and international students using a quasi-experimental study design. All students enrolling as freshmen at this institution take a brief timed writing exam; based on their needs as revealed from their score on this test, many students are then placed into up to three-levels of credit-bearing developmental writing classes with a focus on academic composition processes via several out-of-class papers commonly emphasized in the US, particularly on using sources. These matriculated students must pass through the developmental in a timely manner prior to enrolling in first year composition, typically while also taking foundational courses in their selected majors.

For this quasi-experimental study, I collected and contrasted student data from existing sections of several intermediate and advanced developmental writing. While the courses primarily focused on composition, teachers of control sections secondarily employed traditional grammar instruction (a grammar book with exercises and lesson units on specific grammatical features) and teachers of treatment sections also employed an adaptation of DWCF (as explained in the introduction of this article) alongside the traditional grammar instruction. As with other small assignments designed to scaffold writing/language instruction, students earned points for engaging with grammar activities/DWCF.

To keep the study ecologically valid to this real-world classroom context, instructors taught grammar per their own best practices, while adhering to departmental guidelines, with corrective feedback beyond DWCF being limited to correction on grammar exercises and any feedback on out-of-class papers the instructors deemed appropriate to provide as typically done in these developmental writing classes. In the developmental writing program in my institution, the primary focus is on out-of-class essays with a secondary linguistic/grammar focus. This is in contrast to the original studies on DWCF conducted in an IEP in which DWCF replaced all instruction in grammar classes.

When instructors were teaching two or more sections of the same class, I had them teach one of those sections using DWCF and one without to help reduce variability in teaching practices. Teachers who taught one or more treatment sections over the course of the study (which was conducted over two consecutive 10-week terms) participated in a professional development session on how to use DWCF effectively in which I explained the DWCF process (as I outlined earlier).

DWCF was originally designed to replace grammar instruction, so instructors had students write new paragraphs or revisions daily in class, something instructors in our program felt to be prohibitive given the primary composition focus of these classes. Accordingly, we adjusted the rounds of DWCF required, based on level (ten at the intermediate level and five at the advanced level, meaning that students had to write ten/five initial paragraphs and all required edits for each, spread out roughly equally throughout the term). To reduce variability in instruction approaches, I provided a list of ten prompts designed to solicit specific grammatical features for the instructors of intermediate classes to use (Appendix A), although instructors could determine the order in which to assign the prompts as long as they covered all ten. Instructors of advanced classes were required

to include at least five rounds of DWCF, although the specific topics were left to them to determine, to best adapt their instruction to their more proficient students' needs. Instructors of control sections did not include DWCF in their classes.

Participants

Table 2 contains an overview of the numbers of class sections, teachers, and student participants by intermediate/advanced class level and treatment/control group.

About 80% of the student participants were international (studying in the US on a student visa) while the remaining 20% of the student participants were Generation 1.5 students (late- or early-arrival immigrants)(Ferris, 2009). The international students primarily were Chinese (roughly 90%), with the remaining being from South Korea, Saudi Arabia, Mexico, and Japan, while Generation 1.5 students were less homogenous, although roughly 85% were from Spanish- or Chinese-speaking backgrounds. I collected data from about one third of all intermediate and advanced developmental writing classes offered at the time which resulted in some students moving between control and treatment groups as they progressed through the program and/or enrolled in courses that were not ultimately included in the study.

Following the guidelines of DWCF, I required students from the treatment and control groups to write paragraphs (the diagnostics in Appendix C) at the start of the two terms of the study for pre-test data allowing a comparison of the control and treatment groups. *T*-tests comparing the means of the two groups revealed no significant differences for all measured variables (numbers of errors of all error types per 100 words outlined in the next section and word counts) at both the intermediate and advanced levels. Because of this lack of statistically significant difference, the control and treatment groups at both levels could be properly compared for this research study.

I recruited instructors from the group of lecturers scheduled to teach in the ESL developmental writing program during the academic year I conducted the study. Instructors in the program held a terminal degree (either a master's or PhD), typically in TESOL or a composition-related field, and had been teaching ESL classes for several years. Beyond two instructors who were new to our program and started out teaching control sections, I randomly assigned the other instructors to be either treatment or control sections and had instructors who were teaching two sections of the same class teach one using DWCF and one without (to reduce variability in teaching approaches/instructor bias as much as possible); sections were accordingly quite comparable in instruction beyond the absence or inclusion of DWCF. Prior to the start of the study, I provided a professional development session on how to use DWCF to all the instructors of treatment sections to ensure that the approaches, coding systems, and numbers of DWCF rounds were standardized. Student paragraphs written across the terms and collected and analyzed in Kurzer (2018a) reveal that instructors successfully adhered to the parameters of DWCF and assigned all required rounds of DWCF, with paragraphs written, coded, and edited regularly throughout the terms as expected.

Materials and Coding System

The coding system used in these classes was one I adapted from the original DWCF coding system (Evans et al., 2010) based on feedback from instructors in our program. While the original system had 20 codes, I combined some to reduce redundancy based on the needs of our more advanced student population compared to the students in the IEP of the original study, resulting in 16 codes that still captured the range of student errors frequently present in student writing in our program (Appendix A). In order to stress to the instructors and students in this program which types of errors should be emphasized as being essential for meaningful communication, I grouped these by error type: global errors that are more likely to impede easy comprehension, local errors that may be distracting but do not impede comprehension (Bates et al., 1993; Lane & Lange, 2012), and mechanical (punctuation, spelling issues, or missing/extra words), as follows in Table 3:

While the coding system was unfocused and captured all main error types seen in L2 writing, grouping the codes helped prioritize the importance of mastery of grammatical features that contribute to communication first (Bates et al., 1993; Bitchener & Ferris, 2012), rather than local errors that

Table 2

Study Participants

	Intermediate		Advanced	
	Treatment	**Control**	**Treatment**	**Control**
# of Sections	4	2	4	3
# of Teachers	4	2	3	2
# of Students	66	31	64	48
# of DWCF Rounds	10		5	

are frequently prioritized by many studies on written corrective feedback but typically do not actively impede comprehension (Ferris, 2010).

Table 3

List of Error Codes

Global Errors	
	Verb Form
	Verb Tense/Time
	Sentence Structure
	Word Order
	Word Choice
Local Errors	
	Prepositions
	Determiners
	Noun Forms
	Word Forms
Mechanical Errors	
	Spelling
	Punctuation
	Capitalization
	Insert
	Omit
	Unclear Meaning
	Awkward Wording

Instructors also required their students to record error type and frequency in an error log (Appendix B), as done in the original DWCF approach. However, as instructors felt that requiring the students to edit their drafts until no errors at all remained would be unrealistic and demotivating for the students, we elected to adjust the acceptability threshold at which students would no longer need to edit. Ultimately, we decided that students would no longer need to edit if they had three or fewer global errors remaining (without requirements for local or mechanical errors) as the emphasis on global errors would better serve our student population by prioritizing comprehensibility rather than native-speaker-like accuracy.

Data Collection and Statistical Analysis Procedures

To explore my hypothesis regarding any possible improvements regarding specific error types from DWCF, at the end of the 10-week term teachers of both the control and treatment sections instructed their students to write a 10-minute paragraph that possibly could elicit all target grammatical features formally instructed on in these developmental writing classes (Appendix C includes this post-test prompt). This approach mitigated the concerns about research on WCF which has largely relied on student-edited language production, rather than entirely new, original student language (e.g. Truscott, 2007). I collected and anonymized these paragraphs and coded all errors per the coding system (Appendix A) as a collective whole, before sorting them into treatment/control groups to reduce the chance of personal bias. I then tallied the errors and calculated error numbers per 100 words as a measure of standardization. The errors per 100 words numbers for each error type were then compared across treatment and control groups using *t*-tests. The level of significance of these analyses is presented at both a standard $p<.05$ and a more conservative $p<.003$ (calculated per a Bonferroni correction, which is used to protect against Type 1 Error when conducting multiple analyses on a single dependent variable as in this case).

Other measures to evaluate writing accuracy such as error-free *T*-units (Wolfe-Quintero et al., 1998) or error-free clause ratios (Wigglesworth, 2008) have been used in DWCF studies, although they may conflate fluency with accuracy, may be overly simplistic (Larson-Freeman, 2009), or may not be more valid than other more straight-forward measures, such as errors per total words (Polio & Shea, 2014). Given the lack of tangible benefit of these other measures, I elected to use the errors/100 words metric commonly employed in other WCF research (e.g. Chandler, 2003; Truscott & Hsu, 2008). An additional benefit of this metric is that I was able to tally all errors independently of each other in cases of multiple errors in a single *T*-unit or clause. As a result, in any instances when errors overlapped (i.e. when a preposition error was identified within a sentence structure error), I coded and tallied them as distinct errors.

I coded and tallied the errors in the post-test student-produced paragraphs myself; to help ensure reliability in the coded data, a subset of the paragraphs was also coded by a different teacher from the program who had been teaching using DWCF herself for several years but was not participating in the study in either a control or treatment capacity. Pearson's *r* inter-rater reliability agreement estimates were reasonably high for these data (at .82 for all error types), especially given that many grammatical errors could have multiple possible conflating codes/corrections.

RESULTS

To determine the impact of DWCF on student writing at the intermediate and advanced levels, I contrasted the number of errors of each type in paragraphs treatment and control students wrote at the end of the term using *t*-tests. For the complete intermediate level *t*-test results and effect sizes identified from each variable, see Table 4.

As seen in Table 4, the students in the treatment sections of intermediate developmental writing courses produced statistically more accurate term-end paragraphs than their peers in the control sections for all global, local, and mechanical error types except prepositions at $p<.05$. Even utilizing a much more conservative significance threshold of *p*

Table 4

T-test Results for All Error Types per 100 Words at the Intermediate Level

Variable	Treatment[1]		Control[2]		*t*	*p*	Cohen's *d*
	M	SD	M	SD			
Verb Form	.48	.43	1.11	.153	-3.17	<.001	.56
Verb Tense	.38	.39	1.06	.99	-3.96	<.001	.904
Sentence Structure	.54	.44	1.26	.85	-4.32	<.001	1.06
Word Order	.07	.05	.22	.29	-1.85	.03	.72
Word Choice	.37	.3	1.37	1.68	-5.23	<.001	.829
Preposition	.69	2.11	.81	.76	-.407	.34	.076
Determiner	.43	.49	1.88	2.93	-5.74	<.001	.69
Noun Form	.46	.62	2.26	4.03	-6.15	<.001	.624
Word Form	.23	.21	.78	.79	-3.9	<.001	.951
Spelling	.18	.2	.62	1.25	-2.71	.004	.492
Punctuation	.21	.18	.56	.37	-3.16	.001	1.2
Capitalization	.01	.49	.11	.16	-1.84	.035	.274
Insert	.43	.37	.99	.78	-3.42	<.001	.917
Omit	.48	.41	.94	.63	-2.88	.002	.865
Unclear	.25	.23	.61	.66	-2.57	.006	.728
Awkward	.32	.26	.69	.46	-2.79	.003	.99

Note. [1] *Treatment n=66*
[2] *Control n=31*

<.003 from the Bonferroni correction, the majority of the error type differences were statistically significant (except for word order, spelling, capitalization, and unclear). Most error types also featured effect sizes that were moderate or large (greater than .5), apart from prepositions and capitalization.

I repeated this analysis with the final paragraphs written by students in treatment and control sections of the advanced developmental writing class, conducting *t*-tests on each error type (Table 5).

As seen in Table 5, the students in the treatment sections of advanced developmental writing courses produced statistically more accurate term-end paragraphs than their peers in the control sections for all global, local, and mechanical error types, including prepositions at $p<.05$. At the more conservative *p*-value threshold calculated per a Bonferroni correction ($p<.003$), differences of all error types except capitalization remain statistically significant. All error types also featured effect sizes that were moderate or large (greater than .5). While I cannot unequivocally connect the DWCF treatment to the gains in accuracy seen in the treatment students' final paragraphs, due to the statistically significant differences noted in the *t*-tests, DWCF seems to contribute to improvements in grammar usage among this student population.

DISCUSSION

The results of this study included statistically significant differences in most global, local, and mechanical error types in final paragraphs of intermediate and advanced treatment and control groups, even when performing a Bonferroni correction to determine a more conservative threshold of significance. The moderate to large effect sizes I identified support unfocused feedback via the DWCF process as a meaningful pedagogical intervention to improve accuracy, at least in short, timed writing contexts.

The findings of this study strengthen previous research (Hartshorn & Evans, 2012) supporting DWCF's possible role in facilitating untreatable grammatical errors as I found statistically significant improvements among all untreatable grammatical concepts except for prepositions at the intermediate level. Hartshorn and Evans (2012) identified statistically significant improvements in lexical, verb, mechanical, and semantic accuracy, sentence structure use, numeric

Table 5

T-test Results for All Error Types per 100 Words at the Advanced Level

Variable	Treatment[1]		Control[2]		*t*	*p*	Cohen's *d*
	M	SD	M	SD			
Verb Form	.16	.12	1.21	2.61	-5.02	<.001	.568
Verb Tense	.09	.06	1.55	2.99	-6.66	<.001	.69
Sentence Structure	.08	.07	1.61	2.06	-8.32	<.001	1.05
Word Order	.01	.01	.2	.23	-3.06	.001	1.17
Word Choice	.06	.04	1.65	2.83	-7.52	<.001	.794
Preposition	.22	.15	.85	.9	-4.79	<.001	.976
Determiner	.26	.21	2.02	3.82	-6.97	<.001	.651
Noun Form	.5	.33	1.88	2.67	-6.25	<.001	.725
Word Form	.17	.16	.85	1.19	-4.61	<.001	.801
Spelling	.19	.2	.72	1.26	-3.47	<.001	.588
Punctuation	.08	.07	.68	1.58	-3.69	<.001	.537
Capitalization	0	0	.19	.47	-2.16	.016	.572
Insert	.16	.09	1.24	1.9	-6.08	<.001	.803
Omit	.23	.27	.91	1.11	-4.43	<.001	.842
Unclear	.03	.02	.7	1	-5.22	<.001	.947
Awkward	.15	.12	.71	.7	-4.87	<.001	1.12

Note. [1] *Treatment n=64*
[2] *Control n=48*

agreement, and determiners. It is interesting to note that prepositions in particular may be difficult for students to master in DWCF settings, as significant improvements in prepositions were absent in the IEP (Hartshorn & Evans, 2012) and intermediate groups of this study, although the advanced students did have statistically significant gains in prepositions. Beyond prepositions, the medium to large effect sizes in the remaining 15 error types measured (all 16 for the advanced students) further suggest that DWCF can be effective at helping students produce more accurate writing, at least in short in-class paragraphs.

The practice of self-editing writing utilizing scaffolding via coded errors as in DWCF may result in stronger self-awareness of untreatable grammatical concepts. This suggests that, rather than exclusively relying on instruction using grammar books and worksheets to give students exposure to and practice using untreatable grammatical concepts, practice using those concepts in their own writing - and then self-editing scaffolded coded errors - may prove to be more effective.

When connected to the studies that have shown that some students value DWCF (Kurzer, 2018b, 2019) and other studies that have shown that many multilingual students value and expect grammatical support via WCF (Bates, Lane, & Lange, 1993; Ferris et al., 2013; Han & Hyland, 2015), DWCF may align with students' expectations for language classes. Some instructors and researchers are rightly concerned that a strong emphasis on form and corrective feedback in the target language may overly stress dominant narratives/ideologies and trivialize students' home languages, creating an environment toxic to socially progressive pedagogies (Loza, in print); I argue that, provided that DWCF is implemented to augment other pedagogies and that communication (rather than an arbitrary notion of correctness or "native-like fluency") is emphasized when introducing DWCF to students, there is ample room within a socially progressive classroom for DWCF. Instructors should stress that accuracy is but one facet of language acquisition and take steps to avoid instilling/reinforcing unrealistic expectations of fluency or biased ideologies (Kurzer, 2021).

While early studies on DWCF in an IEP used DWCF to completely replace grammar instruction (Evans et al., 2010; Hartshorn & Evans, 2015; Hartshorn et al., 2010), my own research explored its impact in developmental writing courses as a supplementary pedagogy to augment composition in-

struction. A previous analysis of the data currently presented broadly identified improvements at all levels in global, local, and mechanical error categories and stressed communication over strict overall accuracy (Kurzer, 2018a) but did not include a fine-grained analysis like the current study did. This narrower analysis of specific error types reinforced DWCF's appropriate role to augment—but not completely replace—language/grammar support in writing classes, reinforced by previous studies that included students' positive perceptions of DWCF in their classes (Kurzer, 2018b; Kurzer, 2019). This current study also found statistically significant improvements in accuracy in the two levels despite differences in frequency of rounds of DWCF. DWCF appears to be effective with far fewer rounds of DWCF in classes than originally implemented, depending on students' language proficiency. I also identified statistically significant improvements with students only editing their work two or three times to a threshold of no more than three global errors, rather than completely eliminating all errors. This further indicates that the DWCF process can be adapted to varied student needs.

Finally, we have yet to see adequate published literature identifying a ceiling effect at which DWCF is no longer effective. While designing the study, I questioned whether I would see improvements at the advanced level since I required fewer rounds of DWCF and therefore students did not self-edit as frequently as in other contexts. However, the statistically significant differences revealed improvements even in that context.

More broadly, some researchers have highlighted concerns with WCF research that have identified improvements in narrow grammatical features but neglected to consider possible negative impacts of focusing on only a single or narrow subset of grammatical error types on accuracy elsewhere (Xu, 2009). As I identified statistically significant improvements in accuracy across nearly all grammatical types, this study helps counter that valid concern. Similarly, the gains in accuracy I noted were in new student writing, not simply edited drafts, a limitation of other WCF research as noted by Truscott (2007). These results also support the common assumption that coded/explicit corrective feedback is a meaningful pedagogical practice (Bitchener, 2008; Bitchener & Knoch, 2010; Ferris, 2006).

Additionally, studies investigating unfocused/comprehensive feedback in non-DWCF contexts have largely presented contradictory results thus far (Bitchener, 2019), with only two comparing unfocused and focused specifically (Ellis et al., 2008; Sheen et al., 2009); even these studies had methodological limitations that prevented adequate comparison of the two to produce "unequivocal finding[s]" (Bitchener, 2019, p. 97). While my study did not compare focused and unfocused/DWCF feedback, it does provide one more point of evidence supporting that unfocused feedback, providing that it is given in manageable manners that are accessible for the students, may be effective. While unfocused WCF addressing all possible grammatical concepts—when added to feedback on other concerns such as idea development, rhetoric mastery, and organization as students are likely to see in composition classes—on larger papers may be quite overwhelming to students and likely does not adhere to *i*+1 precepts, if grammatical WCF is conducted only on shorter paragraphs as done in DWCF, unfocused WCF still seems to be comprehensible for students, at least in certain contexts. A separation between grammatical WCF assignments and larger scale feedback on other assignments (likely out-of-class process papers) accordingly seems prudent to keep workloads reasonable.

CONCLUSION

The results of this study complicate the literature and assumptions regarding unfocused corrective feedback and provides evidence that the DWCF process (using a coding system to code errors in manageable student-produced paragraphs with deliberate editing and error recording stages) can be used to promote increased grammatical accuracy alongside a composition-focused curriculum in developmental writing classes for multilingual students. By including data from a large number of participants (130 treatment students and 79 control students) across two levels, this study also burgeons the limited research base on DWCF specifically.

While the metric of using newly written authentic student-produced writing samples at the end of the terms of the study and the relatively large sample size invested in an ecologically valid context helped counter some of the limitations seen in other studies of DWCF and WCF, this study still has some limitations. First, while the primary point of data collection—the term-end paragraphs—were authentically produced by the students, they still were stripped of context because the topics were not related to their other writing assignments for their classes, an adaptation of DWCF I have since encouraged. Stronger connection between DWCF topics and course themes (i.e. using DWCF drafts for brainstorming, reading reflections, or dialogue journaling) may be pedagogically sound. The paragraphs were doubtless an improvement compared to grammar book work with limited application to authentic writing or grammar cloze exercises, but still lacked the importance of the main papers students were expected to write for these composition classes. In this study, I did not explore the possible impact of DWCF on students' process writing/papers written outside of the classroom, which is arguably a more important context to consider, and is a limitation of the larger body of research on DWCF and WCF in general.

Second, as the instructors of the courses used in this study volunteered to participate, the results could have been potentially biased. That said, the treatment and control groups shifted over the course of the study as some teach-

ers moved from treatment to control and vice versa and, when instructors taught more than one section, I had them teach one control and one treatment section as possible. Accordingly, this potential bias was likely reduced. However, one teacher—who was hired at the time the study started - taught control sections for the two consecutive terms of the study; her students submitted term—final paragraphs that were slightly shorter than seen in the other groups. As the word count differences were not statistically significant, this instructor's potential effect on the outcomes of this study was likely minimal.

Additionally, I collected data at the different levels of developmental writing during consecutive terms using only approximately a third of the total offered sections in the program; thus some students enrolled in sections that may or may not have included DWCF but did not feature data collection prior to or after enrolling in treatment/control sections. Students also switched between control and treatment sections as I could not dictate enrollment. Additional possible lurking variables beyond the scope of the study include the following: students may have gained increased practice at editing their own writing, developed stronger language skills stemming from lengthier exposure to English-dominant contexts, and/or simply developed stronger writing skills as a result of taking several intensive writing courses in consecutive terms.

Further research into unfocused feedback and DWCF specifically addressing longitudinal impact (beyond Hartshorn & Evans, 2015) via delayed post-tests in subsequent terms throughout students' undergraduate experiences would provide a much stronger sense of how effective DWCF may be. Additional research looking at transferability of language accuracy to out-of-class process papers would contribute meaningfully to the literature base on DWCF. We also need more studies on DWCF in different contexts (other IEPs, first year composition, graduate writing support courses, writing courses in specific disciplines, etc.) and using different approaches (varying the frequency of DWCF rounds/coding systems, length of student texts, using DWCF alongside anti-racist pedagogies, etc.) to develop a more robust research base upon which to ascertain DWCF best practices for different contexts and student populations. Researching and identifying valid adaptations of DWCF that adhere to the ecologies of different classroom contexts and student populations would provide L2 writing/grammar instructors with a stronger set of pedagogies to help promote meaningful but manageable grammar acquisition for their students.

Along with this study, the growing body of research on DWCF indicates that it is a method of providing corrective feedback using a comprehensive/unfocused coding system to target all common student errors. As DWCF emphasizes indirect feedback that places the responsibility for practicing and acquiring the target features on the multilingual students themselves while still providing meaningful scaffolding, DWCF's use prioritizes individual student requirements and may promote increased automatization of grammatically accurate language production. This automatization may then result in stronger self-editing abilities to provide multilingual students with increased self-sufficiency that will prove valuable to them throughout their language learning experiences.

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DECLARATION OF COMPETING INTEREST

None declared.

REFERENCES

Bates, L., Lane, J., & Lange, E. (1993). *Writing clearly: Responding to ESL compositions*. Heinle & Heinle.

Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing, 17*(2), 102–118. http://dx.doi.org/10.1016/j.jslw.2007.11.004

Bitchener, J. (2019). The intersection between SLA and feedback research. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues,* (2nd ed., pp. 85-105). Cambridge University Press. http://dx.doi.org/10.1017/9781108635547.007

Bitchener, J. & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge. http://dx.doi.org/10.4324/9780203832400

Bitchener, J. & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics, 31*(2), 193–214. http://dx.doi.org/10.1093/applin/amp016

Bruton, A. (2009). Improving accuracy is not the only reason for writing, and even if it were... . *System, 37*(4), 600-613. https://doi.org/10.1016/j.system.2009.09.005

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing, 12*, 267–96. http://dx.doi.org/10.1016/S1060-3743(03)00038-9

DeKeyser, R. (2001). Automaticity and automatization. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 97-113). Lawrence Erlbaum. http://dx.doi.org/10.1017/CBO9781139524780.007

DeKeyser, R. (Ed.). (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology*. Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511667275

Eckstein, G., Sims, M., & Rohm, L. (2020). Dynamic written corrective feedback among graduate students: The effects of feedback timing. *TESL Canada Journal, 37*(2), 78-102. http://dx.doi.org/10.18806/tesl.v37i2.1339

Ellis, R., Y. Sheen, M. Murakami & H. Takashima (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System, 36*(3), 353–371. http://dx.doi.org/10.1016/j.system.2008.02.001

Evans, N. W., Hartshorn, K. J., Strong-Krause, D. (2011) The efficacy of dynamic written corrective feedback for university-matriculated ESL learners. *System*, *39*, 229-239. http://dx.doi.org/10.1016/j.system.2011.04.012

Evans, N. W., Hartshorn, K. J. , McCollum, R., Wolfersberger, M. (2010). Contextualizing corrective feedback in L2 writing pedagogy. *Language Teaching Research, 14*, 445-463.

Ferris, D. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81-104). Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524742.007

Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA. *Studies in Second Language Acquisition*, *32*(2), 181-201. http://dx.doi.org/10.1017/S0272263109990490

Ferris, D. R. & Kurzer, K. (2019). Does error feedback help L2 writers? Latest evidence on the efficacy of written corrective feedback. In K. Hyland and F. Hyland (Eds.) *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 106-124). Cambridge University Press.

Ferris D. R., Liu, H., Sinha, A., & Senna, M. (2013). Written corrective feedback for individual L2 writers. *Journal of Second Language Writing, 22,* 307-329. http://dx.doi.org/10.1016/j.jslw.2012.09.009

Foin, A. T., & Lange, E. J. (2007). Generation 1.5 writers' success in correcting errors marked on an our-of-class paper. *The CATESOL Journal, 19*(1), 146-163.

Han Y. & Hyland, F. (2015). Exploring learner engagement with written corrective feedback in a Chinese tertiary ESL classroom. *Journal of Second Language Writing, 30*, 31-44. https://doi.org/10.1016/j.jslw.2015.08.002

Hartshorn, K. J., & Evans, N. W. (2012). The differential effects of comprehensive corrective feedback on L2 writing accuracy. *Journal of Linguistics and Language Teaching*, *3*, 16-46.

Hartshorn, K. J., & Evans, N. W. (2015). The effects of dynamic written corrective feedback: A 30 week study. *Journal of Response to Writing, 1*(2), 6-34.

Hartshorn, K. J., Evans, N. W., Merrill, P. F., Sudweeks, R. R., Strong-Krause, D., Anderson, N. J. (2010). Effects of dynamic corrective feedback on ESL writing accuracy. *TESOL Quarterly*, *44*(1), 84-108. http://dx.doi.org/10.5054/tq.2010.213781

Hyland, K. & F. Hyland (2006). Feedback on second language students' writing. *Language Teaching, 39*(2), 83–101. http://dx.doi.org/10.1017/S0261444806003399

Krashen, S. D. (1985). *The input hypothesis: Issues and implications.* Pergamon.

Kurzer, K. (in print). Dynamic written corrective feedback. In H. Mohebbi (Ed.) *Insights into teaching and learning writing: A practical guide for early-career teachers.* Castledown Publishers.

Kurzer, K. (2021). More than just grammar deficiencies: Moving faculty in the disciplines toward a difference-as-resource pedagogical paradigm. In E. Lee, N. Fahim, J. Johnson, and B. R. Schreiber (Eds.), *Building a more linguistically just campus: Theory, pedagogy, and advocacy* (pp. 198-213). Multilingual Matters.

Kurzer, K. (2019). Dynamic written corrective feedback in a community college ESL writing class setting. In S. M. Anwaruddin (Ed.) *Knowledge mobilization in TESOL: Connecting research and practice* (pp. 59-75). Brill.

Kurzer, K. (2018b). Student perceptions of dynamic written corrective feedback in developmental multilingual writing classes. *Journal of Response to Writing, 4*(2), 34-68.

Kurzer, K. (2018a). Dynamic written corrective feedback in developmental ESL writing classes. *TESOL Quarterly, 52*(1), 5-33. https://doi.org/10.1002/tesq.366

Lalande, J.F. II (1982). Reducing composition errors: An experiment. *Modern Language Journal* 66.2*,* 140-149. http://dx.doi.org/10.1111/j.1540-4781.1982.tb06973.x

Lane, J., & Lange, E. (2012). *Writing clearly: Grammar for editing* (3rd ed.). Heinle Cengage Learning.

Larsen-Freeman, D. (2009). Adjusting expectations: The study of complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics*, *30*(4), 579-589. http://dx.doi.org/10.1093/applin/amp043

Lee I. (2005). Error correction in the L2 classroom: what do students think? *TESL Canada Journal 22*, 1–16. http://dx/doi.org/10.18806/tesl.v22i2.84

Long, M. H. (1996). The role of linguistic environment in second language acquisition. In W. Ritchie & T. Bhatia (Eds.), *Handbook of second language acquisition.* Academic Press. http://dx.doi.org/10.1016/B978-012589042-7/50015-3

Loza, S. (in print). Oral corrective feedback in the Spanish heritage language context. In S. Loza & S. M. Beaudrie (Eds.), *Heritage language teaching: Critical language awareness perspectives for research and pedagogy*. Routledge.

Marzban, A., & Arabahmadi, S. (2013). The effect of written corrective feedback on Iranian EFL students' writing. *Procedia-Social and Behavioral Sciences, 83*, 1000-1005. http://dx.doi.org/10.1016/j.sbspro.2013.06.186

Messenger, R. A., Evans, N. W., & Hartshorn, K. J. (2020). Managing dynamic written corrective feedback. *Journal of Response to Writing, 6*(1), 108-138.

Polio, C., & Shea, M. C. (2014). An investigation into current measures of linguistic accuracy in second language writing research. *Journal of Second Language Writing*, *26*, 10-27. http://dx.doi.org/10.1016/j.jslw.2014.09.003

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly, 41*(2), 255–283. http://dx.doi.org/10.1002/j.1545-7249.2007.tb00059.x

Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System, 37*(4), 556-569. http://dx.doi.org/10.1016/j.system.2009.09.002

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, *46*(2), 327-369. http://dx.doi.org/10.1111/j.1467-1770.1996.tb01238.x

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing, 16*(4), 255-272. http://dx.doi.org/10.1016/j.jslw.2007.06.003

Truscott, J., & Hsu, A. Y. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*, 292–305. http://dx.doi.org/10.1016/j.jslw.2008.05.003

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children*, *23*(3), 34-41. http://dx.doi.org/10.2307/j.ctvjf9vz4.11

Wigglesworth, G. (2008). Measuring accuracy in second language performance. Paper presented at the Annual Conference of Teachers of English to Speakers of Other Languages (TESOL), New York.

Wolfe-Quintero, K., Inagaki, S., & Kim, H. (1998). *Second language development in writing: Measures of fluency*, *accuracy*, *and complexity.* University of Hawaii at Maona.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology, 17,* 89-100. http://dx.doi.org/10.1111/j.1469-7610.1976.tb00381.x

Xu, C. (2009). Overgeneralization from a narrow focus: A response to Ellis et al. (2008) and Bitchener (2008). *Journal of Second Language Writing, 18,* 270–275. http://dx.doi.org/10.1016/j.jslw.2009.05.005

APPENDIX A

DWCF Writing Correction Marks

	Code	Error Type		Example
Global Errors	VF	Verb Form		It was happened yesterday. Psychology expose you to behavior.
	VT	Verb Time		It happen yesterday.
	SS	Sentence Structure (incl. Run-on and incomplete)		They brought the man who them him found. Because they thought it was good. Because friendship takes effort, so it is time-consuming.
		Word Order		Especially, I miss home.
	WC	Word Choice (that impacts comprehension)		Candy makes children feel a sweet taste.
Local Errors	PP	Prepositions		I was responsible of everything.
	D	Determiner (articles)		The trip to United States was enjoyable.
	NF	Noun Form		All family member are supposed to get along. She limited the amount of candies I could eat.
	WF	Word Form		Money brings themselves more opportunities.
Other Errors (Mechanical)	SPG	Spelling		I never worried about my teech getting bad.
	P	Punctuation		When I was visiting; one morning scared me.
	C	Capital letter		Students love to party. they also love to eat pizza.
	^	Use with SS	Insert something	A good major helps you earn a lot money.
			Omit something	I chose this major is because it is interesting.
	?		Meaning is not clear	He borrowed some smoke.
	AWK		Awkward wording (that is still comprehensible)	She says that raising a pet needs responsibility.

APPENDIX B

Error Log

		1	2	3	4	5	6	7	8	9	10	Total
Paragraph Score:												
Global Errors	VF											
	VT											
	SS											
												
	WC											
Local Errors	PP											
	D											
	NF											
	WF											
Other Errors (Mechanical)	SPG											
	P											
	C											
	^											
												
	?											
	AWK											

APPENDIX C

DWCF Paragraph Prompts

Diagnostic/Pre-test (used at both intermediate and advanced levels): Discuss what you want to accomplish this quarter. What do you need to do in order to accomplish these goals? (Remember that these paragraphs **shouldn't** be returned to the students for editing until the end of the quarter, for our study.)

Study prompts (used at the intermediate levels):

1. Describe your week so far. What have you accomplished? What do you still want to do? (Verb tense)
2. Write about your most recent vacation. What did you do? Where did you go? (Verb time)
3. What is a regret you have? What should you have done and why? (Modals)
4. What is the best gift you have ever received and why? (Passive voice)
5. Think of a prominent historical figure. What are his/her qualities? (Subject/verb agreement)
6. What is your definition of success? What makes a successful person? (Word order)
7. If you were given the chance to change your life at this moment, what would you do and why? (Conditional sentences)
8. Describe an embarrassing moment you've experienced. (Clauses)

Post-test prompt (used at both intermediate and advanced levels): If you were given the chance to change your life right now, what would you do and why?

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Moroccan EFL Public University Instructors' Perceptions and Self-Reported Practices of Written Feedback

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ABSTRACT

Background. Since the 1990s, teachers' written corrective feedback (WCF) has been recognized as vital in addressing linguistic issues or product aspects of writing. However, it is necessary to go beyond error correction and focus on written feedback (WF) that concerns other areas of process writing. Still, teachers' thinking on these issues is often an under-explored area.

Purpose. This study aimed to explore English as a foreign language (EFL) instructors' perceptions and their self-reported practices of product- and process-based WF in the writing context of tertiary education.

Method. The exploratory quantitative study collected data from 51 Moroccan EFL writing instructors through a self-developed questionnaire. The questionnaire items regarding perceptions and self-reported practices were valid and acceptable for factor analysis of nine subscales covering the features of product- and process-based WF, and all of them proved to be reliable. This structure allowed several comparisons during data analysis.

Results. Concerning product-oriented WF, participants perceived applying WCF and WF modes on the written text as important techniques. As part of process-based WF, most of them highly valued effective WF modes in the writing process. Regarding their self-reported practices of product-based WF, instructors stated that they often employed WF modes on the written text. Within the process-based WF, they reported using judgemental feedback and effective WF modes as their most frequent practices. The comparisons between perceptions and self-reported practices showed mismatches in four subscales, including WCF, content-based WF related to macroaspects of writing, developing evaluative judgement, and effective WF modes in the writing process. Thus, instructors admitted the importance of WF in these areas although they acknowledged applying their practices less frequently.

Conclusion. This study verified the psychometric properties of a self-constructed questionnaire, which was justified to be appropriate to explore teachers' perceptions and self-reported practices regarding WF. The results obtained from the different subscales support the effectiveness of WCF and allow the exploration of a new conceptualisation of WF as a process.

KEYWORDS

written feedback, written corrective feedback, perceptions, self-reported practices, EFL writing

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INTRODUCTION

In feedback research, the main topic of concern is that researchers hold different views on the effectiveness of written feedback (WF). One group of researchers (Bitchener & Ferris, 2012; Bitchener & Knoch, 2010; Lee, 2008, 2009; Sia & Cheung, 2017) has considered product-oriented WF, and associated it with the product approach to writing, which focuses on developing learners' language accuracy (Guo et al., 2022), mastering grammatical forms (Hyland, 2003; Pramila, 2017; Puengpipattrakul, 2014), and improving content-related aspects of the written text (Lee, 2008, 2009; Junqueira & Payant, 2015). This group has investigated both focused and unfocused written corrective feedback (WCF) from two perspectives. In the first perspective, which supports Ferris's (1999, 2004, 2010) arguments, some researchers (e.g., Ashwell, 2000; Ellis, 1998; Ferris & Roberts, 2001) confirmed that even though error correction has only short-term ef-

fects, it is still beneficial to students struggling with writing accuracy. In the second perspective, which supports Truscott's (1996, 2001, 2004, 2007) arguments against grammar correction, researchers (e.g., Hillocks, 1986; Kepner, 1991; Polio et al., 1998) claimed that WCF is ineffective because it does not promote students' abilities to develop self-editing writing strategies as part of their long-term learning. Another group of researchers (Haines, 2004; Hyland, 2013; Stewart, 2015; Vattøy & Smith, 2019) has focused on process-oriented WF and linked it to the process approach to writing in which learners are engaged in planning, revision, self- and peer-evaluation, and composing meaningful texts (Guo et al., 2022) and argued that WF is useful in developing students' metacognitive processes and macroaspects of writing. Metacognitive processes can be supported by encouraging students to take an active and constructive role in responding to feedback (Nicol, 2010), while the macroaspects pertain to students' response to feedback information beyond mechanics and form-based language (e.g., areas of developing students' ideas and revision, including purpose, coherence/cohesion, content, paragraphing, and developmental aspects of a text) (Ferris, 2003). To synthesise these different interpretations of feedback effectiveness, the current study aims to focus on both form- and teacher-directed product-oriented WF (Bitchener & Ferris, 2012; Ferris, 2003) and process-based learner-centered feedback in writing (Brooks et al., 2021), which enable students' active role in the process of seeking, receiving, providing, and acting upon WF (Henderson et al., 2019; Nieminen et al., 2022; Winstone et al., 2022).

Due to the various views regarding WF, it is worthwhile to understand how teachers perceive its effectiveness. Lee et al. (2017) argued that "it is important to understand why and how teachers provide feedback, as practice is often guided by beliefs" (p. 60). Based on the existing research, exploring teachers' perceptions can influence their feedback provision on students' writing and, therefore, the way they perceive revision and effective writing (Min, 2013; Tsui & Ng, 2000). It can also contribute to supplementing the paucity of such research in English as a second (ESL) and foreign language (EFL), compared to the many studies focusing on the forms and functions of teacher feedback (Lee, 2009; Lee et al., 2017; Min, 2013). Previous research has concentrated on perceptions and practices of WF based on teachers' preferences and usefulness of its focus and type, experience, and scope (Alshahrani & Storch, 2014; Cheng et al., 2021; Cho, 2015; Li & Barnard, 2011; Wei & Cao, 2020; Yu et al., 2021). Studies have mainly focused on error-directed WCF rather than on process-oriented WF. Yang et al. (2021) also argued that there is no agreement on the match between EFL/ESL teachers' beliefs and their practices on various purposes and the usefulness of WF. Therefore, to contribute to existing research, the current study aims to investigate and identify the relationships between teachers' perceptions and reported practices of product and process-based WF. To achieve this goal, we conducted an exploratory quantitative study and used a self-constructed questionnaire that covered various subscales to investigate teachers' perspectives and practices related to WF associated with a product- and a process-approach to writing respectively.

WF from the Product and Process Perspective

In ESL and EFL, WF has been viewed differently depending on its usefulness in developing students' writing as a product and/or process. The key features of and distinctions between product- and process-oriented WF can be defined by five main aspects. The differences lie in the provision, focus, and intentions of feedback, as well as the students' roles and the way of constructing WF. Table 1 summarises the key features based on these aspects, which will be explained in the following section.

To differentiate between WF from the product and process perspectives, Bowen et al. (2022) pointed out that pro-

Table 1

Key Features of Product- and Process-Oriented WF

Product-oriented WF	Process-oriented WF
… is provided on completed drafts or final written texts.	… is provided before, during, and after writing activities.
… focuses mainly on local (e.g., spelling, grammar, vocabulary, mechanics) or probably global (e.g., organisation, content) aspects of writing over cognitive and social aspects.	… focuses on cognitive writing processes, social aspects, and content development based on standards of textuality and macroaspects of writing by using assessment criteria rather than linguistic ones.
… is intended to improve students' language accuracy in writing.	… is intended to foster learner self-regulation, improve self-editing writing strategies, and make use of social processes to help students make writing improvements.
… involves students primarily as recipients of feedback provided by teachers and other resources.	… involves students primarily as active and constructive constructors of feedback through self- and peer-feedback, oral feedback, and teacher-student discussions.
… is constructed using direct and indirect corrections, possibly with metalinguistic explanations, coding, general praise and criticism.	… is constructed using praise, criticism, and suggestions, with explanations formulated in supportive, specific, personalised, and detailed ways.

cess-oriented feedback occurs in pre-, while-, and post-writing, which involves specific writing activities such as setting goals, planning, managing time, using resources, solving problems, and revising. Product-focused feedback is provided on completed drafts or final written texts, which aims to improve students' drafts in terms of content, organisation, language, and linguistic structure of the text. Despite this distinction, in the process approach to writing, the combinations of product and process-oriented feedback are "achieved through written or face-to-face comments, questions, and suggestions provided by teachers and/or peers on finished drafts" (Bowen et al., 2022, p. 3).

Supporters of the role of feedback in the product approach (e.g., Bitchener & Ferris, 2012; Bitchener & Knoch, 2010; Lee, 2008, 2009; Sia & Cheung, 2017) have defined WCF as a process of underlining and/or correcting students' errors as well as of commenting on their text. WCF can be provided by using different types of corrections, such as direct correction, indirect correction, and coding (Bitchener & Ferris, 2012). WCF is deemed summative and aims at correcting linguistic forms, evaluating grammatical accuracy, checking appropriate use of vocabulary, and correcting spelling within the text (Bitchener & Ferris, 2012; Lee, 2009). Besides these microaspects, it is also valuable to focus on cognitive and social variables when improving writing (Hayes, 1996) through feedback. The cognitive aspects pertain to how students self-regulate their learning when receiving feedback (Nicol & Macfarlane-Dick, 2006), self-assess their own writing by reflecting on their strengths and weaknesses (Zaman et al., 2012) using assessment criteria, and identify the next steps in the writing process (Ferguson, 2011; Tai et al., 2018). The social variables are associated with teacher-student dialogue and engagement in the feedback process (Nicol, 2010; Nicol & Macfarlane-Dick, 2006) in which students not only act on the feedback to improve the quality of their work but also behave as key feedback constructors (Carless & Boud, 2018). This engagement may also encourage teachers to provide feedback that fulfils long-term goals, such as scaffolding students to learn to proofread their writing independently, rather than short-term goals, such as supporting students in correcting errors in their written text (Nicol, 2010). To achieve these long-term goals, Haines (2004) and Stewart (2015) have argued that process-oriented WF can be formulated by providing (1) praise with explanation, (2) direct or refined criticism supported by arguments, and (3) direct instructions and encouraging suggestions. This feedback can also be given as the teacher's input on a writer's composition in the form of information to be used for revision (Keh, 1990). Thus, it shows students the cognitive connections between what they did in the writing process and the results they got, as well as what they can do to improve (Brookhart, 2008). The social aspect of feedback can be enhanced through the practices of peer reviews and teacher-student conferences that help students make improvements in their writing (Pramila, 2017). Myles (2002) argued that following the process approach is useful when learners can receive feedback from multiple sources, take time to revise, and then seek input when they revise their text.

Content-related feedback can be used from both the product-oriented and process-oriented feedback perspectives; however, there are differences in how it is applied. While the product-based WF relates to the completed draft by providing comments on global issues such as organisation and content (Lee, 2008, 2009; Junqueira & Payant, 2015), assessment criteria need to be defined in an analytical way to fulfil the purposes of the process-oriented WF and to support the student revision process (Tai et al., 2018). From a process-oriented feedback perspective, content-related feedback includes both WF on macroaspects such as purpose and genre (Ferris, 2003) and WF provided based on the standards of textuality (Beaugrande & Dressler, 1981/1992). Thus, as part of process-based WF, the communicative purpose in students' written texts (Irimiea, 2008) can be achieved by taking into account the standards of textuality when several constituents and relations connect. This connection, as addressed by Beaugrande and Dressler (1981/1992), occurs through (1) syntactic as well as conceptual relations (cohesion and coherence) in the text; (2) both the author's and the reader's attitudes towards the text (intentionality and acceptability); (3) the way information is transferred (informativity); (4) the involvement of the setting (situationality); and (5) the reciprocal relationship between separate texts (intertextuality). These standards can be used as criteria for WF to help the writers make the text communicative (Mikhchi, 2011); thus, they can influence the steps to be taken in the writing process, especially during revision (Hayes, 1996, 2012; Flower & Hayes, 1980). While reviewing the text, students can find ways to evaluate and improve it based on the standards of textuality. To support students in this process, these standards can determine the content-based aspects in which WF can be effectively employed.

The effectiveness of feedback was highlighted by Nicol and Macfarlane-Dick (2006), who outlined the following seven principles: To achieve effective feedback practice, teachers should (1) help clarify what the expected performance is (goals, criteria, expected standards); (2) facilitate the development of self-assessment (reflection) in learning; (3) deliver specific information to students about their learning; (4) foster teacher- and peer-dialogue around learning; (5) encourage positive motivational beliefs and self-esteem; (6) provide opportunities to close the gap between students' current and desired performance; and (7) use the information received from feedback to shape teaching (p. 205).

Research on Teachers' Perceptions and Self-Reported Practices of Product- and Process-Based WF

Examining the perceptions or beliefs of ESL/EFL writing teachers can shed light on "how their beliefs are formed

and developed or the extent to which these beliefs shape their practices" (Min, 2013, p. 627). Yang et al. (2021) argued that previous research has dealt more with EFL teachers' perceptions, preferences, or attitudes towards WCF than with process-based WF. In WF studies (Gul et al., 2016; Lee, 2008), most of the frequently used methods include questionnaires, which are sometimes supplemented by teachers' interviews or focus group discussions. These studies mainly concentrated on implementing different types of corrections (Jodaie & Farrokhi, 2012); on perceptions related to forms, focus, intent, and expectations of WF (Lee et al., 2017); and on the comparison between teacher feedback on one draft and multiple drafts in terms of error communication (Lee, 2008).

Regarding self-reported practices, teachers frequently targeted grammatical errors using coded feedback (Nguyen, 2019) and error corrections on single drafts (Lee, 2008) as the most used techniques of WCF. Other features of analysis were teachers' views on the purpose and nature of using WF; their practice, specifically their area of focus; their communication of assignment writing guidelines; the factors that influenced how they provide WF; and ways of improving teachers' understanding of WF (Gul et al., 2016).

Teachers' beliefs can shape their practices about how to meet their students' needs and capabilities in responding to teacher feedback (Lee et al., 2017). As an example of such a relationship, Indonesian EFL university teachers' actual practices of error correction in students' writing aligned with their perspectives (Purnomo et al., 2021). This indicates that teachers' perceptions can be enacted in their practices.

The existing few empirical studies on feedback conducted in Moroccan higher education have been investigated from the student point of view (Ouahidi & Lamkhanter, 2017, 2020; Zyad & Bouziane, 2020). Empirical studies (Abouabdelkader, 2018; Bouzenirh, 1991) indicated that students face many problems, especially in grammar, vocabulary, and organisation. The reasons are the focus on the product over the process approach to writing and the lack of effective feedback provision (Javadi-Safa, 2018; Ouahidi & Lamkhanter, 2020). Therefore, the present study aims to investigate instructors' perceptions and self-reported practices of product- and process-based WF. Based on this objective, the following research questions were addressed:

1. What are instructors' perceptions of product- and process-based WF?
2. What are instructors' self-reported practices of product- and process-based WF?
3. Is there any match between instructors' perceptions and their self-reported practices regarding the product- and process-based WF?

METHOD

Context of the Study

The importance of teaching EFL in Moroccan public higher education has grown over the years due to the increasing number of students (Jebbour, 2021). Because instructors in English departments have freedom in designing course objectives and content, there is a lack of a unified English language teaching (ELT) syllabus at the institutional level (Jebbour, 2021). However, according to published course descriptions (Abouabdelkader, 2018), product and process writing approaches are often emphasised in writing courses. In the first year of the Bachelor's degree study programme, the focus is on the basic components of writing, such as sentence construction, language mechanics, and paragraph writing. Second-year students are taught to write full compositions of expository, analytical, and argumentative texts with an emphasis on content, purpose, and audience to communicate effectively with mature readers. In the third year, students need to apply their acquired writing skills to produce their final degree research paper. MA students in English studies, such as applied linguistics, need to complete various writing assignments (e.g., reports, reviews, and research projects) to practice the writing process. However, besides the lack of a unified syllabus, the main sources of challenges in ELT are larger class sizes (Ouahidi & Lamkhanter, 2020), unfavourable student-teacher ratio, slow and unequal recruitment policy, and failure to implement continuous assessment (Jebbour, 2021). Although the National Education Charter has emphasised its implementation since 1999 (Jebbour, 2021), English departments often have a summative nature, and incorporating formative assessment into the practice is difficult for most instructors due to these external factors, unfamiliarity, and a lack of systematic training (Jebbour, 2021; Ouakrime, 2000). These factors can influence writing teachers' feedback practices in English writing classrooms, especially when selecting the most appropriate ones based on the context and students' differences and needs to provide adequate personal feedback in the revision process (Ouahidi & Lamkhanter, 2020). Based on the examination of Moroccan university students' perceptions about their teachers' WF, Ouahidi and Lamkhanter (2020) found that instructors provided feedback primarily to the end product because they appeared to frequently skip follow-up activities (e.g., remedial work, substantial revisions) in the writing process, and students claimed that teachers rarely used teacher-student conferencing.

Participants

The current study was conducted in Morocco with a focus on public university EFL writing instructors who are teaching at faculties of arts and humanities. An exploratory quantitative

study using a survey method was designed to analyse and compare the perceived importance of WF approaches with teachers' self-reported practices. To recruit enough participants, the questionnaires were administered both face-to-face and online, and participants anonymously completed them. Thus, data were randomly collected, and the study comprised 51 instructors. This sample size is relatively small because the involved participants were only teachers who taught EFL writing courses (writing paragraphs, composition I and II, and advanced writing) at one of the nine universities, mainly in Meknes, Oujda, Fez, El Jadida, and Kenitra.

Table 2 shows the main characteristics of the sample based on the background variables collected via questionnaire. There were 37 males and 14 females. Teachers between the ages of 31 and 40, and over 50 are the dominant subsample. Concerning the teaching of EFL writing, the majority of teachers have around 15 years' experience, *M* = 14.39, *SD* = 11.17 years. As for the number of students in a writing class, most instructors teach around 70 students; thus, they have been teaching large groups of students.

Instrument and Procedures

Content Validity of the Questionnaire

The present study used a self-designed questionnaire. The reason for not adopting some of the existing questionnaires is due to their overall focus on WCF rather than other aspects of process-based WF, as well as their lack of attention to a comparison between teachers' perceptions and self-reported practices of WF. Thus, to ensure content validity and to be able to select items that reflect the variables of the construct in the measurement instrument, three procedures were implemented. First, the questionnaire structure, the subscales, and the individual items were developed and formulated based on the literature review about WF (Bitchener & Ferris, 2012; Beaugrande & Dressler, 1981/1992; Ferguson, 2011; Ferris, 2003; Haines, 2004; Koenka & Anderman, 2019; Koenka et al., 2019; Nicol, 2010; Stewart, 2015; Tai et al., 2018). Second, the first version of the item pool was assessed by researchers in the fields of EFL/ESL and education. They were asked to evaluate the items in terms of their necessity and relevancy to the constructs being measured, as

Table 2

Characteristics of Participants

Baseline characteristic	Full sample (N= 51)	
	N	%
Gender		
Male	37	73
Female	14	27
Age		
20–30 years old	10	20
31–40 years old	15	29
41–50 years old	10	20
Over 50 years old	16	31
Years of teaching experience in EFL writing		
1–5 years	13	25
6–10 years	14	27
11–20 years	11	22
21–30 years	8	16
Over 30 years	5	10
Average number of students in EFL writing classes		
1–50 students	22	43
50–100 students	20	39
101–150 students	4	8
Over 150 students	5	10

well as their clarity. Third, after the statements were revised based on the feedback that was received, a pilot study was conducted among Moroccan EFL writing instructors to assess the questionnaires' suitability and adequacy. Considering their constructive feedback and suggestions, the questionnaire was finalized to conduct this study in November and December 2021.

The questionnaire items that were used are in the appendix. The questionnaire also contains background questions, but these were only applied to describe the sample (Table 2); thus, the variables are not considered in the data analysis and interpretation, and, therefore, the related questions are not included in the appendix. The two questions targeting the dimensions of teachers' perceptions and self-reported practices about WF show several similarities and differences. Each dimension contains 40 total items. These can be assigned to the same subscales that aim to cover the features of product- and process-based WF and, thus, allow several comparisons during data analysis. The difference between the two questions, however, is that the first question asks about EFL instructors' perceptions of WF practices. For each item, the teachers had to decide on the extent to which they agreed or disagreed with the given statements by using a five-point Likert scale, which ranged from one (strongly disagree) to five (strongly agree). A scale with an odd number was chosen because it allowed participants to express their neutral positions. The second question asks instructors about their WF practices. Thus, participants are required to rate how frequently they use the feedback activities listed in this question. In the case of all statements, a five-point intensity scale ranging from one (never) to five (always) was offered. The aim of using these item-scale data was to compute composite scores for the two dimensions' subscales, which can be interpreted as continuous variables on interval level (see e.g., Rukmana, 2022; Wicking, 2022).

As can be seen in Table 3, within the product-based WF approach, there are three subscales. The first is *WCF*, whose items were formulated based on its typology (direct, indirect, and coded correction). The second subscale contains *WF modes on the written text*. These modes are teacher- and product-oriented (Ferris, 2003), form-based, and focus on the linguistic structure of the final text (Bitchener & Ferris, 2012). The third subscale is *judgemental WF on the written text*. This feedback has a summative nature because it is often based on the number of errors and scores, and it often includes general praise and criticism, usually without any explanation (Koenka & Anderman, 2019).

The scale of the process-based WF approach has six subscales. The first is named *content-based WF related to standards of textuality* because, when developing its items, the main features of cohesion, coherence, intentionality, informativity, acceptability, situationality, and intertextuality (Beaugrande & Dressler, 1981/1992) were included. The second subscale is *content-based WF related to macroaspects of writing*. It contains aspects such as purpose, genre, and developmental aspects of a text (Ferris, 2003) that can function as areas in the revision process. The third subscale is *developing evaluative judgement*, which consists of WF practices that require students to assess their work and that of others in reflective and constructive ways that can be supported by predefined assessment criteria in order to make improvements in the writing process (Tai et al., 2018). The fourth subscale is *supportive WF in the writing process*, which aims to cover the new conceptualizations of feedback defined in the literature as being dialogic and including oral

Table 3

Overview of Scales, Subscales, and Items Related to Two Dimensions

Scales and subscales	Number of items	Dimensions	
		Perceptions	Self-reported practices
Product approach of WF	11		
Written corrective feedback (WCF)	4	9., 15., 28., 40.	2., 14., 20., 37.
WF modes on the written text	3	1., 24., 26.	1., 25., 27.
Judgemental WF on the written text	4	19., 13., 32., 37.	8., 13., 32., 39.
Process approach of WF	29		
Content- based WF related to the standards of textuality	7	3., 5., 8., 20., 22., 31., 33.	3., 5., 7., 10., 16., 29., 36.
Content-based WF related to macroaspects of writing	4	6., 10., 12., 30.	9., 11., 18., 31.
Developing evaluative judgement	4	11., 14., 21., 38.	15., 22., 33., 40.
Supportive WF in the writing process	4	7., 17., 23., 25.	17., 21., 23., 26.
Effective WF modes in the writing process	6	2., 4., 18., 27., 29., 35.	6., 19., 24., 28., 30., 35.
Judgemental WF in the writing process	4	16., 34., 36., 39.	4., 12., 34., 38.

Note. The numbers given in the dimensions' columns indicate the serial numbers of the questionnaire items in the appendix.

feedback, teacher-student discussions, and peer feedback during the revision and rewriting process (Nicol, 2010; Tai et al., 2018). The fifth subscale covers *effective WF modes in the writing process*. The effectiveness of feedback has been regarded as being supportive, specific, personalized, detailed, and as identifying the next steps (Ferguson, 2011; Koenka & Anderman, 2019; Koenka et al., 2019). The sixth subscale is *judgemental WF in the writing process*, which includes justified praise, criticism, and suggestions to improve writing (Haines, 2004; Stewart, 2015).

Construct Validity, Convergent Validity, and Reliability of the Questionnaire

To achieve the purposes of our study, the construct and convergent validity, along with the reliability of the questionnaire items, were examined. These analyses aimed to ensure that the items are relevant to the research focus and that, before analysing them at the subscale level, the extension of the results is reliable and valid. Thus, first, to control the construct validity of the questionnaire, exploratory factor analysis was applied to identify and compare the empirical structure of the variable system with the theoretical structure and to reduce the data set to a manageable size by maintaining most of the original information (Pituch & Stevens, 2016)[1]. Therefore, four principal component analyses (PCA) with Varimax rotation were performed along the two dimensions and scales to determine the contribution of each item to the factor structure and to create composite scores of the different subscales. Second, to analyse the convergent validity of our instrument, the relationships between instructors' perceptions and their self-reported practices along the subscales were compared by computing Pearson's correlation coefficients. Third, the reliability of the subscales was examined by calculating the values of Cronbach's alphas.

Table 4 shows the results of the four PCAs conducted to examine the factorability of the items. In all cases, the Kaiser-Meyer-Olkin measure of sampling adequacy values ranged between .72 and .82, which, as recommended by Kaiser (1974), were middling and meritorious, as well as above the minimum acceptable value of .5. Furthermore, results from Bartlett's test of sphericity were significant in all models, $p < .001$, confirming that the correlation coefficients between the items were sufficient for PCAs. Additionally, communalities of all items exceeded the minimal acceptable limit of .2 (Child, 2006), and the average values in all models were above .6, which is acceptable for a sample size of less than 100 (MacCullum et al., 1999). The total variance explained by the generated factors was around or higher than 65%. The number of factors in each model was determined based on scree plots. Figures 1 and 2 contain the eigenvalues for the two dimensions together because the number of components belonging to the two scales is the same. When identifying the factors, the eigenvalue greater than 1 was considered. In line with the theoretical structure, there are three factors for the product-based WF in both dimensions and six for the process WF approach related to self-reported practices. However, in the other dimension, the sixth component's eigenvalue was slightly lower than 1 (0.95), but the six-factor resolution was preferred because it can be supported by the theoretical background and allows the comparison of perceptions with the application frequency of the WF practices.

When examining the factor loadings at the item level, in the case of the product-oriented WF scales, each item in both dimensions corresponded to the theoretical structure. As shown in Table 5, the values for all factors were above the recommended and preferred limit of .4 (Yang, 2022)[2]. Even in the case of the process approach, in line with the theoretical background, the individual factors could be identified by the majority of the items having factor loadings higher than .4. However, some cross-loading items were also recognised and could be classified into another factor. At the same time, it must be considered that the results are influenced by the number of generated factors and the sample size. This indi-

Table 4

Summary of Four PCAs

Dimensions and scales	KMO	Bartlett's Test of Sphericity			Communalities			Total Variance Explained (%)
		χ^2	df	p	Min.	Max.	M	
Perceptions								
Product-based WF	.75	201.48	55	<.001	.46	.80	.65	64.66
Process-based WF	.80	1134.35	406	<.001	.60	.83	.73	72.58
Self-reported practice								
Product-based WF	.72	215.83	55	<.001	.35	.85	.65	64.78
Process-based WF	.82	1243.09	406	<.001	.50	.86	.76	75.61

Note. KMO = Kaiser-Meyer-Olkin measure of sampling adequacy

[1] Field, A. (2009). *Discovering statistics using SPSS (3rd ed.)*. SAGE.

[2] Field, A. (2009). *Discovering statistics using SPSS (3rd ed.)*. SAGE.

Figure 1

Scree Plot regarding Product Approach of WF in Two Dimensions

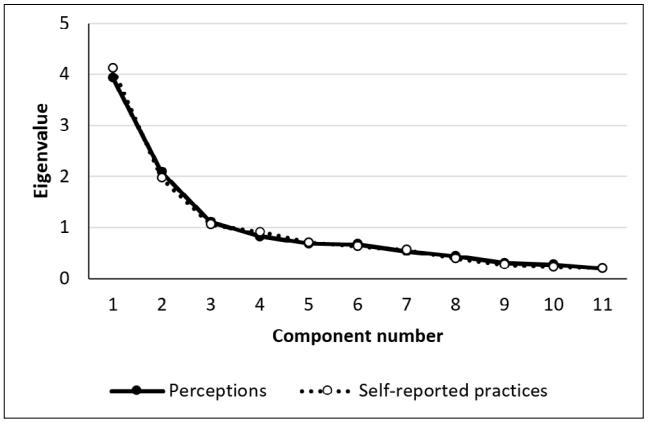

Figure 2

Scree Plot regarding Process Approach of WF in Two Dimensions

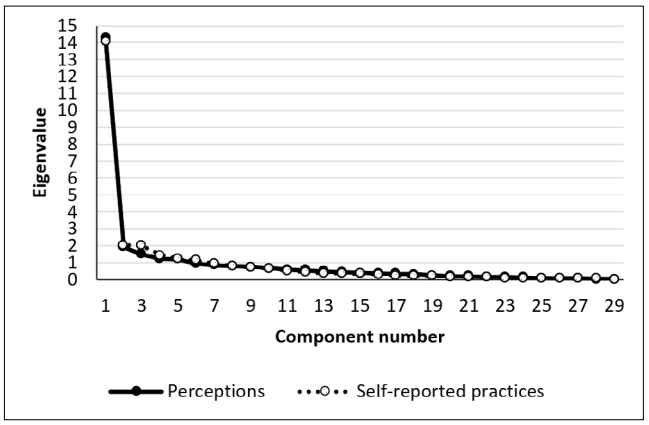

Table 5

Summary of Factor Loadings, Pearson's Correlation Coefficients, and Cronbach's Alphas

Scales and subscales	Factor loadings				Correlations between P– SP		Cronbach's alphas	
	P		SP					
	Min.	Max.	Min.	Max.	r	p	P	SP
Product approach of WF								
Written corrective feedback	.42	.83	.49	.81	.74	<.001	.67	.76
WF modes on the written text	.43	.80	.60	.88	.64	<.001	.50	.61
Judgemental WF on the written text	.59	.85	.69	.82	.73	<.001	.83	.71
Process approach of WF								
Content- based WF related to the standards of textuality	.34	.77	.63	.87	.78	<.001	.87	.88
Content-based WF related to macroaspects of writing	.39	.77	.53	.69	.75	<.001	.78	.74
Developing evaluative judgement	.35	.55	.41	.77	.80	<.001	.84	.79
Supportive WF in the writing process	.39	.84	.34	.81	.67	<.001	.80	.71
Effective WF modes in the writing process	.43	.70	.43	.75	.75	<.001	.89	.88
Judgemental WF in the writing process	.33	.86	.42	.62	.73	<.001	.75	.74

Note. P = perceptions, SP = self-reported practices

cates that it is recommended to control the factor structure related to the process WF approach on a larger sample.

Table 5 indicates the correlations between the composite scores related to the two dimensions along the subscales, together with their Cronbach's alpha coefficients. In all cases, there were moderate or strong positive significant relationships between perceptions and their corresponding self-reported practices, indicating that these two constructs are not only theoretically but also empirically related. Most of the Cronbach's alpha values were acceptable; however, the figures regarding the process approach were higher than those of the product WF approach. Cronbach's alpha of *WF modes on the written text* in the perception dimension is low, but acceptable in the other dimension. Therefore, we decided not to exclude this subscale from further analysis, but the results should be interpreted with caution. The lower reliability was due to the limited number of items; therefore, including more items seems necessary to improve the reliability of this subscale.

Data Analysis

To respond to the three research questions, the Statistical Package for Social Sciences (IBM SPSS) V25 was utilized. As a first step, composite scores were created that emerged from the PCAs. These scores indicated the importance of perceptions of the items within the given subscales and, in the case of self-reported practice, revealed the reported frequency of using the given WF modes in the respondents' own practice. To identify instructors' perceptions and to investigate their self-reported practices of WF, descriptive statistical analyses were employed on these composite scores. The differences between them were examined by performing a series of paired-samples t-tests. The internal relationships between the subscales were indicated by calculating the correlation coefficients. Finally, the differences between perceptions and self-reported practices along the subscales were analysed.

RESULTS

Research Question One

The results in Table 6 related to the product-based WF show that university teachers involved in our study agreed on the value of both *WCF* and *WF modes on the written text*. The ranges, means, and standard deviations of these subscales were similar, $t(50) = 1.82$, $p = .07$, and there was a moderate significant correlation between them, $r = .61$, $p < .001$. Respondents also perceived the statements within these two subscales as more essential than *judgemental WF*, because most of them were neutral when they rated the items within this subscale, and the sample can also be considered more heterogeneous. Significant differences were found between the mean of this subscale and the means of *WCF*, $t(50) = 10.06$, $p < .001$, and *WF modes*, $t(50) = 8.34$, $p < .001$. While there was a weak significant correlation between *WCF* and *judgemental WF*, $r = .33$, $p = .02$, no significant correlation was found between *WF modes* and *judgemental WF*, $r = .26$, $p = .07$.

In the descending order of the averages of the six subscales belonging to process-oriented WF, significant differences between three subscales were identified. First, respondents mostly agreed with the efficacy of using *effective WF modes in the writing process*. The mean of this subscale differed significantly from the means of all other subscales. As an indicator of this, the difference in averages between this subscale and the second in the order was significant, $t(50) = 2.21$, $p = .03$. Second, instructors who completed our questionnaire perceived the three subscales that consist of *content-based WF related to macroaspects of writing*, *developing evaluative judgement*, and *judgemental WF* in the same way because the ranges, means, and standard deviations were similar. Third, they found these more important than the practices of *content-based WF related to the standards of textuality*. For example, the difference between this subscale and *judgemental WF* was significant, $t(50) = 3.45$, $p = .001$, but did not differ from the last subscale, *supportive WF*, $t(50) = 0.89$, $p = .38$. When comparing the standard deviations among the six subscales, the composition of the sample can be considered homogeneous, $0.61 \leq SD \leq 0.75$. In terms of the relationships between all subscales, there were moderate or strong positive significant correlations, $.53 \leq r \leq .87$, $p < .001$.

Research Question Two

As can be seen in Table 7, the differences in averages of the subscales belonging to product-oriented WF were identical to those identified in the perception dimension. The means of *WF modes on the written text* and *WCF* subscales were not significantly different, $t(50) = 0.78$, $p = .44$, but there was a

Table 6

Moroccan EFL Instructors' Perceptions of Product- and Process-Based WF

Scales and subscales	Minimum	Maximum	M	SD
Product approach of WF				
Written corrective feedback	1.50	5.00	3.91	0.61
WF modes on the written text	1.67	5.00	3.76	0.68
Judgemental WF on the written text	1.00	5.00	2.56*	0.97
Process approach of WF				
Effective WF modes in the writing process	1.17	5.00	4.10	0.68
Content-based WF related to macroaspects of writing	1.50	5.00	3.98*	0.62
Developing evaluative judgement	1.00	5.00	3.96	0.75
Judgemental WF in the writing process	2.00	5.00	3.96	0.61
Content-based WF related to the standards of textuality	1.14	5.00	3.72*	0.66
Supportive WF in the writing process	1.00	5.00	3.65	0.72

Note. * Mean significantly differs from the previous subscale at p < .05.

moderate correlation, $r = .60$, $p < .001$. The mean of *judgemental WF* is significantly lower than the averages of the previously mentioned subscales, $p < .001$. As for their relationships, weak significant correlations were identified, $.28 \leq r \leq .43$, $p < .05$.

Regarding the self-reported practices of the process WF approach, no significant differences were found in the descending order between the averages of the six subscales. Examining the significant differences in pairs, we identified two groups. On the one hand, the means of *judgemental WF* and *effective WF modes in the writing process* differed significantly from the last three subscales. This is indicated, for example, by the difference between *effective WF modes* and *developing evaluative judgement*, $t(50) = 2.58$, $p = .01$. On the other hand, there were significant differences between the mean of *content-based WF related to macroaspects of writing* and the means of the last two subscales, $p < .05$. Similarly to the perception dimension, in the case of all subscales, the sample can be considered homogeneous, $0.70 \leq SD \leq 0.78$. However, there were mainly strong significant correlations between all subscales, $.63 \leq r \leq .88$, $p < .001$.

Research Question Three

Table 8 presents the results of the comparison between perceptions and self-reported practices along the subscales. The non-significant differences indicated consistencies in five subscales, namely *WF modes* and *judgemental WF on the written text*, *content-based WF related to the standards of textuality*, *supportive* and *judgemental WF in the writing process*. Mismatches were indicated by significant differences between the two constructs in the subscales of *WCF*, *content-based WF related to macroaspects of writing*, *developing evaluative judgement*, and *effective WF modes in the writing process*. Thus, WF modes measured by these subscales were considered more important by the respondents, while the related practices were much less frequently used. However, the degree of difference was somewhat larger for the process-oriented WF practices compared to the WCF subscale.

DISCUSSION

This section discusses the results of the three research questions. However, no previous studies were found that were conducted among Moroccan EFL writing university instructors with which our results can be compared directly. Therefore, after a systematic literature review, 13 empirical studies were selected that were published in peer-reviewed journals and are similar in terms of their research design and content. Thus, the included studies used quantitative or mixed survey methods, focused on teachers' perceptions and/or self-reported practices of WF in EFL, ESL, or academic writing contexts, and covered one or more similar subscales as those in our study.

EFL Instructors' Perceptions of Product- and Process-Based WF

From the perspective of product-based WF, it can be stated that Moroccan university teachers involved in our study agreed on the importance of both *WCF* and *WF modes on the written text* in a similar way because there was a non-significant difference between the means of these two subscales. This result is consistent with the findings of Junqueira and Payant's (2015) study, in which participants believed in the importance of WF modes on errors related to organisation and content. In other studies (Al Kharusi & Al-Mekhlafi, 2019; Sakrak-Ekin & Balçikanli, 2019; Zaman et al., 2012),

Table 7

Moroccan EFL Instructors' Self-Reported Practices of Product-and Process-Based WF

Scales and subscales	Minimum	Maximum	M	SD
Product approach of WF				
WF modes on the written text	1.33	5.00	3.80	0.75
Written corrective feedback	1.75	5.00	3.72	0.81
Judgemental WF on the written text	1.00	4.50	2.60*	0.93
Process approach of WF				
Judgemental WF in the writing process	2.00	5.00	3.91	0.71
Effective WF modes in the writing process	1.83	5.00	3.89	0.75
Content-based WF related to macroaspects of writing	2.00	5.00	3.77	0.73
Developing evaluative judgement	2.00	5.00	3.71	0.74
Content-based WF related to the standards of textuality	2.00	4.86	3.64	0.77
Supportive WF in the writing process	1.75	5.00	3.63	0.78

Note. * Mean significantly differs from the previous subscale at $p < .001$.

Table 8

Moroccan EFL Instructors' Perceptions and Self-Reported Practices of WF

Scales and subscales	Perceptions		Practices		Mean Diff.	T-test	
	M	SD	M	SD		t(50)	p
Product approach of WF							
Written corrective feedback	3.91	0.61	3.72	0.81	0.19	2.48	.02
WF modes on the written text	3.76	0.68	3.80	0.75	-0.03	-0.38	.70
Judgemental WF on the written text	2.56	0.97	2.60	0.93	-0.04	-0.40	.69
Process approach of WF							
Content- based WF related to the standards of textuality	3.72	0.66	3.64	0.77	0.08	1.12	.27
Content-based WF related to macroaspects of writing	3.98	0.62	3.77	0.73	0.20	2.94	<.001
Developing evaluative judgement	3.96	0.75	3.71	0.74	0.25	3.87	<.001
Supportive WF in the writing process	3.65	0.72	3.63	0.78	0.02	0.28	.78
Effective WF modes in the writing process	4.10	0.68	3.89	0.75	0.21	2.99	<.001
Judgemental WF in the writing process	3.96	0.61	3.91	0.71	0.05	0.78	.44

Note. In the case of all subscales, the values can be ranged between 1 and 5.

many of the respondents also agreed with the efficacy of WCF and perceived it as vital in developing students' writing. Similarly, Purnomo et al. (2021) and Sakrak-Ekin and Balçikanli (2019) found that most involved teachers viewed the provisions of WCF as valuable because they were easy to follow and understand. Other researchers (Al Kharusi & Al-Mekhlafi, 2019; Alshahrani & Storch, 2014; Liu & Wu, 2019; Zaman et al., 2012) also discovered that providing feedback on form, language use, content, organisation, and mechanics based on different WF modes appears to be crucial to teachers. The reason could be related to their flexibility in giving feedback on grammar and mechanics, which can be easily and quickly identified. In our study, however, teachers perceived *WCF* and *WF modes on the written text* as more valuable than *judgemental WF*. This indicates that Moroccan instructors perceived the use of summative WF in the form of grades, praise, and criticism without justification as less important for assessing students' texts.

As for the process-oriented WF, the instructors who participated in this study perceived the subscales that consist of *effective WF modes in the writing process*, as well as *content-based WF related to macroaspects*, *developing evaluative judgement*, and *judgemental WF in the writing process* as the most fundamental ones, because there were no significant differences in the means of the three latter subscales. Findings from Zaman et al.'s (2012) study matched our results regarding the perceived value of judgemental WF. They concluded that the combination of both praise and criticism with explanations helps develop students' writing processes, especially if it is supported by comments and suggestions on their strengths and weaknesses. Cheng et al. (2021) also claimed that teachers involved in their study favoured the comprehensive WF approach, which focuses not only on microaspects but also on providing content-based feedback related to macroaspects of writing. Thus, teachers maintained the responsibility to develop students' overall writing performance rather than specific areas. Concerning *evaluative judgement*, Purnomo et al. (2021) found that most teachers believed it was important for students to assess themselves by analysing and correcting their own writing. The other two subscales, *content-based WF related to the standards of textuality* and *supportive WF in the writing process*, compared to the previously mentioned subscales, were perceived as significantly less notable by the responding teachers. Because no study addressed teachers' perceptions of the *content-based WF related to the standards of textuality*, it can be claimed that the little attention given to this type of WF might be owing to teachers' lack of awareness of it and therefore the extent to which their students' writing meets these criteria. In the case of the *supportive WF*, Zaman et al. (2012) also claimed that 58% of teachers had negative perceptions of it, especially about the reliability of peers' feedback. Possible reasons for teachers' underestimation of the importance of supportive WF in our study are probably attributed to either their difficulties in understanding and implementing formative evaluation practices (e.g., dialogic, peer, oral, and multiple draft-focused feedback), or their concern with students' final written products rather than writing process, which is based on collaboration among teachers, students, and peers in the feedback process. These could be possible reasons why the results of our study regarding this subscale differed from that of Nguyen and Filipi (2018) who found that participants perceived the process of providing feedback on students' second and final drafts to be of great value. The majority of teachers taking

part in Liu and Wu's (2019) study also perceived oral feedback, which is part of supportive WF, as potentially valuable for the development of students' writing.

EFL Instructors' Self-Reported Practices of Product- and Process-Based WF

Based on the product WF approach, Moroccan participant teachers stated they relied on the practices of both *WCF* and *WF modes on the written text*. This was justified by the non-significant difference between these two subscales. In harmony with these results, the majority of teacher respondents (69%) in the study of Purnomo et al. (2021) stated they applied direct WCF by indicating errors and correcting them. In the present study, *judgemental WF on the written text* was less applied in comparison to other product WF practices described in the subscales. Therefore, it seemed that the WF provided by Moroccan teachers was not used to give grades, praise, or criticism that judge students' final written texts but rather to indicate and correct errors. Similarly, Al Kharusi and Al-Mekhlafi (2019) found that indirect WCF was one of the most highly practiced techniques. An opposite finding to our study regarding *judgemental WF* is that of Li and Barnard (2011), which revealed that teachers perceived the awarding of a grade and praise to be integral elements of their feedback provision. This difference may indicate that Moroccan instructors probably prefer to avoid problems related to providing grades or praising and criticising students' written text in general ways without justifications.

Regarding the process WF approach, our study revealed that Moroccan teachers stated they utilized *judgemental WF* and *effective WF modes in the writing process* as their more frequent self-reported practices compared to the subscales *developing evaluative judgement*, *content-based WF related to the standards of textuality*, and *supportive WF*. The focus on judgemental WF may be explained by the institutional requirements defined in the National Education Charter, which require instructors to implement continuous assessment in their practice (Jebbour, 2021) and, thus, to provide process-oriented WF by using assessment criteria, praise, and criticism formulated with justifications. The use of *effective WF modes* indicates teachers' orientation toward providing students with specific comments, suggestions, detailed information, and guidance during the writing process. Concurring with these results, Ma (2018) also found that teachers acknowledged the motivating role of providing strength-related feedback and positive comments. Despite this frequent emphasis on the two previous WF types, Moroccan instructors seem reluctant to overtly incorporate student-centred WF types, which are *developing evaluative judgement* and *supportive WF*, to encourage students to assess their writing and that of others, as well as to comment on students' writing based on the standards of textuality.

The Relationship between Instructors' Perceptions and Self-Reported Practices of Product- and Process-Based WF

In the case of product WF subscales, we found that teachers' perceptions of *WCF* did not match with their self-reported practices because there was a significant difference between the two dimensions. Thus, instructors considered WCF important, but they stated they applied its practice less frequently. This incompatibility regarding direct or indirect feedback has also been confirmed in Mao and Crosthwaite's (2019) study. Sakrak-Ekin and Balçikanli (2019) attributed the discrepancy between teachers' beliefs and their practices concerning the effectiveness of WCF to the low writing skill level of students, lack of a general common practice about error correction, fear of not providing enough input, and time constraints. In contrast to our findings regarding WCF, Purnomo et al. (2021) showed a high consistency between Indonesian EFL university teachers' perspectives and their actual practices of correcting students' writing errors. According to them, the reasons for this consistency were participants' experiences with different strategies of providing WCF, their awareness of its value, and their willingness to give feedback. Concerning the subscales, *WF modes* and *judgemental WF on the written text*, alignments were found due to the lack of significant differences between the means of the two dimensions. This result is consistent with the findings of previous studies (Mao & Crosthwaite, 2019; Said & Mouzrati, 2018) regarding *WF modes on the written text* because involved teachers focused more on the linguistic structure of the final written text (e.g., grammar, vocabulary) than on giving student support that would help develop meaningful ideas.

Regarding the process WF, we found mismatches in three subscales, *content-based WF related to macroaspects*, *developing evaluative judgement* and *effective WF modes in the writing process*. This was justified by significant differences between the two dimensions. Thus, WF modes measured by these subscales were considered more important by the respondents, while their related practices were less frequently used. These mismatches may be related to Moroccan instructors' concerns on how to guide students in developing their writing beyond microaspects, how to involve them in assessing their own and their peers' written work, and how to support them by providing detailed and specific comments and suggestions. Compared to other studies, misalignment regarding *effective WF modes* was also found in Said and Mouzrati's (2018) study, where Moroccan high school teachers believed in the value of positive WF in motivating students to improve their texts. Yet, in their practices, teachers only addressed structural deficiencies in students' writing. In the case of the other three subscales, instructors' perceptions aligned with their self-reported practices as these were not significantly different. Regarding *judgemental WF*, the same finding was reported in Ma's (2018) study, in which teachers valued and acknowledged the efficacy of following a criterion-referenced teacher evaluation form when giving

WF. Moroccan teachers' provision of criterion-referenced WF is consistent with the perceived idea that teacher feedback should be related to the assessment criteria. Previously, no study compared perceptions and self-reported practices regarding *content-based WF related to the standards of textuality*. Therefore, one of the main findings of our study, that teachers might perceive and give feedback based on the extent to which students' writing is coherent, cohesive, context-oriented, and informative to the readers and their intention, may merit some attention in further studies.

Limitations and Suggestions for Future Research

The limitations of this study can be explained by five reasons. First, the limited sample size influenced the findings mainly in the case of process-based WF because it covers several subscales, and the reliability of the subscale, *WF modes on the written text*, needs to be improved by formulating more items. Second, the extent to which background variables related to providing WF could influence teachers' perceptions and practices was not investigated. Third, no information was given regarding instructors' behaviour in relation to the practicality of the different WF approaches. To examine these, qualitative research methods could have been employed to compare their self-reported and observed practices. Fourth, students were not involved to investigate the extent to which teachers' perceptions and practices match those of students. Finally, when discussing the results, comparison between the findings of our study and the research of others was made based on their study design and content. However, in different school systems, the contexts in which WF is provided and received may make different perceptions and/or practices viable or optimal. These limitations also indicate possible directions for further research. The developed questionnaire, which has been verified in terms of validity and reliability, can function as an appropriate instrument to investigate product and process WF. It can also be modified to account for the students' perspective: first, to analyse their WF preferences and perceived practices, and second, to compare them with teachers' perceptions and self-reported practices. Future studies from these multiple perspectives could meticulously gauge the effectiveness of WF forms in EFL writing classrooms.

CONCLUSION

In general, the findings of this study concerning Moroccan writing instructors' perceptions showed that they valued WCF and believed that it helps students solve their problems in areas related to language accuracy. The importance of providing WF on students' final products may be due to teachers' aim to help Moroccan students write accurately in areas related to grammar, vocabulary, and organisation, as argued by some Moroccan researchers (Abouabdelkader, 2018; Bouzenirh, 1991). Regarding process-based WF, effective WF modes were highly valued by most of the instructors. As for their self-reported practices concerning product-oriented WF, instructors stated that they often employed WF modes on the written text, which address students' linguistic structure when writing their drafts. Concerning process-oriented feedback, judgemental WF and effective WF modes were also frequently utilized. The mismatches between perceptions and self-reported practices found in this study may lead Moroccan instructors to gain knowledge and expertise, which can help them bridge the gap between what they believe and what should be enacted in practice. As for the theoretical and pedagogical implications, our findings can empower the body of knowledge of product and process WF in the assessment of EFL writing. This study may also contribute to teachers' awareness by highlighting the importance of incorporating follow-up WF activities into their instructional practice that promote new feedback conceptualisations such as dialogic feedback, peer feedback, content-based feedback, and evaluative judgment. Its innovation resides in proposing new scales and subscales that show different distinctions between product- and process-based WF. Owing to the limited applications of WF types, strategies, and practices, teachers are therefore required to professionally develop their WF knowledge to encourage the integration of product and process WF approaches in diverse contexts of writing. Further research on the effectiveness of WF is also required from multiple perspectives with larger sample size, different subject samples, and other research instruments.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

A. Mamad: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing, Other contribution.

T. Vígh: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing, Other contribution.

REFERENCES

Abouabdelkader, S. (2018). Moroccan EFL university students' composing skills in the balance: Assessment procedures and outcomes. In A. Ahmed, & H. Abouabdelkader (Eds.), *Assessing EFL writing in the 21st century Arab world* (pp. 79–109). Palgrave Macmillan, Cham.

Al Kharusi, F. M., & Al-Mekhlafi, A. M. (2019). The practice of teachers' written corrective feedback as perceived by EFL teachers and supervisors. *International Journal of Higher Education*, *8*(6), 120–137. https://doi.org/10.5430/ijhe.v8n6p120

Alshahrani, A., & Storch, N. (2014). Investigating teachers' written corrective feedback practices in a Saudi EFL context: How do they align with their beliefs, institutional guidelines, and students' preferences? *Australian Review of Applied Linguistics*, *37*(2), 101–122. https://doi.org/10.1075/aral.37.2.02als

Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, *9*(3), 227–257. https://doi.org/10.1016/S1060-3743(00)00027-8

Beaugrande, R., & Dressler, W. (1981/1992). *Introduction to text linguistics*. Longman.

Bitchener, J., & Ferris, D. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge.

Bitchener, J., & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing*, *19*(4), 207–217. https://doi.org/10.1016/j.jslw.2010.10.002

Bouzenirh, F. (1991). Errors of composition. In El Haddad E., & M. Najbi (Eds.), *English Language Teaching in the Maghreb: Focus on the Learner* (pp. 113–126). Tetouan

Bowen, N. E. J. A., Thomas, N., & Vandermeulen, N. (2022). Exploring feedback and regulation in online writing classes with keystroke logging. *Computers and Composition*, *63*, 1–30. https://doi.org/10.1016/j.compcom.2022.102692

Brookhart, S. M. (2008). *How to give effective feedback to your students*. Association for Supervision and Curriculum Development.

Brooks, C., Burton, R., van der Kleij, F., Ablaza, C., Carroll, A., Hattie, J., & Neill, S. (2021). Teachers activating learners: The effects of a student-centred feedback approach on writing achievement. *Teaching and Teacher Education*, *105*, 1–10. https://doi.org/10.1016/j.tate.2021.103387

Carless, D., & Boud, D. (2018). The development of student feedback literacy: enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, *43*(8), 1315–1325. https://doi.org/10.1080/02602938.2018.1463354

Cheng, X., Zhang, L. J., & Yan, Q. (2021). Exploring teacher written feedback in EFL writing classrooms: Beliefs and practices in interaction. *Language Teaching Research*, 1–31. https://doi.org/10.1177/13621688211057665

Child, D. (2006). *The essentials of factor analysis* (3rd ed). Continuum.

Cho, S. (2015). Writing teacher views on teacher feedback: A shift from grammar corrector to motivator. *Journal of Asia TEFL*, *12*(3), 33–59. https://doi.org/10.18823/asiatefl.2015.12.3.2.33

Ellis, R. (1998). Teaching and research: Options in grammar teaching. *TESOL Quarterly*, *32*(1), 39–60. https://doi.org/10.2307/3587901

Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education*, *36*(1), 51–62. https://doi.org/10.1080/02602930903197883

Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing*, *8*(1), 1–11. https://doi.org/10.1016/s1060-3743(99)80110-6

Ferris, D. R. (2003). *Response to student writing: Implications for second language students*. Routledge.

Ferris, D. R. (2004). The "Grammar Correction" debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the meantime …?). *Journal of Second Language Writing*, *13*(1), 49–62. https://doi.org/10.1016/j.jslw.2004.04.005

Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, *32*(2), 181–201. https://doi.org/10.1017/s0272263109990490

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing*, *10*(3), 161–184. https://doi.org/10.1016/S1060-3743(01)00039-X

Flower, L. & Hayes, J. (1980). Identifying the organization of writing processes. In L. W. Gregg & E. R. Steinberg (Eds.): *Cognitive processes in writing: An interdisciplinary approach* (pp. 3–30). Lawrence Erlbaum.

Gul, R. B., Tharani, A., Lakhani, A., Rizvi, N. F., & Ali, S. K. (2016). Teachers' perceptions and practices of written feedback in higher education. *World Journal of Education*, *6*(3), 10–20. https://doi.org/10.5430/wje.v6n3p10

Guo, Y., Puranik, C., Dinnesen, M. S., & Hall, A. H. (2022). Exploring kindergarten teachers' classroom practices and beliefs in writing. *Reading and Writing*, *35*(2), 457–478. https://doi.org/10.1007/s11145-021-10193-y

Haines, C. (2004). *Assessing students' written work: Marking essays and reports*. Routledge.

Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Randall (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 1–27). Erlbaum.

Hayes, J. R. (2012). Modeling and remodeling writing. *Written Communication*, *29*(3), 369–388. https://doi.org/10.1177/0741088312451260

Henderson, M., Phillips, M., Ryan, T., Boud, D., Dawson, P., Molloy, E., & Mahoney, P. (2019). Conditions that enable effective feedback. *Higher Education Research & Development*, *38*(7), 1401–1416. https://doi.org/10.1080/07294360.2019.1657807

Hillocks, G. (1986). *Research on written composition: New directions for teaching*. National Conference on Research in English.

Hyland, K. (2003). *Second language writing*. Cambridge University Press.

Hyland, K. (2013). Student perceptions of hidden messages in teacher written feedback. *Studies in Educational Evaluation*, *39*(3), 180–187. https://doi.org/10.1016/j.stueduc.2013.06.003

Irimiea, S. (2008). *Text linguistics*. Presa Universitara Clujeana.

Javadi-Safa, A. (2018). A brief overview of key issues in second language writing teaching and research. *International Journal of Education and Literacy Studies*, *6*(2), 15–25. https://doi.org/10.7575/aiac.ijels.v.6n.2p.15

Jebbour, M. (2021). English language teaching in Morocco: A focus on the English department. *The Journal of North African Studies*, *26*(1), 103–115. https://doi.org/10.1080/13629387.2019.1681267

Jodaie, M., & Farrokhi, F. (2012). An exploration of private language institute teachers' perceptions of written grammar feedback in EFL classes. *English Language Teaching*, *5*(2), 58–67. https://doi.org/10.5539/elt.v5n2p58

Junqueira, L., & Payant, C. (2015). "I just want to do it right, but it's so hard": A novice teacher's written feedback beliefs and practices. *Journal of Second Language Writing*, *27*, 19–36. https://doi.org/10.1016/j.jslw.2014.11.001

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*(1), 31–36. https://doi.org/10.1007/bf02291575

Keh, C. (1990). Feedback in the writing process: A model and methods for implementation. *ELT Journal*, *44*(4), 294–304. https://doi.org/10.1093/elt/44.4.294

Kepner, C. G. (1991). An experiment in the relationship of types of written feedback to the development of secondlanguage writing skills. *The Modern Language Journal*, *75*(3), 305–313. https://doi.org/10.1111/j.1540-4781.1991.tb05359.x

Koenka, A. C., & Anderman, E. M. (2019). Personalized feedback as a strategy for improving motivation and performance among middle school students. *Middle School Journal*, *50*(5), 15–22. https://doi.org/10.1080/00940771.2019.1674768

Koenka, A. C., Linnenbrink-Garcia, L., Moshontz, H., Atkinson, K. M., Sanchez, C. E., & Cooper, H. (2019). A meta-analysis on the impact of grades and comments on academic motivation and achievement: A case for written feedback. *Educational Psychology*, *41*(7), 922–947. https://doi.org/10.1080/01443410.2019.1659939

Lee, H. H., Leong, A. P., & Song, G. (2017). Investigating teacher perceptions of feedback. *ELT Journal*, *71*(1), 60–68. https://doi.org/10.1093/elt/ccw047

Lee, I. (2008). Understanding teachers' written feedback practices in Hong Kong secondary classrooms. *Journal of Second Language Writing*, *17*(2), 69–85. https://doi.org/10.1016/j.jslw.2007.10.001

Lee, I. (2009). Ten mismatches between teachers' beliefs and written feedback practice. *ELT Journal*, *63*(1), 13–22. https://doi.org/10.1093/elt/ccn010

Li, J., & Barnard, R. (2011). Academic tutors' beliefs about and practices of giving feedback on students' written assignments: A New Zealand case study. *Assessing Writing*, *16*(2), 137–148. https://doi.org/10.1016/j.asw.2011.02.004

Liu, Q., & Wu, S. (2019). Same goal, varying beliefs: How students and teachers see the effectiveness of feedback on second language writing. *Journal of Writing Research*, *11*(2), 299–330. https://doi.org/10.17239/jowr-2019.11.02.03

MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods, 4*(1), 84–99. https://doi.org/10.1037/1082-989x.4.1.84

Mao, S. S., & Crosthwaite, P. (2019). Investigating written corrective feedback: (Mis)alignment of teachers' beliefs and practice. *Journal of Second Language Writing*, *45*, 46–60. https://doi.org/10.1016/j.jslw.2019.05.004

Mikhchi, H.H. (2011). Standards of textuality: Rendering English and Persian texts based on a textual model. *Journal of Universal Language, 12*(1), 47–74. https://doi.org/10.22425/jul.2011.12.1.47

Min, H. T. (2013). A case study of an EFL writing teacher's belief and practice about written feedback. *System*, *41*(3), 625–638. https://doi.org/10.1016/j.system.2013.07.018

Myles, J. (2002). Second language writing and research: The writing process and error analysis in student texts. *TESL-EJ*, *6*(2), 1–20.

Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, *35*(5), 501–517. https://doi.org/10.1080/02602931003786559

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, *31*(2), 199–218. https://doi.org/10.1080/03075070600572090

Nieminen, J. H., Tai, J., Boud, D., & Henderson, M. (2022). Student agency in feedback: Beyond the individual. *Assessment & Evaluation in Higher Education*, *47*(1), 95–108. https://doi.org/10.1080/02602938.2021.1887080

Nguyen, H. T., & Filipi, A. (2018). Multiple-draft/multiple-party feedback practices in an EFL tertiary writing course: Teachers' and students' perspectives. *International Education Studies*, *11*(8), 1–26. https://doi.org/10.5539/ies.v11n8p1

Nguyen, L. T. T. (2019). A case study of teacher feedback on Thai university students' essay writing. *GEMA Online Journal of Language Studies*, *19*(2), 121–138. https://doi.org/10.17576/gema-2019-1902-08

Ouahidi, M., & Lamkhanter, F. (2017). How do higher education students perceive feedback? *International Journal of Arts & Sciences*, *10*(2), 609–619.

Ouahidi, M., & Lamkhanter, F. (2020). Students' perceptions about teachers' written feedback on writing in a Moroccan university context. In A. Ahmed, S. Troudi, & S. Riley (Eds.), *Feedback in L2 English writing in the Arab world* (pp. 35–63). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-25830-6_2

Ouakrime, M. (2000). The new education reform in Morocco: The role of English. In Zaki A. (eds), *Proceedings of the 20th MATE Annual Conference, An Argument for a more Formative Approach to Assessment in ELT in Morocco* (pp. 60–66). Kenitra.

Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences* (6th ed.). Tyler & Francis.

Polio, C., Fleck, C., & Leder, N. (1998). "If I only had more time": ESL learnters' changes in linguistic accuracy on essay revisions. *Journal of Second Language Writing*, *7*(1), 43–68. https://doi.org/10.1016/S1060-3743(98)90005-4

Pramila, N. (2017). Approaches to teaching English writing: A research note. *Studies in Foreign Language Education*, 39, 141–148.

Puengpipattrakul, W. (2014). A process approach to writing to develop Thai EFL students' socio-cognitive skills. *Electronic Journal of Foreign Language Teaching*, *11*(2), 270–284.

Purnomo, W. W., Basthomi, Y., & Prayogo, J. A. (2021). EFL university teachers' perspectives in written corrective feedback and their actual applications. *International Journal of Evaluation and Research in Education*, *10*(3), 1089–1099. https://doi.org/10.11591/ijere.v10i3.21641

Rukmana, D. (2022). Interval scale. In B. B. Frey (Ed.), The SAGE encyclopedia of research design (2nd ed, pp. 725–727). Sage Publications, Inc.

Said, K., & Mouzrati, A. E. (2018). Investigating teacher written corrective feedback as a formative assessment tool. *Arab World English Journal*, *9*(4), 232–241. https://dx.doi.org/10.24093/awej/vol9no4.17

Sakrak-Ekin, G., & Balçikanli, C. (2019). Written corrective feedback: EFL teachers' beliefs and practices. *Reading Matrix: An International Online Journal*, *19*(1), 114–128.

Sia, D., & Cheung, Y. L. (2017). Written corrective feedback in writing instruction: A qualitative synthesis of recent research. *Issues in Language Studies*, *6*(1), 61–80. https://doi.org/10.33736/ils.478.2017

Stewart, M. (2015): The language of praise and criticism in a student evaluation survey. *Studies in Educational Evaluation,* 45, 1–9. https://doi.org/10.1016/j.stueduc.2015.01.004

Tai, J., Ajjawi, R., Boud, D., Dawson, P., & Panadero, E. (2018). Developing evaluative judgement: Enabling students to make decisions about the quality of work. *Higher Education*, *76*(3), 467–481. https://doi.org/10.1007/s10734-017-0220-3

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, *46*(2), 327–369. https://doi.org/10.1111/j.1467-1770.1996.tb01238.x

Truscott, J. (2001). Selecting errors for selective error correction. *Concentric: Studies in Linguistics*, *27*(2), 93–108.

Truscott, J. (2004). Evidence and conjecture on the effects of correction: A response to Chandler. *Journal of Second Language Writing*, *13*(4), 337–343. https://doi.org/10.1016/j.jslw.2004.05.002

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing*, *16*(4), 255–272. https://doi.org/10.1016/j.jslw.2007.06.003

Tsui, A. B., & Ng, M. (2000). Do secondary L2 writers benefit from peer comments? *Journal of Second Language Writing*, *9*(2), 147–170. https://doi.org/10.1016/s1060-3743(00)00022-9

Vattøy, K., & Smith, K. (2019). Students' perceptions of teachers' feedback practice in teaching English as a foreign language. *Teaching and Teacher Education*, *85*, 260–268. https://doi.org/10.1016/j.tate.2019.06.024

Wei, W., & Cao, Y. (2020). Written corrective feedback strategies employed by university English lecturers: A teacher cognition perspective. *SAGE Open*, *10*(3), 1–12. https://doi.org/10.5539/elt.v6n9p177

Wicking, D. (2022). Categorizing continuous data. In B. B. Frey (Ed.), The SAGE encyclopedia of research design (2nd ed, pp. 170–172). Sage Publications, Inc.

Winstone, N., Boud, D., Dawson, P., & Heron, M. (2022). From feedback-as-information to feedback-as-process: a linguistic analysis of the feedback literature. *Assessment & Evaluation in Higher Education*, *47*(2), 213–230. https://doi.org/10.1080/02602938.2021.1902467

Yang, H. (2022). Factor loadings. In B. B. Frey (Ed.), *The SAGE encyclopedia of research design* (2nd ed., pp. 560–563). Sage Publications, Inc.

Yang, L., Zhang, L., Li, C., Wang, K., Fan, L., & Yu, R. (2021). Investigating EFL teachers' beliefs and practices about written corrective feedback: A large-scale study. *Language Teaching Research Quarterly*, *25*, 29–65. https://doi.org/10.32038/ltrq.2021.25.03

Zaman, M. M., Azad, M., & Kalam, A. (2012). Feedback in EFL writing at tertiary level: Teachers' and learners' perceptions. *ASA University Review*, *6*(1), 139–156.

Yu, S., Zheng, Y., Jiang, L., Liu, C., & Xu, Y. (2021). "I even feel annoyed and angry": Teacher emotional experiences in giving feedback on student writing. *Assessing Writing*, *48*, 1–15. https://doi.org/10.1016/j.asw.2021.100528

Zyad, H., & Bouziane, A. (2020). The effect of EFL correction practices on developing Moroccan students' English writing skills. In A. Ahmed, S. Troudi, & S. Riley (Eds.), *Feedback in L2 English writing in the Arab world* (pp. 113–138). Palgrave Macmillan, Cham.

APPENDIX

Questionnaire items related to EFL university teachers' perceptions and self-reported practices of written feedback

1. To what extent do you agree or disagree with the following practices of written feedback to be targeted in English classrooms? Please, tick your answer.

1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly Agree

	Written feedback should …					
1	… be provided on the linguistic structure of the final written text (e.g., grammar, vocabulary, organization).	1	2	3	4	5
2	… support students to be better motivated during the writing process by providing them with directions.	1	2	3	4	5
3	… comment on whether students' writing is cohesive.	1	2	3	4	5
4	… include specific comments that encourage students to improve their own previous written texts in the writing process.	1	2	3	4	5
5	… comment on whether students' writing is related to their own intention.	1	2	3	4	5
6	… comment on whether students' writing is related to the given purpose.	1	2	3	4	5
7	… be based on teacher-student discussion about the development of the written text.	1	2	3	4	5
8	… comment on whether students' new written text is related to their prior text which shares the same characteristics.	1	2	3	4	5
9	… indicate errors in students' writing by correcting them.	1	2	3	4	5
10	… comment on whether students' writing is related to the given genre.	1	2	3	4	5
11	… encourage students to self-assess their own writing by reflecting on their strengths and weaknesses.	1	2	3	4	5
12	… comment on whether students' writing is developed in terms of meaningful ideas.	1	2	3	4	5
13	… judge students' final writing based on scores without justifications.	1	2	3	4	5
14	… encourage students to follow the assessment criteria when assessing writing for improvement.	1	2	3	4	5
15	… indicate errors in students' writing by underlining them.	1	2	3	4	5
16	… be given as explained praises with justifications that improve writing.	1	2	3	4	5
17	… be supplemented with oral feedback during the development of writing.	1	2	3	4	5
18	… include detailed information which can help students revise their written text effectively.	1	2	3	4	5
19	… judge students' final writing based on general praises (e.g., "great work") without justifications.	1	2	3	4	5
20	… comment on whether students' writing is related to a specific situation or context.	1	2	3	4	5
21	… encourage students to assess others' writing by constructing feedback.	1	2	3	4	5
22	… comment on whether the content of students' writing is informative for the reader.	1	2	3	4	5
23	… be supported by peers' feedback during the development of writing.	1	2	3	4	5
24	… be provided by the teacher when evaluating the final written text.	1	2	3	4	5
25	… be given on different drafts during the development of writing.	1	2	3	4	5
26	… be provided on a single-draft as a final version of writing.	1	2	3	4	5
27	… guide students to explain their written ideas with precision during the writing process.	1	2	3	4	5
28	… indicate the type of errors in students' writing by using codes (e.g., "S" for spelling).	1	2	3	4	5
29	… include specific suggestions that help students identify the next steps in the writing process.	1	2	3	4	5

	Written feedback should …					
30	… comment on whether students' writing is supported by examples.	1	2	3	4	5
31	… comment on whether students' writing is coherent.	1	2	3	4	5
32	… judge students' final writing based on general criticism (e.g., "poor work") without justifications.	1	2	3	4	5
33	… indicate whether readers' expectations are addressed in students' writing.	1	2	3	4	5
34	… be given as elaborated criticism formulated with explanations that improve writing.	1	2	3	4	5
35	… trigger students to notice the gaps by engaging them actively in the writing process to improve the written text.	1	2	3	4	5
36	… be given as justified scores based on assessment criteria that help the improvement of writing.	1	2	3	4	5
37	… judge students' final writing based on the number of errors they have made.	1	2	3	4	5
38	… encourage students to accept receiving feedback from their peers.	1	2	3	4	5
39	… be provided as concrete suggestions pointing forward to improve writing.	1	2	3	4	5
40	… indicate errors in students' written text when targeting their language accuracy.	1	2	3	4	5

2. How frequently do you apply the following practices of written feedback? Please, tick your answer.

1: Never 2: Rarely 3: Sometimes 4:Often 5: Always

	In my written feedback, I ….					
1	… provide students with feedback on the linguistic structure of their final written text (e.g., grammar, vocabulary, organization).	1	2	3	4	5
2	… use codes (e.g., "S" for spelling) to indicate the type of errors in students' writing.	1	2	3	4	5
3	… comment on whether students' writing is cohesive.	1	2	3	4	5
4	… give students justified scores based on assessment criteria that help the improvement of writing.	1	2	3	4	5
5	… comment on whether students' writing is related to their own intention.	1	2	3	4	5
6	… support students to be better motivated during the writing process by providing them with directions.	1	2	3	4	5
7	… comment on whether students' writing is related to a specific situation or context.	1	2	3	4	5
8	… judge students' final writing based on general praises (e.g., "great work") without justifications.	1	2	3	4	5
9	… comment on whether students' writing is related to the given purpose.	1	2	3	4	5
10	… comment on whether students' writing is coherent.	1	2	3	4	5
11	… comment on whether students' writing is supported by examples.	1	2	3	4	5
12	… give students explained praises with justifications that improve writing.	1	2	3	4	5
13	… judge students' final writing based on scores without justifications.	1	2	3	4	5
14	… indicate errors in students' writing by correcting them.	1	2	3	4	5
15	… encourage students to self-assess their own writing by reflecting on their strengths and weaknesses.	1	2	3	4	5
16	… indicate whether readers' expectations are addressed in students' writing.	1	2	3	4	5
17	… provide students with oral feedback as supplementary to written feedback during the development of writing.	1	2	3	4	5
18	… comment on whether students' writing is related to the given genre.	1	2	3	4	5
19	… provide students with detailed information which can help them revise their written text effectively.	1	2	3	4	5
20	… indicate errors in students' writing by underlining them.	1	2	3	4	5
21	… support peers' feedback during the development of writing.	1	2	3	4	5
22	… encourage students to assess others' writing by constructing feedback.	1	2	3	4	5

	In my written feedback, I					
23	... discuss the development of the written text with students.	1	2	3	4	5
24	... provide students with specific suggestions that help them identify the next steps in the writing process.	1	2	3	4	5
25	... provide students with my feedback when I evaluate their final written text.	1	2	3	4	5
26	... give students feedback on different drafts during the development of writing.	1	2	3	4	5
27	... respond to students' single-draft as a final version of writing.	1	2	3	4	5
28	... guide students to explain their written ideas with precision during the writing process.	1	2	3	4	5
29	... comment on whether the content of students' writing is informative to the reader.	1	2	3	4	5
30	... provide students with specific comments that encourage them to improve their own previous written texts in the writing process.	1	2	3	4	5
31	... comment on whether students' writing is developed in terms of meaningful ideas.	1	2	3	4	5
32	... judge students' final writing based on general criticism (e.g., "poor work") without justifications.	1	2	3	4	5
33	... encourage students to follow the assessment criteria when assessing writing for improvement.	1	2	3	4	5
34	... give students elaborated criticism formulated with explanations that improve writing.	1	2	3	4	5
35	... trigger students to notice the gaps by engaging them actively in the writing process to improve the written text.	1	2	3	4	5
36	... comment on whether students' new written text is related to their prior text which shares the same characteristics.	1	2	3	4	5
37	... indicate errors in students' written text when targeting their language accuracy.	1	2	3	4	5
38	... provide students with concrete suggestions pointing forward to improve writing.	1	2	3	4	5
39	... judge students' writing based on the number of errors they have made.	1	2	3	4	5
40	... encourage students to accept receiving feedback from their peers.	1	2	3	4	5

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Unfocused Written Corrective Feedback and L2 Learners' Writing Accuracy: Relationship Between Feedback Type and Learner Belief

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ABSTRACT

Background. Feedback provided to learners' writing is a construct of identifying a learner's performance, and it can be identified and trifurcated as grammatical form, location in the text, and pragmatic functions. Second language researchers worldwide consider written corrective feedback (WCF) as a vital and valuable teaching tool that enables learners to improve accuracy in L2 writing.

Purpose. In this context, there exists a plethora of studies that examine the efficacy of WCF on L2 learners' writing accuracy. However, literature is replete with research that looks into the effectiveness of unfocused WCF on L2 learners' writing accuracy especially concerning learners' belief of the feedback type. Not much research is available demonstrating unfocused WCF's efficacy on L2 learners' writing accuracy.

Method. Using a quasi-experimental design, three intact classes were recruited and were randomly placed into two experimental groups: indirect corrective feedback, direct corrective feedback, and one control group. The participants completed three narrative writings, one each at pre-test, post-test, and delayed post-test.

Results. The results of the study unveiled that the WCF enabled the treatment group learners to produce text with fewer errors than the control group participants. The study also reported no relationship between the learners' beliefs and the efficacy of WCF, meaning that the preference of learners for a particular type of feedback did not influence the efficacy of WCF.

Conclusion. Based on the results of the case study, important pedagogical implications for ESL/EFL instructors are provided

KEYWORDS

written corrective feedback, learners' beliefs, L2 writing, unfocused written corrective feedback

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INTRODUCTION

The field of written corrective feedback (WCF) has garnered considerable attention from research scholars globally (Lee et al., 2021). Overwhelming research evidence is available demonstrating the efficacy of WCF (see Kang & Han, 2015), thereby refuting Truscott's (1996) claim that WCF wastes teachers' time and energy and is ineffective in assisting learners in overcoming their errors. Therefore, L2 teachers should provide WCF to their learners. Although a great strand of research has shown support for the efficacy of WCF in general, thus questioning Truscott's (1996) argument. The findings obtained from these studies have also unveiled that the efficacy of WCF can be moderated by a number of variables, such as feedback type and learners' perception of the feedback they receive (Rummel & Bitchener, 2015; Hyland & Hyland, 2019; Suzuki et al., 2019; Zabihi

& Erfanitabar, 2021; Mujtaba et al., 2022). While the previous body of research has compared the effects of different forms of feedback, such as direct versus indirect corrective feedback (Bitchener & Knoch, 2010; Bitchener et al., 2005; Al Harrasi, 2019; Guo & Barrot, 2019), the mode of feedback in these studies was 'focused', that is, these studies provided feedback on the selected number of errors. Karim and Nassaji (2018) argue that providing focused WCF is not the reflection of a real classroom setting where L2 teachers usually provide WCF on a wide range of errors. They also argue that focused WCF studies are not ecologically valid. However, most of the WCF studies are dominated by focused feedback (Karim & Nassaji, 2018; Sinha & Nassaji, 2021). Therefore, one of the goals of the current study is to provide unfocused WCF on L2 learners' writing errors, thus increasing the ecological validity of the study and bringing more empirical evidence demonstrating the efficacy of unfocused WCF. Another variable that can moderate the efficacy of WCF is L2 learners' beliefs about WCF (Rummel & Bitchener, 2015; Sinha & Nassaji, 2021). While a number of studies (Ghazal et al., 2014; Diab, 2015; Chen et al., 2016) have examined L2 teachers' and learners' beliefs and preferences of different types of WCF and reported that both L2 teachers and learners favor WCF, not much research evidence is available tracing the relation between L2 learners' beliefs and the efficacy of WCF (Sinha & Nassaji, 2021). Investigating the relationship between learners' perception and WCF types merits attention because the previous body of research has demonstrated that different modes of instruction seem to benefit L2 learners differently (Slack & Norwich, 2007; Tight, 2010; Thomson et al., 2015). The current study was therefore conducted to fill two gaps: first investigating the efficacy of unfocused WCF on L2 learners' writing accuracy; second, investigating if there exists any relation between WCF types and L2 learners' beliefs.

LITERATURE REVIEW

Writing Accuracy and Written Corrective Feedback

WCF plays an important role in helping learners improve their writing accuracy. An accurate understanding of the processing of WCF has been explained in the cognitive processing of WCF (Bitchener, 2016). WCF is an input that points out the erroneous output of the learners. The input provided in the form of WCF may raise the level of learners' attention (Bitchener & Storch, 2016). Therefore, there is a possibility that learners respond to and process WCF, and subsequently modify their erroneous output (Bitchener & Storch, 2016). If learners are unable to modify their erroneous output, another episode of WCF may start. In this manner, WCF is expected to help learners improve their accuracy in writing (Bitchener & Storch, 2016). A great strand of research has tested the theoretical claims and demonstrated the efficacy of WCF on L2 writing (Mujtaba et al., 2021). The earlier studies on WCF reported their efficacy in revised writing (Robb et al., 1986; Fathman & Whalley, 1990; Ashwell, 2000; Truscott & Hsu, 2008). However, these studies were met with criticism because Truscott (1996,2007) argues that exhibiting accuracy in revised writings is not a testimony that accuracy will be maintained in new writings. Thus, to counter this criticism, studies started examining the efficacy of WCF on new writing drafts (Sheen, 2007; Bitchener & Knoch, 2009; Guo & Barrot, 2019; Ekiert & di Gennaro, 2019; Mujtaba et al., 2019; Suzuki et al., 2019). While these studies have shown the efficacy of WCF, the mode of WCF in these studies was focused. Focused WCF is when teachers provide feedback on a limited number of errors (Ellis et al., 2009). For instance, in a text, the teachers decide to provide feedback on English article errors only, while not providing feedback on the other types of errors. For instance, the participants in Ekiert and di Gennaro (2019) received WCF only on English articles. Likewise, Suzuki et al. (2019) provided WCF only on English articles and past perfect tense. Focused WCF is believed to be more effective than unfocused WCF, in which teachers provide WCF on all the errors made by the learners (Karim & Nassaji, 2018), because the former does not overburden the learners' attentional capacity and allows them to study and respond to the WCF more effectively (Sheen, 2007; Ellis, 2008; Bitchener & Storch, 2016; Lee, 2019). Karim and Nassaji (2018) argue that focused WCF may seem to be more effective than unfocused WCF, however, the findings of such studies are not ecologically valid (Ferris, 2010) as language teachers usually provide WCF on a wide range of errors. In this regard, Storch (2010) asserts that providing unfocused WCF is a real reflection of a classroom setting, thus findings obtain from unfocused WCF studies have a direct practical implication for L2 teachers.

Since unfocused WCF is a reflection of a real classroom setting, L2 scholars have started examining the effects of unfocused WCF on L2 learners' writing accuracy (Van Beuningen et al., 2008;2012; Frear & Chiu, 2015; Karim & Nassaji, 2018). However, the findings obtained from these studies are mixed. For instance, Van Beuningen et al. (2008) investigated whether the provision of unfocused WCF helps learners improve their writing accuracy in revised writing and new writing. The study had two groups: direct feedback and indirect feedback. The findings unveiled that both WCF groups enabled the learners to improve their accuracy in writing in the short run, while in the long run, the indirect corrective feedback (ICF) group did not retain its accuracy in writing. Contrary to the findings of Van Beuningen et al. (2008), Frear and Chiu (2015) conducted a study to investigate the effects of focused and unfocused WCF. The results of the study concluded that both types of WCF helped learners improve their accuracy in writing on post-test and delayed post-test. More recently, Karim and Nassaji (2018) conducted a study to investigate the effects of unfocused WCF on L2 learners' revised writing and new writing. The study had two types of unfocused WCF: indirect and direct. The findings of the

study confirmed that both types of WCF helped learners improve their accuracy in the short run. However, the effects of WCF diluted in the long run on a new draft. Although the aforementioned studies unveiled the efficacy of unfocused WCF, the results obtained from these studies are mixed (see Karim & Nassaji, 2019). The mixed findings obtained from these studies could be attributed to the complexity of the feedback (Nassaji, 2015; Chen & Nassaji, 2018). Therefore, L2 scholars are now not only interested in investigating the efficacy of WCF but are also interested in unearthing the factors that influence the effectiveness of WCF (Suzuki et al., 2019; Sinha & Nassaji, 2021).

Direct and Indirect Feedback

Many recent L2 scholars have started to investigate not only the general efficacy of WCF but also if its effects differ across different types of WCF (Karim & Nassaji, 2019). In this regard, WCF studies have mainly focused on direct corrective feedback (DCF) and indirect corrective feedback (ICF) (Ferris & Robert, 2001; Ferris, 2002, 2006). DCF is when teachers provide the correct form of the erroneous output made by the learners (Ellis, 2008), and this correction is commonly provided by crossing or underlining the erroneous output and providing the correct form. In contrast, ICF is when teachers do not provide the correct form, rather they underline or circle the erroneous output of the learners (Ellis, 2008). While L2 scholars seem to advocate in favor of WCF, there is a conundrum among research scholars as to which type of WCF is most effective (Nassaji, 2016; Guo & Barrot, 2019). For instance, some researchers put their argument in favor of DCF because they believe this type of WCF is less confusing for the learners as it provides the correct form of the erroneous output (Bitchener et al., 2005; Sheen, 2007; Shintani et al., 2014). In contrast, other research scholars argue that ICF works better as it engages learners in autonomous learning and encourages them to be independent in their learning (Ferris, 2003, 2006).

Despite the disagreement among the scholars over which type of WCF is superior, other scholars assert that the question of which type of WCF is superior is not relevant, as each type of WCF contributes to language learning differently, therefore, the use of WCF should not be taken as a matter of superiority rather than suitability (Al-Rubai'ey & Nassaji 2013; Chen et al., 2016). Studies investigating the differential effects of types of WCF have reported mixed results. For instance, Ferris and Roberts (2001) found both DCF and ICF equally effective in promoting language learning. Accumulating similar research evidence, Bitchener and Knoch (2010) reported no significant difference between more explicit types of WCF (DCF and DCF+ written and oral metalinguistic explanation (ME) and less explicit types of WCF (underlining). Ellis et al. (2006) explain the distinction between explicit and implicit types of WCF. They explain that in the case of implicit feedback there is no overt indication that an error has been made, whereas in explicit type there is. Based on this rationale, DCF give is more explicit than ICF (Nassaji, 2016). Contrary to the findings of these studies, Sherpa (2021) reported the superiority of ICF over DCF. Similarly, Nematzadeh & Siashpoosh (2017) investigating the effects of DCF and ICF, reported the effectiveness of both types of WCF. However, the ICF group exhibited higher accuracy. While these studies demonstrated the superiority of ICF over DCF, other scholars reported the superiority of DCF over ICF (Bitchener et al., 2005; Guo & Barrot, 2019; Zabihi & Erfanitabar, 2021). Bitchener et al. (2005) investigated the differential effects of different types of WCF: DCF; DCF+ ME; DCF+ written and oral ME. The study found that DCF +written and oral ME group exhibited higher accuracy than the DCF group alone. Reflecting similar findings, Zabihi and Erfanitabar (2021) conducted a study to examine the effect of DCF, DCF+ME, ICF+ME, and ICF. The study reported the supremacy of DCF+ME over ICF+ME and ICF groups. Taken together the findings of the aforementioned studies, it seems plausible to infer that there seems no certain answer as to which type of WCF is most effective. Indeed, Kang and Han (2015) in their meta-analysis rightly argued that research scholars have yet to decide which type of WCF (DCF and ICF) is superior.

Feedback Type and Beliefs of Learners

Learner beliefs have a pivotal role in second language learning (Rummel & Bitchener, 2015). Wenden (1999) defines learner beliefs as what learners think about learning. Dörnyei (2005) and Barcelos (2003) assert that learner beliefs shape L2 learning. A great strand of WCF research has examined the teachers' and learners' beliefs about WCF and unveiled that both teachers and learners prefer feedback in general (Leki, 1991; Hedgcock & Lefkowitz, 1994; Chen et al., 2016). However, Bitchener and Rummel (2015) argue that different types of WCF and learners' proficiency levels may influence the preference of L2 learners for WCF. For instance, Lee (2008) reported that WCF was preferred more by higher-proficiency learners than those of lower proficiency. Seker and Dincer (2014) concluded that learners believe feedback to be beneficial for their improvement in writing accuracy. Similarly, Chen et al. (2016) examined the EFL learners' perception of grammar instruction and feedback. Their study reported that learners greatly value feedback. Amrhein and Nassaji (2010) examined the learners' and teachers' views about the efficacy of WCF. The study reported that both teachers and learners believe WCF to be essential in L2 classes. However, the study also reported some discrepancies in the opinions of the teachers and learners. For instance, the majority of the students preferred unfocused WCF, while nearly half of the teachers employed focused WCF.

While the aforementioned studies demonstrated the general preference of L2 learners and teachers for WCF, there is a paucity of studies that have unearthed the extent to which L2 learners' preferences shape the efficacy of WCF (Sinha &

Nassaji, 2021). In this regard, a few studies have indirectly examined how learner beliefs can influence the working of WCF (Swain & Lapkin, 2002; Storch & Wigglesworth, 2010; Mahfoodh & Pandian, 2011). For instance, Swain and Lapkin (2002) found indirect evidence of how learner beliefs influence WCF. They had their learners work collaboratively to produce a text in a jigsaw activity. The study unveiled that L2 learners when provided with the reformulations of their errors, they accepted the reformulations, and sometimes they refused them. The reason for refusal was attributed to the learner's beliefs that contradicted the reformulations provided to them. Accumulating similar research evidence, Mahfoodh and Pandian (2011) demonstrated that one of the learners refused the reformulation provided by the teacher because it modified the meaning of the sentence the learner had intended to express. Similarly, Storch and Wigglesworth (2010) reported that learners were unlikely to accept the WCF if it was against their preferences and beliefs. In a few rare studies, Rummel and Bitchener (2015) directly examined the relationship between learner beliefs and WCF. To this end, they unearthed the learners' beliefs about WCF at the outset of the study and later assigned them to one control and three treatment group: DCF, ICF, and ME. These learners were then provided with the WCF types they preferred, while the others were not given the preferred WCF type. The results unveiled that learners benefitted the most from WCF when they received the feedback type they preferred. More recently, Mujtaba et al. (2022) conducted a study to examine the differential effectiveness of audio-based and text-based computed mediated feedback types and whether there was any relationship between the feedback types and the learners' preferences. The study unveiled that learners who received the feedback type they preferred exhibited higher accuracy in the text-reconstruction writing tests than those who did not receive the feedback type they preferred. While the authors demonstrated that learner beliefs influence the effectiveness of the WCF type, the findings of the study may not hold valid for written corrective feedback because the mode of feedback in the current study is written. Sheen (2010) also substantiates this statement by stating that the mode of feedback may influence the effectiveness of WCF.

Taken together the findings of the aforementioned studies, it seems clear that there is a dearth of studies examining the efficacy of unfocused WCF on L2 learners' writing. It also becomes clear that a limited number of studies have directly examined the relationship between learner beliefs and WCF types. Based on these gaps in the literature, the current study intends to answer the following questions:

1. How effective are direct and indirect unfocused WCF types in helping ESL learners improve accuracy in writing?

2. What are the preferences and beliefs of ESL learners regarding WCF in general and the types of feedback?

3. Is there any relationship between WCF types and learner belief? If yes, do the learners who receive their preferred WCF types produce more accurate written texts than those who do not receive their preferred WCF types?

METHODOLOGY

Participants

The current study recruited three intact classes of Functional English totaling 119 first-semester undergraduate students (see Table 1 for demographics). Functional English is a mandatory course that focuses on L2 learners' grammar and writing accuracy. The learners in this course are expected to learn and produce different writings, including, process, narrative, and picture descriptions. These learners were administered the Oxford Placement Test (OPT) before the commencement of the study to ensure they are homogenous in terms of language proficiency. The OPT has 60 items that measure the grammar and vocabulary of test takers. The result of the OPT demonstrated no significant difference among the groups (p=.699). After eliminating the participants who could not participate during the complete study, data from 105 participants from three classes remained. These intact classes were then randomly allocated to a control group (n=35) and two treatment groups: DCF (n=37) and ICF (n=33).

Data Collection Instrument

The data for the current study was conducted employing questionnaires and writing tasks. The subsequent sections explain these instruments in detail.

Questionnaire

Since one of the purposes of the research was to unearth learner beliefs about WCF and to see how these beliefs affect the efficacy of WCF, the current study adapted a questionnaire from Chen et al. (2016) (see Appendix A). The questionnaire was initially designed by Amrhein and Nassaji

Table 1

Demographics of the Participants

	Total	Male	Female	Age (average)	Proficiency	Education
Participants	105	49	56	20	B 1	Undergraduate

(2010) after extensive reviewing and a pilot study. The questionnaire contains closed-ended and open-ended questions regarding learners' beliefs about WCF, and which type of WCF they prefer (see Chen et al., 2016). The responses to the open-ended questionnaire were analyzed qualitatively, while the close-ended questions were analyzed quantitatively. The participants had to record their responses on a Likert scale or multiple choice formats. The questionnaire was pilot studied to estimate the time needed to complete and to ensure that the language used in the questionnaire was properly understood by the participants. The questionnaire has been used in previous studies (Amrhein & Nassaji, 2010; Chen et al., 2016; Sinha & Nassaji, 2021), and it also yielded an acceptable alpha value for the present study (.858)

Writing Tasks

Since the aim of the study was to assess the efficacy of unfocused WCF on L2 learners' writing accuracy, picture description narrative writing was chosen. The use of picture description narrative writing allows learners to write naturally (Rummel & Bitchener, 2015), and the researchers expect a wide variety of errors related to past tenses, prepositions, articles, passive voice, and subject-verb agreement, etc. Secondly, narrative writing is a part of the Functional English course, thereby asking learners to write a narrative text would make the findings of the study ecologically valid. After consulting the course teachers involved in the current study, three picture description narrative writings were adopted from Heaton's (1975) Beginning Composition Through Pictures. Several WCF studies have adopted picture description narrative writings from Heaton's Beginning Composition Through Pictures (Khezrlou, 2019; Zhang, 2021). Each picture description narrative writing task had six pictures displayed sequentially, and the participants were instructed to write about the story shown in the picture in between 120-150 words in 25 minutes. The first writing task was titled ***Waiting for a bus***. The pictures depicted the story of three small boys and how they could not get a place on the first bus. The boys finally got a place on the second bus and later found that the first bus got broken. The second writing task was titled ***A surprise.*** The pictures depicted the story of a man with a suitcase waiting at the airport, and how his suitcase was stolen. The third writing task was titled ***The chase.*** The pictures depicted the story of a boy who lost his parcel on the way and how he was chased by a stranger.

Procedure of Data Collection

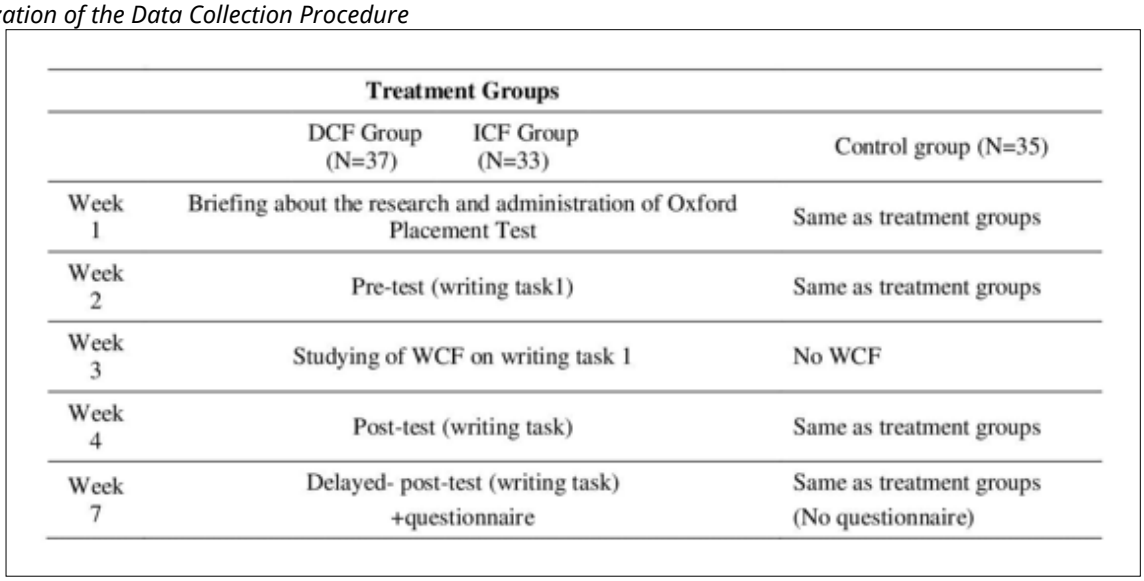
Before the commencement of the data collection, the first author discussed the purpose of the study with the course teachers. The researchers recruited two teachers: one for the control group and the other for the treatment group. The first author discussed the data collection procedure of the study and the scoring criteria of the writing tasks with the teachers and clarification was provided by the first author where required. The data collection commenced halfway through the semester ensuring that all the participants had received instruction on paragraph writing. The teachers explained how paragraphs are written and that past tenses are usually used while describing narrative picture description writing. The teachers did not teach grammar explicitly nor any feedback on grammar errors was provided. In week 1 of the study, the teachers administered the OPT to ensure the participants of the study were similar in terms of language proficiency. The first picture description narrative writing was administered across the three classes in week 2. The participants were asked to write 120-150 words in 25 minutes (based on the findings from the pilot study). This writing was taken as a pre-test as it was administered before the learners received unfocused WCF on their writing. The teachers had one-week time to check the writings and provide unfocused WCF on the errors. The control group teacher only scored the writing, and no feedback was provided. In week 3, the teachers distributed the written drafts of the learners (from week 2). Consistent with other WCF studies (Shintani et al., 2014; Reynolds & Kao, 2019; Suzuki et al., 2019; Zhang, 2021), the treatment group participants were given 5 minutes to review the feedback provided on their writings, while the participants in the control group were asked to read their work and look for possible errors themselves, as done in previous WCF studies (Sheen, 2007; Rummel & Bitchener, 2015). During this time, the teachers did not provide any comments on the errors, nor the learners were asked to revise their texts. After the lapse of 5 minutes, the teachers collected the written drafts from the participants. The second picture description narrative writing was administered across the three classes in week 4. This writing was taken as a post-test as it was administered after the learners have received the WCF treatment session. The participants were given 25 minutes to write between 120-150 words. The teachers did not return the second picture description writing task to the participants. The teachers had a week time to score the writings. The delayed post-test was administered in week 7 in which the learners had to write a picture description narrative writing 3. This writing was taken as a delayed post-test since it assessed the retention of the WCF by the treatment group participants. The teachers did not return the second picture description writing task to the participants. Post completing the delayed post-test, the teachers administered the questionnaire to the two treatment groups. The data collection procedure is schematized in Figure 1.

Operationalization of Unfocused WCF

The current study had two treatment groups: direct corrective feedback (DCF) and indirect corrective group (ICF). Since the aim of the study was to examine the efficacy of unfocused WCF on L2 learners' writing accuracy, the current study provided WCF on all the errors made by the learners, as done in the previous WCF studies (Van Beuningen et al., 2012; Karim & Nassaji, 2018).

Figure 1

Schematization of the Data Collection Procedure



Direct Corrective Feedback Group

The learners in the DCF group received direct correction of their errors by their teacher. The teacher crossed the erroneous part and provided the correct form. For instance, see sentence (1)

The ~~childrens~~ were ~~waited~~ for the school bus.
children waiting

Indirect Corrective Feedback Group

The learners in the ICF group did not receive a corrected form of their erroneous output, rather the errors were underlined only. For instance, see sentence (2)

When the bus was arrived, it was full by people.

Scoring of the Written Drafts

The written drafts at three testing times of both treatment groups and the control group were scored by their respective teachers. Following previous WCF studies (Chandler, 2003; Karim & Nassaji, 2018; Author et al., 2021), we employed an error ratio metric to capture the writing accuracy of the participants. The metric of error ratio would also enable the researchers to account for the differences in text-Slength of each participant. The error ratio was computed by counting the total number of errors made by a participant divided by the total number of words written multiplied by 100. All the writings were scored again by the fourth author to ensure the reliability of the scoring. The inter-rater reliability between the two raters for all three writings was found to be good and acceptable for both treatment groups and the control group. For treatment group, DCF, pre-test (ICC= .811, 95% CI=.633, .903), post-test (ICC=.943, 95% CI= .890, .971), delayed post-test (ICC= .888, 95% CI= .783, .942). Similarly, for ICF: pre-test (ICC=.834, 95% CI= .665, .918). The inter-rater reliability was good and acceptable for the control group for all three writings: pre-test (ICC=.836, 95% CI, .676, .917), post-test (ICC=.824, 95% CI, .652, .911), and delayed post-test (ICC=.802, 95% CI, .609, .900).

DATA ANALYSIS

RQ1. How Effective are Direct and Indirect WCF Types in Helping ESL Learners Improve Writing Accuracy?

To answer RQ1, we analyzed the written drafts of the participants produced at pre-test, post-test, and delayed post-

Table 2

Descriptive Statistics of Error Rates across Three Testing Times

Groups	N	Pre-test		Post-test		Delayed post-test	
		M	SD	M	SD	M	SD
DCF	37	18.7	2.1	14.9	3.0	13.8	2.4
ICF	33	20.0	2.4	16.9	2.3	15.5	2.6
Control	35	19.9	2.2	18.5	2.3	18.2	1.8

Note. M= mean of error rat

test. We first calculated the descriptive statistics of the error rates of three writings produced by both treatment and control groups (see Table 2).

We then applied a one-way on the pre-test error rates of the three groups. To test whether the mean values reported in Table 2 are significantly different from the control group, we applied one-way ANOVA to answer RQ1. Before applying the ANOVA test, the assumptions of the ANOVA test were checked. The examination of the data at the pre-test indicated the assumption of the normality was met for the three groups: DCF (Shapiro- Wilk, p= .290); ICF (Shapiro-Wilk, p= .90), and control group (Shapiro-Wilk, p=.209). The data at the pre-test also met the condition of Homogeneity of Variance (Leven's test=.904). The result of the one-way ANOVA reported no significant difference among the three groups at the outset of the study [F (2,102) = 2.98, p=.55], indicating that all the groups were homogenous in terms of writing accuracy. After ensuring homogeneity among the groups at the pre-test, we analyzed the post-test and delayed post-test error rate scores of the three groups. The assumption of the normality and homogeneity of variance were met at both post-test and the delayed post-test. One-way ANOVA reported a significant difference among the three groups for post-test [F (2,102) = 17.4, p=.000]. Similarly, one-way ANOVA reported a significant difference among the three groups at the delayed post-test [F (2,102) = 31.7, p= .000]. We then applied a post hoc multiple comparison test to isolate the group differences at the post-test and delayed post-test. The multiple post hoc comparison test unveils that both treatment groups significantly outperform the control group at the post-test and delayed post-test (see Table 3).

RQ2. What are the Preferences and Beliefs of ESL Learners Regarding WCF in General and the Types of Feedback?

To answer RQ2, we analyzed the questionnaire to unearth the two treatment group participants' beliefs about learning grammar and receiving feedback from teachers. The participants of the groups were also asked to give their preference on the different types of WCF– DCF or ICF. The questionnaire was analyzed by calculating the percentages and frequencies of responses to each item. The first question asked whether grammar is useful for improving writing. Table 4 presents the participants' responses to this question. From Table 4, it becomes evident that the majority of the participants 59 out of 70 view grammar as very useful for improving writing accuracy.

The next question was designed to elicit the participant's beliefs about the significance of WCF in general. The result of the questionnaire unveiled that the majority of the participants 61 out of 70 believe WCF to be very useful, while 6 out of 70 indicated WCF to be somewhat useful (see Table 5).

Table 3

Comparison of Treatment and Control Group at Post-Test and Delayed Post-Test

Group Contrast	Post-test		Delayed Post-test	
	Cohen d	P-value	Cohen d	P-value
DCF vs. Control	2.3	.005*	2.0	.007*
ICF vs. Control	0.6	.003*	1.2	.000*
DCF vs. ICF	0.7	.005*	0.8	.007*

Table 4

Frequencies of Participants' Responses to Q 1: Grammar and Writing

	Options				
	Very useful	Somewhat useful	Not Very useful	Not useful at all	Total
N	59	09	02	0	70
% of Response	84	13	03	0	100

Table 5

Frequencies of Participants' Responses to Q2: WCF and Grammar

	Options				
	Very useful	Somewhat useful	Not Very useful	Not useful at all	Total
N	61	6	3	0	70
% of Response	87	09	04	0	100

The third question was meant to ascertain the learners' beliefs about the amount of WCF they prefer receiving from their teachers. Table 6 reports that the majority of the participants, 66 out of 70, responded in favor of receiving WCF on all the errors in their writing. Not a single participant indicated that they do not want their teachers to correct any errors in their writing. From Table 6, it becomes evident that the participants prefer unfocused WCF.

The fourth question was designed to elicit the participants' responses pertaining to the effectiveness of DCF and ICF feedback types, irrespective of the type of feedback that they received. The analysis of the fourth question demonstrated that the majority of the participants rated DCF as very useful (see Table 7). From Table 7, it becomes clear that a great majority of the participants (83%) valued DCF to be very useful. In contrast, 38 % valued ICF to be very useful. The analysis of the participants' responses further unearthed that those who voiced DCF to be very useful were of the view that this type of feedback does not create any confusion. In contrast, the participants who voice ICF to be very useful reported that this type of feedback (ICF) is enough. The participants said that they can reach the correct form of the error if the error is underlined.

The fifth question was meant to gauge the efficacy of the WCF the participants received in their respective groups. Table 8 presents the opinion of the learners pertaining to the type of feedback they received in their respective groups. In the DCF group, 70 % of the participants regarded DCF to be very useful, while 11 % of the participants regarded DCF as not very useful. Similarly, in the ICF group, 18 % of the participants regarded ICF to be very useful, while the majority of the participants (58%) reported ICF to be somewhat useful. To sum up, the majority of the respondents voiced in favor of DCF citing reasons that this type of feedback is less confusing. Likewise, the participants who voice in favor of ICF cited reasons that this type of feedback is sufficient and ICF also allows us (the learners) to not become dependent on the teachers every time for error corrections.

Table 6
Frequencies of Participants' Responses to Q 3: WCF on All Errors

	Options				
	Correct all errors	**Correct major errors, but not the minor ones**	**Correct errors that interfere with the message**	**Should not correct any error**	**Total**
N	66	4	0	0	70
% of Response	94	6	0	0	100

Table 7
Frequencies of Participants' Responses to Q4: DCF vs. ICF

	DCF		**ICF**	
Options	N	%	N	%
Very useful	58	83	27	38
Somewhat useful	7	10	18	26
Not very useful	3	4	14	20
Not useful at all	2	3	11	16
Total	**70**	**100**	**70**	**100**

Table 8
Frequencies of Participants' Responses to Q5. Efficacy of the Type of WCF Received

	DCF		**ICF**	
Options	N	%	N	%
Very useful	26	70	06	18
Somewhat useful	7	19	19	58
Not very useful	4	11	08	24
Not useful at all	0	00	0	00
Total	**37**	**100**	**33**	**100**

RQ3. Is There any Relationship between L2 Learners' Writing Accuracy and Learner Beliefs and References? If Yes, do the Learners Who Receive Their Preferred WCF Types Produce More Accurate Written Texts Than Those Who do not Receive Their Preferred WCF Types?

To answer RQ3, we first analyzed the questionnaire and calculated the frequencies of responses indicating the preferences of learners for direct and indirect types of feedback. We then applied Pearson Correlation to ascertain whether there is any significant relationship between learners' overall perception of WCF preferred feedback type and their writing accuracy measured in terms of error rate at both post-test and delayed post-test. We applied the Pearson correlation based on the responses accrued from question 5 of the questionnaire (see Table 8). The result of the Pearson Correlation unveiled no significant correlation between the learners' preferred feedback type and error rate at post-test (r=-.016, p=.898). Similarly, no significant correlation was found between the learners' preferred feedback type and error rate at delayed post-test (r=-.110, p=.364). After ascertaining the correlation between the preferred feedback types and error rate, we then divided the learners into two groups: 1) those who preferred DCF and those who preferred ICF. We then applied independent samples t-test to ascertain if there is any significant difference between the two groups favoring different types of WCF. The result unveiled no significant difference between the two groups at post-test (t=-1.83, p=.072, df=68) and delayed post-test (t=-1.55, p=.125, df=68). This indicates that the learners' preference does not influence the efficacy of WCF reflected in the writing accuracy of the learners at the post-test and delayed post-test. However, this provides an incomplete picture as we do not know whether the learners who received the feedback they preferred outperformed those who did not receive the feedback they preferred. To achieve this, we made two subgroups, meaning each group (DCF and ICF) is divided into two groups: those who received the feedback they preferred and those who did not receive the feedback they preferred (see Tables 9 and 10). Since the group size shrank to less than 30, we applied a non-parametric Mann-Whitney U test. The result of the Mann-Whitney U test reported no significant difference between the two subgroups of DCF at the post-test (U=78.5, p=.312) and delayed post-test (U=72.0, p=.213). Similarly, no significant difference between the two subgroups of ICF was found: post-test (U=109.5, p=.345) and delayed post-test (U=99, p=.191). This indicates that even the learners who received their preferred feedback type did not perform significantly different from those who did not receive their preferred feedback type.

DISCUSSION

The current research was conducted to examine the effects of two forms of unfocused WCF: direct and indirect on ESL learners' writing. The research also explored the relationship between the efficacy of WCF and learner beliefs and whether the learner beliefs and preferences for a particular type of WCF have any influence on the writing accuracy of the learners measured in terms of error rate. The RQ1 of

Table 9

Descriptive Statistics of Error Rate for Preferred and not Preferred Sub-Sets of DCF and ICF at Post-Test

	DCF (error rate), N=37		ICF (n=33)	
	Not preferred DCF	**Preferred DCF**	**Preferred ICF**	**Not preferred ICF**
N	4	33	25	8
Mean	15.5	14.8	16.6	17.3
Median	16	14.5	17	17
SD	2.1	3.2	2.5	2.1

Table 10

Descriptive Statistics of Error Rate for Preferred and not Preferred Sub-Sets of DCF and ICF at Delayed Test

	DCF (n=37)		ICF (n=33)	
	Not preferred DCF	**Preferred DCF**	**Preferred ICF**	**Not preferred ICF**
N	4	33	25	8
Mean	15	13.7	14.8	16.4
Median	15	13.5	15	15.2
SD	2.2	2.4	2	3.1

the study sought to answer how effective direct and indirect WCF types are in assisting ESL learners to produce texts with fewer errors. We computed the error rate of the number of errors made by the participants at three testing times. The results of one- ANOVA unveiled that both types of WCF significantly performed better than the control group at post-test and delayed post-test. This aligns with the findings of the previous WCF studies that demonstrated that WCF helped learners improve their writing accuracy (Bitchener et al., 2005; Karim & Nassaji, 2018; Rahimi, 2019; Author et al., 2021). For instance, Karim and Nassaji (2018) conducted a study examining the differential effects of unfocused WCF types on L2 learners' writing accuracy on revised and new writing drafts. The study demonstrated that unfocused WCF helped learners improve writing accuracy in revised and new drafts. Karim and Nassaji (2018) administered three rounds of WCF treatment sessions while the current study had one round of WCF. The results of the current study are substantiated by Bitchener's (2016) cognitive processing model of WCF which explains how a single episode of WCF can help learners notice their linguistic inaccuracies and thereby improve them in subsequent drafts (see Bitcher, 2016 for cognitive processing of WCF). We also examined the differential effects of DCF and ICF and found that learners who received DCF produced written texts with significantly fewer errors than those who received ICF at both post-test and delayed post-test as reflected by the mean error rate. Moreover, the effect size, represented by Cohen d was higher for the DCF group at post-test (Cohen d= 2.3) and delayed post-test (Cohen d= 2.0) than for the ICF group at post-test (Cohen d= 0.6) and delayed post-test (Cohen d=1.2). This aligns with the previous WCF studies that demonstrated the superiority of DCF over ICF (Chandler, 2003; Van Beuningen et al., 2012; Guo & Barrot, 2019; Author & Author, 2022). One plausible reason for the DCF group to exhibit significantly higher accuracy in writing than the ICF group could be attributed to the learners' proficiency level. The participants in the present study had (B1) intermediate language proficiency based on the score of the OPT. There is a possibility that the learners in the ICF group may have needed more than the underlining of their errors to produce the correct linguistic forms. In contrast, the DCF learners were given the correct forms of their erroneous linguistic output, thereby making it less confusing for them. Bitchener and Ferris (2012) also assert that ICF works effectively for advanced L2 learners as these learners "have a larger linguistic repertoire to draw on" (p.105). While the superiority of the DCF group in helping learners produce more accurate texts aligns with the aforementioned studies, there are a few studies that reported contradictory findings, that is, these studies did not find any significant difference between the DCF and ICF groups. For instance, Sinha and Nassaji (2021) did not find any significant difference between the ICF group and the DCF group in helping learners improve their writing accuracy over time in new writing drafts. One possible reason for such a contradictory finding between the current study and their study could be attributed to the delivery of the ICF. The ICF group in the current study had their errors underlined, while the ICF group in Sinha and Nassaji (2021) had their errors underlined with metalinguistic clues. This makes the delivery of ICF in Sinha and Nassaji's (2021) study more explicit. This indicates that the degree of explicitness of the feedback influences the efficacy of WCF, as demonstrated in the previous WCF studies (Sheen, 2007; Suzuki et al., 2019; Zabihi & Erfanitabar, 2021; Author & Author, 2022). Similarly, Sherpa (2021) conducted a study to examine the effects of DCF and ICF on the past tense. The study demonstrated that the ICF group produced texts containing fewer past tense errors than the DCF group. One possible reason for such a divergent finding between the current study and Sherpa's (2021) could be attributed to methodological differences. The ICF group in Sherpa (2021) was given grammar notes that they were allowed to read while they produced a new draft, but not the DCF group. In contrast, the errors of the ICF group of the current study were underlined. There is a possibility that the additional grammar rules may have given the advantage to the ICF group over the DCF group in Sherpa's study.

The RQ2 of the study aimed to unveil the learners' beliefs about WCF. The examination of the questionnaire demonstrated that the majority of the participants believed WCF to be an important teaching tool that can aid learners in their writing. These participants also showed their inclination toward unfocused WCF, indicating that it is important for their teachers to mark all the errors in writing. These findings are largely reflected in previous WCF studies (Amrhein & Nassaji, 2010; Mahfoodh & Pandian, 2011; Chen et al., 2016; Sinha & Nassaji, 2021). For instance, the participants in Amrhein and Nassaji (2010) also "thought it most useful for teachers to provide WCF on as many errors as possible" (p.114). In addition to unveiling the preference of L2 learners regarding the usefulness of WCF in classes, the questionnaire was meant to unearth the beliefs of learners for different types of WCF. The analysis of the questionnaire demonstrated that the majority of the participants favored the direct form of feedback correction over the indirect form of feedback. This aligns with the previous WCF studies that explored the preference of learners for the different types of WCF (Lee,2005, 2008; Karim & Nassaji, 2015; Orts & Salazar, 2016). The learners in the current study expressed that the direct form of correction is less confusing as they are provided with the correct answer. This echoes the findings of Karim and Nassaji (2015) where the participants who received DCF voiced "this type of CF was very helpful in correcting the errors because both the errors and their corrections (i.e., target forms) were identified" (p.18). Taken together the results obtained from the questionnaire, it becomes clear that ESL learners value WCF in general and believe that with the provision of teachers' feedback in classes they can improve their understanding of grammar and produce written texts with fewer errors. The majority of the learners also posited that all linguistic inaccuracies in writing should be corrected by the instructors. This statement should be given due consideration by the ESL/EFL teachers as errors that are not treated by the

teachers may become fossilized (Selinker, 1972). The learners of the current study preferred the direct form of error correction over the indirect form of error correction on the pretext that the former type of error correction is less confusing as the correct form of the erroneous linguistic output is provided by the teachers.

The third question of the study was posited to find if there is any correlation between the learners' beliefs and preferences about the WCF types and the efficacy of WCF measured in terms of error ratio at post-test and delayed post-test. The result of the Pearson correlation unveiled no significant correlation between the learners' preferred feedback type and writing accuracy at the post-test and the delayed post-test. Similarly, the result of the independent samples t-test reported no significant difference was found between the groups who favored DCF and ICF, suggesting that preference for WCF does not moderate the efficacy of the feedback. We also applied the Mann-Whitney U test to ascertain whether the learners who received the feedback they preferred performed statistically different than those who did not receive the feedback they preferred. The result of the Mann-Whitney U test unveiled that no significant difference was observed between the groups who received the feedback they preferred with those who did not receive the feedback they preferred, suggesting that the writing accuracy of the learners was not different even if they received the type of feedback they preferred. While these findings resonate with the findings of Sinha and Nassaji (2021), the results contradict the findings of (Swain & Lapkin, 2002; Storch & Wigglesworth, 2010; Rummel & Bitchener, 2015; Author et al., 2022). For instance, Storch and Wigglesworth (2010) reported that the learners while revising the texts used the feedback they preferred to be effective. Similarly, Rummel and Bitchener (2015) demonstrated that the learners who received the feedback they preferred could eliminate more errors in their writing than the ones who did not receive the feedback they preferred. More recently, Author et al. (2022) reported that computer-mediated feedback was more effective when allied with the preferred learning style of the learners. There are possible reasons for such contradictory findings. For instance, the participants in Rummel and Bitchener (2015) and Author et al. (2022) received multiple exposures to the WCF, meaning these participants received WCF more than once on their writings. In contrast, the participants in the current study received WCF only once. There is a possibility that learners in Rummel and Bitchener (2015) and Author et al. (2022) may have become accustomed to their preferred feedback type after getting multiple exposures to the WCF. Another possible reason for not finding any correlation between learners' belief and the efficacy of WCF measured in terms of error rate could be attributed to the fact that the learners may have a wrong belief about the type of WCF they preferred. For instance, the participants have shown their preference for ICF in the questionnaire, but in reality, they may have been interested in receiving DCF. This misalignment has also been shown in previous studies where learners' and teachers' beliefs are not aligned with their actual practice (Han & Hyland, 2015; Mao & Crosthwaite, 2019). However, this needs to be tested more rigorously in future studies.

CONCLUSION

The current study unveiled that the learners improved their writing accuracy after receiving unfocused WCF. The study reported that both types of WCF: ICF and DCF facilitated the learners in both post-test and delayed post-test. However, the DCF type of WCF was more effective than the ICF. The study also unearthed the learners' beliefs about WCF, grammar learning, and different types of WCF. The analysis of the questionnaire unveiled that the majority of the participants regarded grammar as important for the mastery of writing. These participants also termed WCF as an important pedagogical tool with which they can improve their writing. The examination of the questionnaire also demonstrated that most of the participants preferred receiving unfocused WCF from their teachers. While the analysis of the questionnaire demonstrated the participants' beliefs about WCF, no relation was found between participants' beliefs and the efficacy of WCF measured in terms of error ratio. The learners who received their preferred feedback did not perform significantly different from the ones who did not receive their preferred feedback.

The current study offers some important pedagogical implications for L2 teachers. Firstly, the current study has demonstrated that WCF improved the writing accuracy of the treatment groups. This must encourage L2 teachers to employ unfocused WCF in writing classes to help learners overcome their writing errors. Secondly, the findings demonstrate that both types of WCF helped learners improve their writing accuracy. However, the DCF type of feedback was more effective, therefore, teachers can use these forms of WCF as per their teaching context. For instance, in large classes, teachers often do not find time to provide WCF. In such cases, teachers can use ICF as it can help learners to overcome their errors in writing, and it is also less time-consuming than DCF. Thirdly, albeit the current study did not find any relation between learners' beliefs and the efficacy of WCF, it is still recommended that teachers should not ignore the learners' beliefs about WCF and should consider them before employing the different types of WCF. The current study although providing important pedagogical implications is not without limitations. First, the current study recruited participants from an ESL background. Therefore, future studies should recruit participants from an EFL background to yield more research evidence. Secondly, the current study employed only one treatment session. Future researchers should employ multiple WCF treatment sessions to make the design of the study more ecologically valid. Lastly, future studies may also think of employing think aloud quali-

tative technique to examine how learners engage with the feedback provided to them.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

Syed Muhammad Mujtaba: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing, Other contribution.

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REFERENCES

Al Harrasi, S. N. M. (2019). The effectiveness of direct and indirect written corrective feedback in improving the grammatical accuracy of Omani EFL learners [Doctoral dissertation, University of Sterling].

Al-Rubai'ey, F., & Nassaji, H. (2013). Direct and indirect metalinguistic feedback: A matter of suitability rather than superiority. *Issues in TEFL in the Arab World* (pp. 28-43). Sultan Qaboos University Press.

Amrhein, H. R., & Nassaji, H. (2010). Written corrective feedback: What do students and teachers think is right and why? *Canadian Journal of Applied Linguistics, 13*(2), 95-127.

Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, *9*(3), 227-257. https://doi.org/10.1016/S1060-3743(00)00027-8

Barcelos, A. M. F. (2003). Researching beliefs about SLA: A critical review. In A. Barcelos & P. Kalaja (Eds). *Beliefs about SLA: New research approaches* (pp 7-33). Kluwer Academic Publishers.

Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge.

Bitchener, J., & Knoch, U. (2009). The value of a focused approach to written corrective feedback. *ELT Journal, 63*(3), 204-211. https://doi.org/10.1093/elt/ccn043

Bitchener, J., & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics, 31*(2), 193-214. https://doi.org/10.1093/applin/amp016

Bitchener, J., & Storch, N. (2016). *Written corrective feedback for L2 development*. Multilingual Matters.

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing, 14*(3), 191-205. https://doi.org/10.1016/j.jslw.2005.08.001

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, *12*(3), 267-296. https://doi.org/10.1016/S1060-3743(03)00038-9

Chen, S., & Nassaji, H. (2018). Focus on form and corrective feedback research at the University of Victoria, Canada. *Language Teaching, 51*(2), 278-283. https://doi.org/10.1017/S026144481800006X

Chen, S., Nassaji, H., & Liu, Q. (2016). EFL learners' perceptions and preferences of written corrective feedback: a case study of university students from Mainland China. *Asian-Pacific Journal of Second and Foreign anguage Education, 1*(1), 1-17. https://doi.org/10.1186/s40862-016-0010-y

Diab, N. M. (2015). Effectiveness of written corrective feedback: Does type of error and type of correction matter? *Assessing Writing*, *24*, 16-34. https://doi.org/10.1016/j.asw.2015.02.001

Dörnyei, Z. (2005). *The Psychology of the language learner*. Lawrence Erlbaum.

Ekiert, M., & di Gennaro, K. (2019). Focused written corrective feedback and linguistic target mastery: Conceptual replication of Bitchener and Knoch (2010). *Language Teaching*, *54*(1), 71-89 https://doi.org/10.1017/S0261444819000120

Ellis, R. (2008). A typology of written corrective feedback types. *ELT Journal, 63*(2),97–107. https://doi.org/10.1093/elt/ccn023

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System, 36*(3), 353-371. https://doi.org/10.1016/j.system.2008.02.001

Fathman, A., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). Cambridge University Press

Ferris, D. R. (2002). *Treatment of error in second language student writing*. The University of Michigan Press.

Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Perspectives on Response*. Cambridge University Press

Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition, 32*(2), 181-201. doi:10.1017/S0272263109990490

Ferris, D., & Robert, B. (2001). Error feedback in L2 writing classes: how explicit does it need to be? *Journal of Second Language Writing, 10*, 161-184. https://doi.org/10.1016/S1060-3743(01)00039-X

Ferris, D. R. (2003). *Response to student writing: Implications for second language students*. Lawrence Erlbaum Associates.

Frear, D., & Chiu, Y. H. (2015). The effect of focused and unfocused indirect written corrective feedback on EFL learners' accuracy in new pieces of writing. *System, 53*, 24-34. https://doi.org/10.1016/j.system.2015.06.006

Ghazal, L., Gul, R. B., Hanzala, M., Jessop, T., & Tharani, A. (2014). Graduate students' perceptions of written feedback at a private university in Pakistan. *International Journal of Higher Education, 3*(2), 13. https://doi.org/10.5430/ijhe.v3n2p13

Guo, Q., & Barrot, J. S. (2019). Effects of metalinguistic explanation and direct correction on EFL learners' linguistic accuracy. *Reading & Writing Quarterly*, *35*(3), 261-276. https://doi.org/10.1080/10573569.2018.1540320

Han, Y., & Hyland, F. (2015). Exploring learner engagement with written corrective feedback in a Chinese tertiary EFL classroom. *Journal of Second Language Writing, 30*, 31-44. https://doi.org/10.1016/j.jslw.2015.08.002

Hyland, K., & Hyland, F. (Eds.). (2019). *Feedback in second language writing: Contexts and issues*. Cambridge University Press.

Kang, E., & Han, Z. (2015). The efficacy of written corrective feedback in improving L2 written accuracy: A meta□analysis. *The Modern Language Journal*, *99*(1), 1-18. https://doi.org/10.1111/modl.12189

Karim, K., & Nassaji, H. (2015). ESL students perceptions of written corrective feedback: what type of feedback do they prefer and why? *The European Journal of Applied Linguistics and TEFL, 4*(1), 5-26.

Karim, K., & Nassaji, H. (2018). The revision and transfer effects of direct and indirect comprehensive corrective feedback on ESL students' writing. *Language Teaching Research, 24*(4), 519-539. https://doi.org/10.1177%2F1362168818802469

Karim, K., & Nassaji, H. (2019). The effects of written corrective feedback: A critical synthesis of past and present research. *Instructed Second Language Acquisition, 3*(1), 28-52.

Khezrlou, S. (2019). Effects of timing and availability of isolated FFI on learners' written accuracy and fluency through task repetition. *The Language Learning Journal, 49*(5), 568-580. https://doi.org/10.1080/09571736.2019.1656765

Lee, I. (2005). Error correction in the L2 classroom: What do students think? *TESL Canada Journal, 22*, 1–16. https://doi.org/10.18806/tesl.v22i2.84

Lee, I. (2008). Student reactions to teacher feedback in two Hong Kong secondary classrooms. *Journal of Second Language Writing, 17*, 144–164. https://doi.org/10.1016/j.jslw.2007.12.001

Lee, I. (2019). Teacher written corrective feedback: Less is more. *Language Teaching, 52*(4), 524-536. https://doi.org/10.1017/S0261444819000247

Lee, I., Luo, N., & Mak, P. (2021). Teachers' attempts at focused written corrective feedback in situ. *Journal of Second Language Writing*, *54*, 100809. https://doi.org/10.1016/j.jslw.2021.100809

Mahfoodh, O. H. A., & Pandian, A. (2011). A qualitative case study of EFL Students' affective reactions to and perceptions of their teachers' written feedback. *English Language Teaching, 4*(3), 14-25. https://doi.org/10.5539/elt.v4n3p14

Mao, S. S., & Crosthwaite, P. (2019). Investigating written corrective feedback: (Mis)alignment of teachers' beliefs and practice. *Journal of Second Language Writing, 45*, 46-60. https://doi.org/10.1016/j.jslw.2019.05.004

Mujtaba, S. M, Parkash, R., Kaur Mehar Singh, M., & Kamyabi Gol, A. (2022). The effect of computer-mediated feedback on L2 accuracy. Does the difference in learners' perceptual style moderate the effectiveness of the feedback? *Computers in the Schools*, *39* (2), 99-119. https://doi.org/10.1080/07380569.2022.2041891

Mujtaba, S. M., Reynolds, B. L., Parkash, R., & Singh, M. K. M. (2021). Individual and collaborative processing of written corrective feedback affects second language writing accuracy and revision. *Assessing Writing*, *50*, 100566. https://doi.org/10.1016/j.asw.2021.100566

Mujtaba, S. M., Parkash, R., & Nawaz, M. W. (2019). Do indirect coded corrective feedback and teachers short affective comments improve the writing performance and learners uptake? *Reading & Writing Quarterly*, *36*(1), 34-47. https://doi.org/10.1080/10573569.2019.1616638

Nassaji, H. (2015). *The interactional feedback dimension in instructed second language learning: Linking theory, research, and practice*. Bloomsbury Publishing.

Nassaji, H. (2016). Research timeline: Form-focused instruction and second language acquisition. *Language Teaching, 49*(1), 35-62. https://doi.org/10.1017/S0261444815000403

Nematzadeh, F., & Siahpoosh, H. (2017). The effect of teacher direct and indirect feedback on Iranian intermediate EFL learners' written performance. *Journal of Applied Linguistics and Language Learning, 3*(5), 110-116. https://doi.org/10.5923/j.jalll.20170305.02

Orts, S., & Salazar, P. (2016). EFL students' preferences towards written corrective feedback: an exploratory study on age and level of proficiency. The grove-working papers on English studies, 23, 109-129. https://doi.org/10.17561/grove.v23.a8

Rahimi, M. (2019). A comparative study of the impact of focused vs. comprehensive corrective feedback and revision on ESL learners' writing accuracy and quality. *Language Teaching Research, 25*(5), 687-710. https://doi.org/10.1177%2F1362168819879182

Reynolds, B. L., & Kao, C. W. (2021). The effects of digital game-based instruction, teacher instruction, and direct focused written corrective feedback on the grammatical accuracy of English articles. *Computer Assisted Language Learning, 34*(4), 462-482. https://doi.org/10.1080/09588221.2019.1617747

Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL quarterly, 20*(1), 83-96. https://doi.org/10.2307/3586390

Rummel, S., & Bitchener, J. (2015). The effectiveness of written corrective feedback and the impact Lao learners' beliefs have on uptake. *Australian Review of Applied Linguistics*, *38*(1), 66-84. https://doi.org/10.1075/aral.38.1.04rum

Seker, M., & Dincer, A. (2014). An insight to students' perceptions on teacher feedback in second language writing classes. *English Language Teaching, 7*(2), 73-83. doi:10.5539/elt.v7n2p73

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics, 10*, 209-231. doi.org/10.1515/iral.1972.10.1-4.209

Sheen, Y., 2007. The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly 41*, 255–283. https://doi.org/10.1002/j.1545-7249.2007.tb00059.x

Sherpa, S. Z. (2021). Effects of direct and indirect written corrective feedback on bhutanese learners' grammatical accuracy over time. LEARN Journal: *Language Education and Acquisition Research Network, 14*(1), 574-603.

Shintani, N., & Ellis, R. (2013). The comparative effect of direct written corrective feedback and metalinguistic explanation on learners' explicit and implicit knowledge of the English indefinite article. *Journal of second language writing, 22*(3), 286-306. https://doi.org/10.1016/j.jslw.2013.03.011

Shintani, N., Ellis, R., & Suzuki, W. (2014). Effects of written feedback and revision on learners' accuracy in using two English grammatical structures. *Language Learning*, *64*(1), 103-131. https://doi.org/10.1111/lang.12029

Sinha, T. S., & Nassaji, H. (2021). ESL learners' perception and its relationship with the efficacy of written corrective feedback. *International Journal of Applied Linguistics, 32*(1), 41-56. https://doi.org/10.1111/ijal.12378

Slack, N., & Norwich, B. (2007). Evaluating the reliability and validity of a learning styles inventory: A classroom-based study. *Educational Research, 49*(1), 51-63. https://doi.org/10.1080/00131880701200765

Storch, N. (2010). Critical feedback on written corrective feedback research. *International Journal of English Studies, 10*(2), 29-46. https://doi.org/10.6018/ijes/2010/2/119181

Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing: Case Studies. *Studies in Second Language Acquisition, 32*(2), 303-334. https://doi.org/10.1017/S0272263109990532

Suzuki, W., Nassaji, H., & Sato, K. (2019). The effects of feedback explicitness and type of target structure on accuracy in revision and new pieces of writing. *System, 81*, 135-145. https://doi.org/10.1016/j.system.2018.12.017

Swain, M., & Lapkin, S. (2002). Talking it through: Two French immersion learners' response to reformulation. *International Journal of Educational Research, 37*(3-4), 285-304. https://doi.org/10.1016/S0883-0355(03)00006-5

Thomson, K., Watt, A., & Liukkonen, J. (2015). Cognitive style and teaching style influences on the motor skill performance of 11 and 12 year old physical education students. *Journal of Physical Education and Sport, 15*(3), 509-517. http://dx.doi.org/10.7752/jpes.2015.03077

Tight, D. G. (2010). Perceptual learning style matching and L2 vocabulary acquisition. *Language learning*, *60*(4), 792-833. https://doi.org/10.1111/j.1467-9922.2010.00572.x

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing*, *16*(4), 255-272. https://doi.org/10.1016/j.jslw.2007.06.003

Truscott, J. (2020). The efficacy of written corrective feedback: A critique of a meta-analysis. Unpublished manuscript, National Tsing Hua University, Hsinchu, Taiwan.

Truscott, J., & Hsu, A. Y. P. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*(4), 292-305. https://doi.org/10.1016/j.jslw.2008.05.003

Truscott, J., (1996). The case against grammar correction in L2 writing classes. *Language Learning, 46*, 327–369. University Press. https://doi.org/10.1111/j.1467-1770.1996.tb01238.x

Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2008). The effect of direct and indirect corrective feedback on L2 learners' written accuracy. *ITL- International Journal of Applied Linguistics*, *156*(1), 279-296. https://doi.org/10.2143/ITL.156.0.2034439

Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language learning*, *62*(1), 1-41. https://doi.org/10.1111/j.1467-9922.2011.00674.x

Wenden, A. L. (1999). An introduction to metacognitive knowledge and beliefs in language learning: Beyond the basics. *System, 27*(4), 435-441. https://doi.org/10.1016/S0346-251X(99)00043-3

Zabihi, R., & Erfanitabar, D. (2021). The revision effects of varying degrees of written corrective feedback explicitness on L2 learners' writings. *RELC Journal*, 00336882211054649. https://doi.org/10.1177%2F00336882211054649

Zhang, T. (2021). The effect of highly focused versus mid-focused written corrective feedback on EFL learners' explicit and implicit knowledge development. *System, 99*, 102493. https://doi.org/10.1016/j.system.2021.102493.

APPENDIX

Questionnaire

1. How useful is grammar for mastering the writing? Please check one of the following options
    1. Not useful at all
    2. Not very useful
    3. Somewhat useful
    4. Very useful

2. How useful is WCF in improving writing accuracy? Please check one of the following options
    1. Not useful at all
    2. Not very useful
    3. Somewhat useful
    4. Very useful

3. If there are many errors in your writing, what do you prefer your instructor to do? Please check one of the following options
    1. My instructor should correct all errors.
    2. My instructor should correct major errors but not the minor ones.
    3. My instructor should only correct errors that interfere with the message.
    4. My instructor should not correct any error

4. Please indicate your opinion for the degree of usefulness of each of the following technique. Please provide a reason of your choice.
   4=Very useful; 3=Somewhat useful; 2=Not very useful; 4= Not useful at all
    a) Underlining the error without correcting it
       Example: He drive home every day.
    b) Underlining/Crossing the error and then correcting it
       Example: He drive home every day. (drives)

5. How effective is the feedback type that you received in the current study? Please provide a reason of your choice.
    1. Not useful at all
    2. Not very useful
    3. Somewhat useful
    4. Very useful

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Effect of Implicit Written Corrective Feedback on the Writing Skills of ESL Learners

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ABSTRACT

Background. Providing learners with written corrective feedback (WCF) on their writing is crucial to the ESL learning process.

Purpose. This research is aimed at examining the effects of indicating errors as implicit WCF on the writing skills of ESL learners, as well as identifying learners' perceptions towards its use in their essay writing.

Methods. This is a mixed methods research involving the gathering of data both quantitatively and qualitatively. By means of a purpose sampling method, 50 ESL learners from a private university in Selangor, Malaysia were selected for this study. They underwent a two-week training period during which they were taught to self-correct their essays based on errors indicated as implicit WCF by their lecturer. This also included a pre-test and a post-test administered in between. Finally, 10 respondents were interviewed to gain their perceptions on the use of this technique as implicit WCF in their writing.

Results. The results showed that the students achieved a slightly significant improvement in their essay writing skills. They also had a positive perception of the use of the lecturer's indication of errors as implicit WCF in their essay writing.

Conclusion and Implications: In conclusion, error indication as implicit WCF is effective for enhancing writing skills, and the ESL learners perceived it positively. This present study contributes fundamental pedagogical implications and recommendations for future research. ESL instructors are encouraged to adopt and apply this technique in their composition writing lessons.

KEYWORDS

error indication, self-correction, implicit, corrective feedback, autonomous learners

INTRODUCTION

Giving and receiving corrective feedback is one essential aspect of teaching and learning process in the ESL classroom. It is one of the strategies used by educators to improve their students' learning and academic performance. Corrective feedback administered can either be in the form of oral or written feedback. Previous researchers have classified the types of corrective feedback (CF) into different categories. Lyster and Ranta (1997) classified feedback into three main categories i.e., direct feedback (explicit correction), prompt (metalinguistic clue, elicitation, repetition, and clarification request) and implicit feedback (recast). On the other hand, Bitchener and Ferris (2012) categorised feedback into two main types: direct or explicit, and indirect or implicit feedback. The main difference between this feedback rests on learners' awareness of their understanding of something (Godfroid et al., 2015). In indirect or implicit feedback, teachers do not inform the students about their errors explicitly but use specific codes to indicate the type of errors, in order to prompt students to brainstorm, search, and fix the errors (Ferris & Roberts, 2001). Teachers may offer feedback by underlining or circling the error, showing where the error has occurred using a code and what type of error it is, or stating in the margin the number of errors (Baleghizadeh

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& Dadashi, 2011; Bitchener & Knoch, 2010; Ferris & Roberts, 2001). In direct or explicit feedback, actual corrections are given overtly by the teacher by crossing out unnecessary sentences, words, phrases, or morphemes or inserting a missing one (Bitchener & Ferris, 2012). Conversely, using a prompt, the teacher can encourage learners to think about the error, while not providing the correct form (Ito, 2015). In short, prompts involve using a variety of signals which encourage learners to self-correct (Lyster, 2002).

Providing appropriate corrective feedback to students in a timely and constructive manner is crucial for enriching their abilities towards self-direction. This can involved application of the Zone of Proximal Development (ZPD) (Vygotsky, 1978) and scaffolding to students' learning. Lyster and Saito (2010) contend that corrective feedback (CF) functions as important scaffolding which teachers need to provide to learners for continuous second language growth. The usual approach is for teachers to provide successive levels of temporary support, in order to boost students' comprehension and skills acquisition. These supportive strategies are incrementally removed when they are no longer needed. Then the teacher gradually transfers more responsibilities over the learning process to the students. This sociocultural theory of cognitive development by Lev Vygotsky (1934) requires teachers to adjust the level of his or her help in response to the learners' level of performance. Gradually, students are given the responsibilities to take charge of their own learning, since success in the 21st Century learning requires knowing how to learn. Similarly, it is especially beneficial for ESL learners to acquire the productive language skills of speaking and writing.

In any educational context, ESL learners are expected to gradually acquire good writing skills and achieve commendable linguistic competence. This skill is especially important in tertiary education where learners are required to engage in a wide range of academic writing. Good writing skills are judged on linguistic accuracy. ESL learners are expected to use correct grammar and syntax, and suitable vocabulary in their academic writing. However, this is easier said that done for many learners. Hence, CF is important for students to appreciate mistakes made in writing. It helps give them clear guidance on how to improve their flaws. Furthermore, feedback can also boost students' confidence (Martin & Alvarez Valdivia, 2017), self-awareness (Miller et. al.,2017), and motivation (Taskiran & Yazici, 2021) in learning a second language. In short, the importance of CF to ESL learners are numerous.

Written corrective feedback (WCF) can be categorised as: focused vs. unfocused WCF; direct vs. indirect WCF; and explicit vs. implicit WCF (Ferris, Liu, Sinha, & Senna, 2013). Past studies have examined various types of WCF, including overt correction (direct WCF), underlining (indirect WCF), error code, metalinguistic explanation (metalinguistic WCF), etc. This study employs indirect or implicit WCF by Bitchener and Ferris (2012) to examine the significance of its implementation on the targeted group of ESL learners' writing skills. This strategy integrates indirect or implicit feedback with self-correction as an implicit WCF. It is a correction method used to indicate errors, such as by underlining or circling the errors or using symbols or codes which will guide students to self-correct their errors (Bitchener & Knoch, 2008; Mohebbi, 2013; Hoesseini, 2014). This is a suitable technique for self-correction, since this type of feedback prompts learners to identify the errors they make and correct them on their own. Self-correction is a form of indirect feedback where the teacher provides alternatives to learners but the learners themselves have to work out the correct form (Bitcher et al., 2005). There is no description provided in the feedback, since students are meant to discover their own errors. This type of corrective feedback will encourage learners to repair their own errors, causing them to think, and apply their existing schematic knowledge in the learning process. This will then promote self-directed learners in the ESL classroom. This is a form of discovery learning, implying that learning is more internally driven than externally driven (Maftoon, Shirazi, & Daftarifard, 2010). Learning through self-discovery paves the way for learners to produce language meaningfully and develop their linguistic competence.

Limited studies have been conducted on indirect or implicit WCF. Hyland (2010) contends in his review that there has been very little research conducted on "how students actually engage with feedback and how feedback shapes their writing processes, revising practices and their self-evaluation capacities" (p. 179). This is supported by Linh (2018) who asserts that there is very limited body of research focusing on indirect written corrective feedback. Furthermore, Rouhi et al. (2018) claims that there is still inadequate evidence on which specific feedback strategies are effective in enhancing the accuracy of second language (L2) learners' writing. Thus, in response to this gap in literature, this present study aims to examine the effects of a lecturer's indirect or implicit WCF (indication of errors by underlining or circling the errors) on ESL learner's writing skills. It also aims to test the research hypothesis that there is a significant difference in students' essay writing scores after treatment using the lecturer's indication of errors as implicit WCF. This present study seeks to answer the following research questions:

a. Does error indication as implicit WCF effectuate a significant improvement in the writing skills of learners?

b. What are learners' perceptions towards the use of error indication as implicit WCF in their essay writing tasks?

LITERATURE REVIEW

A number of research studies have been conducted on the effects of direct and implicit written corrective feedback (WCF) on students' speaking (Shamirim & Farvardin, 2016;

Rama-dhani, 2019; Lasmi, 2020) and writing skills (Alavi & Amini, 2016; Westmacott, 2017; Karim & Nassaji, 2018; Nemati et al., 2019; Sultana & Yoko, 2021). The findings of these previous studies are varied and inconclusive. In addition, findings relating to comparison of corrective feedback type on enhancing learners' writing skills is also inconclusive. A number of researchers claim that written corrective feedback is effective in improving students' L2 writing (Fer-ris 1999, 2006; Bruton 2009, 2010; Chandler, 2009), as opposed to arguments by Truscott (1996) that it is ineffective and harmful. Other studies found that there is no significant difference in terms of effectiveness between direct and indirect WCF. Evidently, "a lot of researchers and practitioners have extensively investigated WCF role within the framework of second language acquisition and L2 writing" (Ene & Kosobucki, 2016). However, no conclusive results have been obtained (Yi, 2019).

Evidently, a review of 35 primary studies reveals that written corrective feedback can bring about improvement in L2 written accuracy (Lim & Renandya, 2020). Many recent research findings also approve the effectiveness of WCF on writing skills (e.g., Westmacott, 2017; Karim & Nassaji, 2018; Nemati et al., 2019; Sultana & Yoko, 2021). Alavi and Amini (2016) who investigated the effects of two different corrective feedback techniques, namely recasts and elicitation, found that elicitation was more effective than recasts. Many researchers confirm that it is beneficial for long term learning improvements, because it boosts student engagement and attention to forms, allowing them to problem solve (Ferris, 2003; Lalande, 1982). This is supported by Kisnanto's (2016) finding that direct WCF is effective for improving the writing accurance of university students She examined the effect of direct and indirect WCF on students' L2 writing accuracy. The results of the writing tests revealed that participants who received direct WCF experienced a statistically significant improvement in their writing accuracy, when compared to students who were given indirect WCF. Similarly, the findings of Hamid et al (2018) also ascertain that corrective feedback is a useful editing tool. They explored the effect of colour as a form of corrective feedback on EFL learners' writing and relationship of such feedback with learners' performance in EFL acquisition. This study revealed that colour used in corrective feedback was found to be effective in increasing the awareness of learner, thus improving the writing performance of learners.

Pakbaz (2014) found an equally positive effect of giving both types of written corrective feedback on the written work of learners. There was no statistically significant difference between the implicit and explicit groups on their correct use of the specified structures. This is supported by Babanoğlu, Ağçam and Badem (2018) who also found that there was no statistical superiority of explicit and implicit WCF over each other. Similarly, Wahyuni (2017) discovered that there was no significant difference in the writing quality of students who received direct corrective feedback and those who received indirect corrective feedback. The findings also showed that the cognitive styles of students did not have any influence on the effect of different feedback on writing quality. This is an important finding, but it requires further examination, since the results cannot necessarily be extrapolated to all ESL learners.

In contrast, Ariyandi (2018) compared academic performance in writing skills between students who were taught using indirect written correction and those were not. He found that indirect correction technique was more effective for teaching writing skills. On the other hand, Poorebrahim (2017) compared the effects of two types of indirect corrective feedback - indication and indication plus location. This involved two groups of learners and revealed significant difference between the two groups in error reduction from the original draft to the revision stage. However, there was no significant difference in terms of accuracy of the new pieces of writing. It was found that error reduction at the revision stage should not be considered as learning. The study implicated that "more explicit feedback is better for revising purposes while more implicit feedback is good for learning purposes" (p. 184). Certain studies found that indirect corrective feedback seemed to be effective in helping the learners to improve their linguistic accuracy of grammatical errors (Jamalinesari et al., 2015). The findings of the above studies substantiate the inconclusive findings in past literature concerning the effectiveness of direct and implicit WCF.

Previous studies have shown that students have different per-ceptions on the usefulness of the different types of correc-tive feedback and which feedback they prefer for their learn-ing. However, the findings are also inconclusive and there are limited studies conducted in this field of research espe-cially in Malaysia. Some past studies (e.g., Lee, 2009; Black & Nanni, 2016; Khalil Jahbel, et al., 2020) show that students prefer direct error correction. For instance, Mohammad and Rahman's (2016) findings showed that majority of students wanted lecturers to provide correction or feedback for the mistakes on their writing and they preferred lecturers to mark their mistakes and give comments on their work. This finding is supported by Khalil Jahbel, et al. (2020) who found that students had high preferences towards written correc-tive feedback. Bozkurt and Acar (2017) support Mohammad and Rahman's (2016) and Jahbel, et al.'s (2020) findings that students preferred getting explicit feedback to their written work, however, they were aware that implicit feedback led to more awareness, exploration, autonomy, and self-improve-ment. Chandler (2003) claims that students accept that they learn more from implicit feedback and benefit more from self-correction. This confirms the findings of Ferris and Roberts' (2001) that students preferred implicit feedback for error rectification, and they valued the feedback specifically implicit correction from their teachers (Saito,1994). In the contrary, Umer, Ahmad and Soomro (2018) found that students believed direct written feedback provided by teachers and saw it as effective for improving writing

skill. They perceived direct face-to-face interaction as more productive than indirect feedback, due to a failure to understand the comments or the symbols used by their teachers.

The contradictory findings from past studies may be due to several factors which influence the preferences of students for corrective feedback. This includes important demographic factors such as age, educational background and linguistic proficiency. These are all factors which can influence how students like their errors to be corrected (Lee, 2009). In addition, the field of interest of students may also affect their preference for feedback. For example, certain students prefer feedback on grammar while others need feedback on content and ideas (Hedgcock & Lefkowitz, 1996; Ferris & Roberts, 2001). Nevertheless, further examination is needed on issues such as "the problems inherent in the provision of corrective feedback, the differential effects of various types of feedback, the conditions under which the effect of feedback can be maximised, and the issue of uptake" (El-Tatawy, 2002, p. 12). Storch (2010) indicates that research findings are still inconclusive, although many of the inadequacies of earlier research have been largely addressed. She suggests that "future research on WCF needs to be conducted in authentic classrooms, so that the feedback is given within the context of an instructional program" (p. 43). In providing WCF, she recommends that future research take into consideration the writing goals or learners and their attitude to grammatical accuracy. Taking Storch's (2010) suggestions into consideration, the present study is expected to offer new insights and knowledge on these issues, especially relating to the effect of the lecturer's indication of errors as implicit WCF on learners' writing skills in an ESL classroom.

METHODOLOGY

Research Design

This present study employed a mixed methods research design wherein two research methods were used for data collection and analysis. For the quantitative data, a single group pre-test and post-test design was used. The pre-test and post-test results were compared to measure the improvement in the writing skills after treatment. "This design attempts to use the subjects as their own controls and to eliminate the need for a control group design. This design is sometimes referred to as a 'repeated measures' design because subjects are observed or measured twice on the dependent variable" (Seliger & Shohamy, 2008). The main advantage of using this design is that it controls several extraneous variables which can affect the homogeneity of subjects when more than one group is employed (Seliger & Shohamy, 2008). Next, a qualitative research method using a structured interview was employed to determine the perceptions of participants regarding the treatment, based on error indication as implicit corrective feedback in writing. The combination of both methods complements the flaws of each research method and thus, generates richer data, more reliable and specific results. Also, this study was conducted in an authentic classroom environment, wherein the participants remained in their lecture room during the experiment.

Participants

This study applied a purposive sampling method. Participants were a class of 50 final year Bachelor of Education in TESL (BTESL) students at a private university in Selangor, Malaysia. The age range was between 23 to 26. Academically, the majority of them had obtained a good cumulative grade point average (CGPA) of 2.5 and above. Generally, their English proficiency level was upper intermediate. All fifty students participated in the treatment, pre-test and post-test, while only ten were selected for the interview session with the researcher.

Instruments

Essay Writing Tests (Pre-Test and Post-Test)

Essay writing tests were the first instruments used in the data collection. They were employed to gather data which answered the first research question: Does lecturer error indication as implicit WCF effectuate a significant improvement in the writing skills of learners? A pre-test and a post-test were conducted, in order to examine the differences in their total writing scores before and after the treatment using implicit WCF (lecturer error indication and learner self-correction of essay writing). During the Pre-Test, the students were asked to write a short essay of about 200 words in 30 minutes entitled "The advantages of using Twitter for its users". Together with the essay question, four main points (access information, social interaction, share moments, create awareness) were given as guidelines for the students to use in their essay writing. They were also encouraged to use their own ideas to elaborate the essay. For the post-test, the students were also asked to write a short essay of about 200 words in 30 minutes entitled "The advantages of using Facebook for its users". Four main points (access information, social interaction, share moments, create awareness) were also given as in the pre-test. Students were required to use them in their essay with the addition of their own ideas to expand the essay. Both written scripts obtained from the pre-test and the post-test were evaluated by two independent raters based on the scoring rubric for writing test adopted from Jacob et al. (1981). This rubric was employed in this study because it is one of the most frequently used and reliable profiles for ESL composition rating (Lee et al, 2008). Furthermore, it is a suitable scoring rubric that offers a clear undertaking of what and how to score the composition consistently based on each writing element graded by the lecturer (Turgut & Kayaoğlu, 2015). The improvement

was examined by comparing the essay writing scores that the students obtained in the pre-test and post-test.

Independent Raters

Two lecturers with a Master of Education in TESL (Teaching English as a Second Language) were selected as independent raters. Both raters have more than five years experience in teaching TESL subjects. They were briefed about their roles as raters by the researcher and the rubric was explained to them. Importantly, a pilot study was conducted, in order to test interrater reliability of the two raters' scores. The intraclass correlation coefficient analysis showed that the raters' pre-test scores had moderate inter-rater reliability of .67 while the post-test scores had good reliability of .84.

Interview

For the qualitative data collection method, a structured interview was used to enable the selected participants to share their thoughts and opinions about the focused topic. There were eight structured interview questions (Appendix 1) in total, related to their perceptions on the use of error indication as implicit WCF. This interview was mainly to answer Research Question 2 - What are the learners' perceptions towards using the lecturer's indication of errors as implicit WCF feedback in their essay writing tasks? The findings would support the data and findings obtained from the students' essay writing tests. Using purposive sampling method, ten respondents were selected randomly for the interview session. All interview sessions involving the ten interviewees were recorded and transcribed for the purpose of the data analysis.

Data Collection Procedures

The systematic data collection procedures used in this present study are illustrated in Figure 1.

A pilot study was conducted involving 30 actual participants in the study a week before the treatment. After the pilot study, the pre-test was administered to a class of 50 final year BTESL students. They were given 30 minutes to complete the test. They were required to write a short essay of about 200 words, entitled "Advantages of using Twitter for its users". The pre-test scripts were collected and photocopied in two sets to be given to each of the independent raters to evaluate. The original copies of the pre-test scripts were used for the first treatment. Figure 2 shows the framework of the treatment process.

The first session of the treatment process began immediately after the pre-test. The remaining 20 students who were not involved in the pilot study were asked to write their essays based on the same essay topic, "Advantages of using Twitter for its users." Therefore, all the 50 participants participated in this first treatment. Next, the lecturer administered the implicit WCF (Lecturer's indication of errors by underlining or circling the errors) to all the 50 pre-test scripts during his free time after the lesson.

Figure 1

The Data Collection Procedures

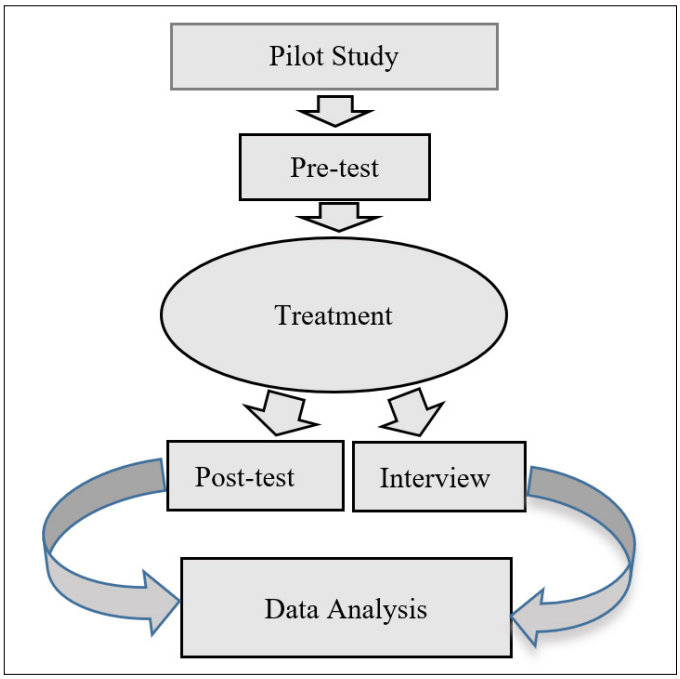
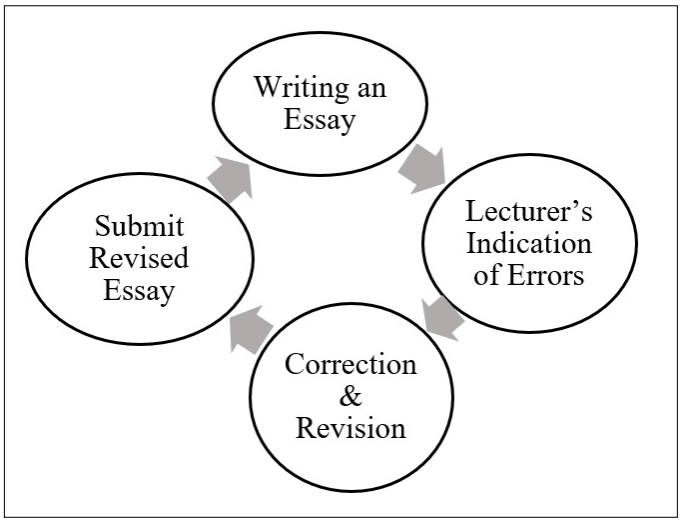


Figure 2

The Treatment Process



In the second session, the lecturer returned the pre-test scripts to the students with indicated errors. They were given 30 minutes to do the correction and rewrite the entire essay. After completing the self-corrected essay, the students submitted it to the lecturer. Then, the second essay topic and its main points - "Ways of reducing stress" (have a hobby, watch television, exercise regularly, talk to a friend) were distributed to all the students. The same process was conducted whereby students were required to write an essay of about 200 words in 30 minutes and submit the completed copy to the lecturer. Similarly, the implicit WCF was administered to the students' writing scripts during the lecturer's free time.

In the third session, the lecturer handed the second essay scripts with the errors indicated back to the students for correction, rewriting and submission of the corrected essays to the lecturer. After that, the lecturer gave a new essay topic and its main points - "Benefits of using social media" (make friends, social interaction, relieve stress, share posts) to the students. The same process was being conducted as in session 2 above for session 3 and session 4. In the fourth session, the students were asked to write the final essay about "The importance of the internet" (obtain information, do research, watch videos, gain knowledge). The steps of the treatment are summarized in Table 1 as follows:

All 50 participants participated and completed their es-says in all the four sessions of the treatment. After the treatments had been conducted four times in two weeks, the post-test was administered to examine the improvement in the writing skills of the learners. This time, the students also wrote a short essay of about 200 words in 30 minutes, but a new topic was given, entitled "Advantages of using Facebook for its users". All 50 students participated and completed their essays in this post-test. The same procedures were applied as in the pre-test whereby the essay scripts were collected, photocopied in two sets, and given to each of the independent raters to evaluate. The final scores in the pre-test and post-test were compared to ascertain if there was any significant difference in their essay writing scores after the implicit WCF had been administered.

After the post-test, a structured interview was conducted. Ten students were chosen at random for the interview session with the researcher. The structured interview instru-ment was also used as a pilot test with two participants from among the actual participants chosen. This pilot testing will enable the researcher to recognise vagueness and unclear interrogations concerning answers for required corrections (Kerlinger (1986). The reliability of the instrument was justified by the results of the pilot testing whereby the two participants did not face any difficulties in responding to all the interview questions. The questions merely focused on student perceptions towards the lecturer's indication of errors as im-plicit WCF in their essay writing tasks. One example of the interview questions (Appendix 1) includes "From your own experience, state two improvements that you have achieved after receiving the lecturer's indication of errors as implicit WCF in your writing task." The interview sessions were re-corded and then transcribed to be analyzed for the research findings.

Data Analysis Procedures

Both the pre-test and post-test were rated by two independent raters based on the analytic scoring rubric for writing test, as adopted from Jacob et al. (1981). This rubric contains certain constructs to guide the independent raters when giving marks for the pre-test and post-test scripts written by students. The descriptions for every level of achievements were stated so that the raters could mark the students' scripts efficiently. An average score was calculated, in order to ascertain the final scores of both the pre-test and post-test. Finally, the final scores which students obtained in the pre-test and post-test were computed using the Statistical Package for the Social Sciences (SPSS) version 22.0 Paired samples t-tests were run to examine the significant difference. Therefore, the results would finally reveal whether the lecturer's indication of errors as implicit WCF is significantly effective for enhancing the essay writing skills of student.

Lastly, the interview sessions involving the ten students were recorded and later transcribed. The interview transcription was analyzed using thematic analysis as employed by Maguire and Delahunt (2017). In the analysis process,

Table 1

The Steps of the Treatment Process

Step 1:	All 50 participants write the essay based on the topic given
Step 2:	The lecturer administers the implicit WCF (The lecturer only circles or underlines the errors made by the students. He neither corrects nor provides them with short comments in the scripts).
Step 3:	Students do self-correction. (The students are requested to do self-correction based on the elicited errors and then, revise their essay scripts)
Step 4:	Students submit their self-corrected essay to the lecturer.

the views given by the interviewees were categorized into themes and codes. In addition, an operationalisation table was constructed to identify the frequency of the same responses being repeated by the participants. This method was followed closely to analyze the qualitative data obtained from the interview.

RESULTS

Does the lecturer's indication of errors as implicit WCF lead to a significant improvement in the writing skills of students?

The essay writing test scores obtained by all 50 students in the pre-test and post-test were computed for data analysis. Then, paired sample t-tests were run to examine whether there was any significant difference between the essay writing final scores in the pre-test and post-test. The results of the analysis are shown in Table 2 below.

No outliers were detected. The difference in scores for the pre-test and post-test were normally distributed, as assessed by the visual inspection of a Normal Q-Q Plot. Table 1 shows that students were able to increase their essay writing scores slightly in the post-test after the treatment, by using the lecturer's indication of errors as implicit WCF (M = 15.58, SD = 1.617) when compared with before the treatment in the pre-test (M =13.30, SD = 2.082), a statistically significant mean increase of 2.28, 95% CI [1.828, 2.732], t (49) = 10.13, p = .001, d = 1.43. The mean difference was statistically and significantly different from zero and, therefore, the null hypothesis was rejected. The research hypothesis was accepted as there was a statistically significant difference between the students' essay writing scores before and after the treatment. Besides, based on Plonsky & Oswald (2014), d = 1.43 shows a large effect value denoting a high practical significance of the difference. Hence, the lecturer's indication of errors as implicit WCF had lead to rather significant effects on the writing skills of students.

What are the learners' perceptions towards using the lecturer's indication of errors as implicit WCF in their essay writing tasks?

The interview sessions involving the 10 selected respondents were transcribed manually. After that, the transcriptions were analyzed using thematic analysis as employed by Maguire and Delahunt (2017). Table 3 shows student responses during the interview sessions. These were classified into themes and codes, in order to obtain a clear understanding on their perceptions and to ease the qualitative analysis. Based on these themes and codes, the frequency was determined to ease the analysis of the research findings.

Table 3 shows that the students perceived positively the use of lecturer's indication of errors as implicit WCF in their essay writing tasks. All 10 participants believed that lecturers are the most qualified individuals to give feedback. In addition, they concurred that errors should be corrected immediately after receiving the indication of errors from their lecturer. According to 7 participants, this would enable them to identify the nature of the errors. For example, participant 1 expressed this by saying, *"Yes, the errors made should be corrected. From there, we are able to notice the mistakes that are commonly made by us and at the same time, we could improve our writing skills."* All 10 students also indicated that they could improve their writing skills after receiving the treatment in their writing tasks. The Majority (9) also believed that the lecturer's indication of errors as implicit WCF helped them to reduce and avoid common errors. This was

Table 2

The Comparison of Students' Pre-Test and Post-Test Essay Writing Scores

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post-test	15.58	50	1.617	.229
	Pre-test	13.30	50	2.082	.295

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-test-Pre-test	2.28	1.591	.225	1.828	2.732	10.13	49	.001

Table 3
Thematic Analysis of the Interview Transcriptions

Themes	Codes	Frequency
Qualified feedback provider	Lecturers	////////// (10)
	Peers	/ (1)
Need for immediate correction	To identify the error type	/////// (7)
	Avoid repeating errors	/// (3)
Improvements in writing	Improve writing skills	////////// (10)
	Identify and correct errors	/// (3)
	Reduce/avoid common errors	///////// (9)
	Use wider vocabulary	// (2)
Good understanding of language components	Classification of errors	/////// (7)
	Discovery learning	/// (3)
Able to assess own progress	More aware of errors	////////// (10)
	Monitor writing development	////////// (10)
It enhances learning	Meaningful learning	////////// (10)
	Increase knowledge	/////// (7)
Need for feedback discussion	Get clarification	////// (6)
	better understanding of error type	/// (3)
Frequency of elicitation	Often	//////// (8)
	Not too often	// (2)

perceived positively by participant 5, *"Firstly, I would say I am improving a lot with my grammar. Secondly, I believe, it would be the sentence structure as I can now construct longer sentences."* It also enables a good understanding of a language component learned as majority (7) of the interviewees perceived they were able to understand the classification of errors.

Notably, the lecturer's indication of errors as implicit WCF helps students assess their own progress in writing. All 10 interviewees explained that it enabled them to become more aware of their own errors and monitor their writing development. In the words of participant 8, *"Yes, I become more careful of the possible errors that I may make in writing specifically on grammatical items."* All of them also claimed that the lecturer's indication of errors as implicit WCF enhanced learning, since it could lead to meaningful learning. 7 of them believed that it could increase their knowledge. This was perceived confidently by participant 3, *"It helps me to enhance my learning because basically the concept of this feedback actually drives students to learn and explore learning by their own. This kind of learning definitely helps me to discover more and learn better..."* As suggestions, 6 interviewees commented on the need to discuss feedback orally during the correction phase, in order to obtain clarification from their lecturer. The majority (7) of interviewees suggested the implementation of this technique in their writing tasks to be conducted more often, as expressed by participant 5, *"Yes. From my point of view, lecturers should start implementing this technique more often so that the learners would appreciate the need of self-learning."*

DISCUSSION

The present study achieved its objective. The findings ascer-tained that the lecturer's indication of errors as implicit WCF had a significant effect on the writing skills of ESL learners. There was a slight improvement in the essay writing skills of ESL learners after the treatment. The students were able to obtain a slight mean increase in their post-test essay writing scores. Therefore, the research hypothesis was accepted, since there was a statistically significant difference between the pre-test and post-test essay writing scores of learners, and the difference had a high practical significance. This finding is supported by Ariyandi (2018) who found that the indirect correction technique was more effective for teaching writing skills. This is because it boosts students' engagement and attention to forms and enables them to solve problems, which is essential for long-term learning improvements (Ferris, 2003; Lalande, 1982). Baghzou (2014) as cited in Farrokhi and Sat-tarpour (2012) states that some researchers think that error feedback is useful for improvement in the writing skills of students. However, contradic-

tory findings were also found by several past studies (e.g., Poorebrahim, 2017; Wahyuni, 2017) on the effects of indirect WCF in improving writing quality. Lim and Renandya (2020) found that WCF can boost L2 writing accuracy, while both direct and indirect feedback can benefit learners. This is supported by Kim et al. (2020) who also found that both feedback types were effective for promoting learning of new linguistic features through collaborative writing. With the limited available studies on the effects of implicit WCF on writing skills, this present study has contributed new finding to the body of knowledge. The lecturer's indication of errors as implicit WCF is proven quite effective in improving ESL learner's writing skills.

The findings from the qualitative analysis revealed that most of the interviewees had a positive perception of the use of the lecturer's indication of errors in their essay writing. They were convinced that the lecturer's indication of errors as implicit WCF had contributed to the improvement of their writing skills. The lecturer's indication of errors during the treatment had provided learners with important knowledge and writing skills as they self-corrected their own work. This is consistent with Cahyono and Rosyida's (2016) claim that teacher feedback helps improve the quality of student writing. Recent studies (e.g., Babanoğlu, Ağçam & Badem, 2018; Lim & Renandya, 2020) also indicate that written corrective feedback (WCF) is effective in improving the grammar of learners. A study by Babanoğlu, Ağçam, and Badem (2018) revealed that learners who were given treat-ment of WCF made more progress in learning English prepositions than the control group. This is further supported by Lim's and Renandya's (2020) finding that written corrective feedback had the potential to improve L2 grammatical ac-curacy. During the interview, the students also explained that their ability to identify and correct errors improved after the lecturer's indication of errors in their essays. The majority acknowledged that they were also able to reduce and avoid common errors in their writing. This finding supports Schmidt's noticing hypothesis theory (2001) which says, "for something to be learned, it has to be noticed first" (p.13). However, Schmidt argues that noticing by itself does not lead to acquisition. Therefore, he postulates that input can become intake for L2 learning when learners pay conscious attention to or notice the input" (p. 13). This is because such corrective feedback encourages learners to notice the gaps between target norms and their own inter-language (IL), thus facilitating grammatical restructuring (Schmidt 2001, p. 13). Schmidt rationalizes that the errors made by second language learners are part of the learning process, and that drawing attention to them is a key part of their language development.

Written corrective feedback is very beneficial in the learning process. After the lecturer's indication of errors as implicit WCF is administered, the students commented that error correction must be performed instantly. They believed that error correction would help them identify the nature or types of errors which they had committed.

Furthermore, some of them claimed that the same errors would not be repeated. Through their lecturer's feedback, students will know their mistakes and they will be able to self-correct. Self-correction requires students to identify the erroneous sentences. This active engagement of students will result in a better performance in their writing task and learning in general. In the long run, this helps develop self-confidence and enhance their learning. They claimed that it led to meaningful learning and increased their knowledge. They also confirmed that it helped them monitor their own writing development. This is supported by studies which showed that language learners were able to improve the accuracy of a particular piece of writing based on the feedback provided. Then gradually they could construct long and complex sentences (e.g., Ashwell, 2000; Fathman & Whalley, 1990; Ferris, 1997; Fer-ris & Roberts, 2001). Learners learn from mistakes. Hence, without feedback, students will never get to know their own mistakes in the first place. They will be left puzzled and eventually as time passes they will no longer be concerned by errors. This can lead to the petrification of those errors. As they self-assess their own progress in the writing task, they notice important aspects in their writing. Furthermore, interviewees also believed that the lecturer's indication of errors enabled them to become more aware of the common errors in their writing. This is consistent with Kubota's (2001) finding that the number of errors of different categories in student writing diminished as a result of self-correction through self-help resources.

The lecturer's indication of errors as implicit WCF also functions as a self-assessed learning strategy, helping students discover their own errors in essay writing. As they successfully grasp the type or nature of errors in their writing scripts, the writing process is made easier, since error correction can be done more accurately. As mentioned by the students in the inte-view, they activated their prior knowledge most of all when they saw the errors in their writing. With the efforts that they are making to self-correct their errors, "it allows students to be the 'architects' of their own learning" (Makino, 1993) and enhances their learning autonomy (Westmacott, 2017) by allowing them to take charge of their own learning. This will mould them into autonomous learners.

The majority of participants claimed that lecturers are the most qualified persons to provide feedback on their writing tasks. A wide range of previous works support this find-ing, for example Fatemeh and Hossein (2017). Even though the use of implicit WCF in the present study does not emphasise the provision of any specific comments on the errors students make in their writing, the mere indication of an error in the writing task is sufficient as lecturers are always the reliable persons to highlight the error. Fatemeh and Hossein (2017) state that the feedback given by the teacher is considered more 'qualified', 'experienced', 'accurate', 'valid', 'reliable' and 'trustworthy'. They argue that with the teachers' expertise mainly in the linguistic field, they know

exactly the weakness of the students. Thus feedback is given to ensure that students are aware of it and through the lecturer's indication of errors, students will gain the curiosity to learn and explore more independently. Especially when it comes to identifying their own mistakes. This will drive them to self-correct their errors without assistance from the lecturer.

Finally, the majority of the interviewees proposed that the lecturer's indication of errors as implicit WCF should be con-ducted more often in an ESL classroom. However, despite the participants' positive perception towards this form of WCF, they felt that there is a need to discuss the feedback orally with the lecturer during the correction phase. They reasoned that oral feedback is beneficial in terms of clarification from their lecturer after error indication. As stated by all interviewees, lecturers are the most qualified individuals to administer the feedback for clarification and guidance in the learning process. They also believed that if they consulted with the lecturers, they would receive better explanation and definite insight into their own weaknesses. Moreover, they asserted that if the oral feedback was given by the lecturer, they would be able to obtain a better understanding of the types of errors. The findings from previous studies support the positive idea expressed by the interviewes of providing oral feedback. For example, Agricola et al. (2020) found that students had positive perceptions towards verbal feedback from teachers. In addition, Merry and Orsmond (2008) and Van der Schaaf et al. (2011) asserted that students respond more positively to verbal feedback than written feedback. Therefore, the combination of oral feed-back and implicit WCF can be explored in future studies.

IMPLICATIONS AND LIMITATIONS

An implication of this study is that the lecturer's indication of errors as implicit WCF is beneficial in an ESL classroom for enhancing writing skills of ESL learners. It is applicable as a form of scaffolding particularly for composition writing. When a teache or lecturer indicates errors, students gain the confidence to identify their own errors and do self-correction. Hence, this learning method enables learners to resolve a writing task and achieve a learning goal by exploring the learning process on their own and thus, develop their own learning experiences. In other words, this process teaches learners to be autonomous in their learning. Fatemeh and Hossein (2015) state that minimizing the number of errors and self-correction are beneficial to high achievers. Therefore, it recommended that ESL teachers and lecturers adopt and apply this technique in their composition writing lessons.

Nevertheless, this present study has its own limitation. First, the participants of this study were only the final Year BTESL students who mostly had an English proficiency level of upper-intermediate. Additionally, only a small sample size of 50 participants participated in this study. Therefore, the results might not be relevant to other contexts and population of learners. It is recommended that future research be conducted involving a bigger sample and learners with pre-intermediate or intermediate English proficiency level, in order to generate better contrasting effects of the treatment. Thirdly, the single group pre-post design employed for the quantitative data analysis has its own weaknesses. One of the primary disadvantages of using this design is that other external variables such as incidental exposure to the second language outside classroom may affect performance (Seliger & Shohamy, 2008). However, this unexpected extraneous effect is beyond the control of the researcher. Fully exper-imental research can be conducted in future by employing a control group design. This will enable performance of two homogenous groups: - the experimental and control groups, can be compared to examine their improvements and more impactful findings obtained. Finally, the treatment for the present study was only conducted for four sessions within a period of two weeks. Future longitudinal studies need to allocate longer time to allow for more sustained treatment (Storch, 2010) and this may obviate the influence of extraneous variables on the performance.

In conclusion, the lecturer's indication of errors as implicit WCF is a quite effective method for enhancing the writing skills of ESL learners. The participants also embrace a positive perceptions towards its use in their essay writing in the classroom. With the lecturer's indication of errors, which serves as a prompt for self-correction, students can identify the type of errors that they have made in their essays, and thus improve their writing skills. It also enables students to reduce and avoid common errors and monitor their own progress in writing. Furthermore, it can promote meaningful learning by enhancing the learning process and increasing knowledge. Hence, educators should consider adopting this technique as a beneficial method for administering implicit WCF to boost writing skills in a second language classroom.

CONCLUSION

The present study has revealed a quite positive effect of lecturer's indication of errors as implicit WCF on the writing skills of ESL undergraduates. A slight improvement in their essay writing scores was evident in the post-test after the treatment period. The lecturer's indication of errors, which serves as a self-correction learning strategy and a scaffolding for writing tasks, is also perceived positively by the ESL learners. These findings are quite significant contributions to the body of knowledge in a second language acquisition. Thus, lecturers and teachers are encouraged to exploit this technique for administering implicit WCF to the writing

tasks of their students in the current L2 classroom. Students should be given wider opportunities to practice self-awareness, self-learning, self-correction, and self-evaluation to shape and develop them into autonomous learners. Since the current education system is gearing towards producing high quality future graduates and a generation who are creative critical thinkers, students and undergraduates should be given more opportunities and exposures to shape and develop their own learning experiences. Therefore, lecturers and teachers should slowly reduce direct WCF in the classroom, since the traditional spoon-feeding approach is no longer relevant. The lecturer's indication of errors technique and other forms of indirect WCF will enable educators to actively implement student-centric teaching and learning approach in a contemporary L2 classroom environment.

Future research may conduct similar research with a different sample of participants, especially involving the pre-intermediate or intermediate proficiency students. Better impact of the treatment using the lecturer's indication of errors technique can be obtained if students with lower English proficiency level are used as participants in the study. Since the present study focuses only on implicit WCF, future research can also be conducted to investigate the effects of incorporating both oral and written corrective feedback on the writing skills of students. To obtain more impactful results, future studies may need to conduct a fully experimental study using a control and experimental group design. This may also require more rigorous preparation and data collection procedures. The lecturer's indication of errors as implicit WCF is yet to be perceived wholly by learners, hence, conducting more future research in this field of study would be highly beneficial and imperative.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

F. Subon: Conceptualization, data analysis and interpretation of results, writing, reviewing & editing the final version of the manuscript.

N. A. Ali: Preliminary data analysis & interpretation of results & writing first draft.

REFERENCES

Alavi, S. S., & Amini, M. (2016). Language trajectory through corrective feedback. *International Journal of Multicultural and Multireligious Understanding*, 3(4), 7-13. http://dx.doi.org/10.18415/ijmmu.v3i4.

Agricola, B. T., Prins, F. J. & Sluijsmans, D. M. (2020). Impact of feedback request forms and verbal feedback on higher education students' feedback perception, self-efficacy, and motivation. *Assessment in Education: Principles, Policy & Practice*, 27 (1), 6–25. doi:https://doi.org/10.1080/0969594X.2019.1688764.

Ariyanti, A. (2018). The effectiveness of indirect written correction on English writing skills. *Journal of English for Academic and Specific Purposes*, *1*(2), 33-44.

Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9(3), 227-258. https://doi.org/10.1016/S1060-3743(00)00027-8

Babanoğlu, M. P., Ağçam, R., & Badem, N. (2018). Explicit and implicit written corrective feedback in higher EFL education: Evidence from Turkey. *Journal of the Faculty of Education, 19*(3), 104-116. https://doi: 10.17679/inuefd.364809

Baleghizadeh, S., & Dadashi, M. (2011). The effect of direct and indirect corrective feedback on students' spelling errors. *Profile Issues in Teachers ` Professional Development, 13*(1), 129-137.

Bijami, M., Kashef, S. H., & Nejad, M. S. (2013). Peer feedback in learning English writing: Advantages and disadvantages. *Journal of Studies in Education*, *3*(4), 91-97. https://doi.org/10.5296/jse.v3i4.4314

Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge. https://doi.org/10.4324/9780203832400

Bitchener, J., & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing, 19*(4), 207-217. https://doi.org/10.1016/j.jslw.2010.10.002

Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing.* Routledge. https://doi.org/10.4324/9780203832400

Bitchener, J., & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing*, *19*(4), 207-217. https://doi.org/10.1016/j.jslw.2010.10.002

Bitchener, J. & Knoch, U. (2008) The value of written corrective feedback for migrant and international students. *Language Teaching Research Journal, 12*, 409-431. https://doi.org/10.1177/1362168808089924

Bitchener, J. & Storch, N. (2016). *Written corrective feedback for L2 development.* Multilingual Matters. https://doi.org/10.21832/9781783095056

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of second language writing*, *14*(3), 191-205. https://doi.org/10.1016/j.jslw.2005.08.001

Black, D. A. & Nanni, A. (2016). Written corrective feedback: Preferences and justifications of teachers and students in a Thai context. *GEMA Online® Journal of Language Studies, 16*(3), 99-114. http://doi.org/10.17576/gema-2016-1603-07

Bozkurt, S., & Acar, Z. C. (2017). EFL students' reflections on explicit and implicit written corrective feedback. *The Eurasia Proceedings of Educational & Social Sciences (EPESS),* 7, 98-102.

Bruton, A. (2010). Another reply to Truscott on error correction: Improved situated designs over statistics. *System*, *38*, 491–498. http://doi.org/10.1016/j.system.2010.07.001

Bruton, A. (2009). Designing research into the effects of grammar correction in L2 writing: Not so straightforward. *Journal of Second Language Writing*, *18*, 136–140. http://doi.org/10.1016/j.jslw.2009.02.005

Cahyono, B., & Rosyida, A. (2016). Peer feedback, self-correction, and writing proficiency of Indonesian EFL Students. *Arab World English Journal*, *7*(1), 178-193. http://dx.doi.org/10.2139/ssrn.2804010

Chandler, J. (2009). A dialogue. Response to Truscott. *Journal of Second Language Writing*, 18, 57-58. https://doi.org/10.1016/j.jslw.2008.09.002

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of second language writing*, 12(3), 267-296. https://doi.org/10.1016/S1060-3743(03)00038-9

Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition,* 28, 339– 368. https://doi.org/10.1017/S0272263106060141

El-Tatawy (2002) *Corrective feedback in second language acquisition*. Columbia University.

Ene, E. & Kosobucki, V. (2016). Rubric and corrective feedback in ESL writing: A longitudinal casestudy of an L2 writer. *Assessing Writing*, *30*, 3-20. https://doi.org/10.1016/j.asw.2016.06.003

Farrokhi, F. & Sattarpour, S. (2012) The effects of direct written corrective feedback on improvement of grammatical accuracy of high proficient L2 learners. *World Journal of Education, 2*(2), 49-57. https://doi.org/10.5430/wje.v2n2p49

Fatemeh, N., & Hossein, S. (2017). The effect of teacher direct and indirect feedback on Iranian intermediate EFL learners' written performance. *Journal of Applied Linguistics and Language Learning,* 3(5), 110-116*.* https://doi.org/10.5923/j.jalll.20170305.02

Fathman, A. & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second Language Writing: Research Insights for the Classroom* (pp. 178-190). Cambridge University Press.

Ferris, D.R. (2006). *Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction*. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81-104). Cambridge University Press. https://doi.org/10.1017/CBO9781139524742.007

Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing*, *8*, 1-l1. https://doi.org/10.1016/S1060-3743(99)80110-6

Ferris, D. (1997). The influence of teacher commentary on student revision. *TESOL Quarterly, 31*(2), 315-339. https://doi.org/10.2307/3588049

Ferris, D. R. (2003). *Response to student writing: Implications for second language students*. Lawrence Erlbaum Associates.

Ferris, D. & Roberts, B. (2001) Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing, 10*, 161-184. https://doi.org/10.1016/S1060-3743(01)00039-X

Godfroid, A., Loewen, S., Jung, S., Park, I., Gass, S., & Ellis, R. (2015). Timed and untimed grammaticality judgments measure distinct types of knowledge: Evidence from eye movement patterns. *Studies in Second Language Acquisition, 37*(2), 269–397

Hamid, H, A., Nasri, N. F., & Ghazali, N. (2018). Colours as a form of corrective feedback in EFL learners' writing. *GEMA Online Journal of Language Studies,* 18(4), 106-123. http://doi.org/10.17576/gema-2018-1804-08.

Hedgcock, J. & Lefkowitz, N. (1996). Some input on input: Two analyses of student response to expert feedback in L2 writing. *The Modern Language Journal, 80*(3), 287-308. https://doi.org/10.1111/j.1540-4781.1996.tb01612.x

Hoesseini, M. (2014). The role of direct and indirect written corrective feedback in improving Iranian EFL students' writing skill*. Social and Behavioral Sciences*, *98*, 668-674. doi: 10.1016/j.sbspro.2014.03.466

Hyland, F. (2010). Future directions in feedback on second language writing: Overview and research agenda. *International Journal of English Studies*, 10(2), 171-182. https://doi.org/10.6018/ijes/2010/2/119251

Ismail, N., Maulan, S., & Hassan, N. (2008). The impact of teacher feedback on ESL students' writing performance. *Jurnal Akademik UiTM Johor*, *8*(1), 45-54.

Ito, K. (2015). Recast and Elicitation: The Effectiveness of corrective feedback on Japanese language learners [Masters theses]. University of Massachusetts Amherst. https://doi.org/10.7275/6946038

Jacobs, H., S. Zingraf, D. Wormuth, V.F. Hartfiel, & J. Hughey (1981). *Testing ESL composition: Apractical approach.* Newbury House Publishers.

Jamalinesari, A., Rahimi, F., Gowhary, H., & Azizifar, A. (2015). The effects of teacher-written direct vs indirect feedback on students' writing. *Procedia-Social and Behavioral Sciences*, *192*, 116-123. https://doi.org/10.1016/j.sbspro.2015.06.018

Karim, K., & Nassaji, H. (2018). The revision and transfer effects of direct and indirect comprehensive corrective feedback on ESL students' writing. *Language Teaching Research*, *24*(4), 519-539. https://doi.org/10.1177/1362168818802469

Kerlinger, F.N. (1986). *Foundations of behavioral research* (3rd ed.). Holt, Rinehart & Winston.

Jahbel, K., Latief, M. A., Cahyono, M. Y., & Abdalla, S. N. (2020). Exploring university students' preferences towards written corrective feedback in EFL context in Libya. *Universal Journal of Educational Research*, *8*(12A), 7775 - 7782. https://doi.org/10.13189/ujer.2020.082565

Kim, Y., Choi, B., Kang, S., Kim, B. & Yun, H. (2020). Comparing the effects of direct and indirect synchronous written corrective feedback: Learning outcomes and students' perceptions. *Foreign Language Annals, 53*(1), 176-199. https://doi.org/10.1111/flan.12443

Kisnanto, Y. P. (2016). The effect of written corrective feedback on higher education students' writing accuracy. *Jurnal Pendidikan Bahasa dan Sastra UPI, 16*(2), 121-131. http://dx.doi.org/10.17509/bs_jpbsp.v16i2.4476

Lalande, J. F. (1982). Reducing composition errors: An experiment. *Modern Language Journal, 66,* 140–149. https://doi.org/10.1111/j.1540-4781.1982.tb06973.x

Lasmi, F. (2020). Teacher's corrective feedback on students' oral responses. *English Community Journal*, *4*(1), 12–23. https://doi.org/10.32502/ecj.v4i1

Lee, I. (2008). Understanding teachers' written feedback practices in Hong Kong secondary classrooms. *Journal of Second Language Writing, 17*, 69-85. https://doi.org/10.1016/j.jslw.2007.10.001

Lee, I. (2009). Ten mismatches between teachers' beliefs and written feedback practice. *ELT Journal, 63*(1), 13-22. https://doi.org/10.1093/elt/ccn010

Linh, D. M. (2018). The Effectiveness of indirect written corrective feedback as perceived by teachers and students of a public university in Vietnam. *International Journal of Education & Literacy Studies*, *6*(4), 152-162. http://dx.doi.org/10.7575/aiac.ijels.v.6n.4p.152

Lyster, R. (2002). Negotiation in immersion teacher-student interaction. *International Journal of Educational Research*, *37*, 237–253. https://doi.org/10.1016/S0883-0355(03)00003-X

Lyster, R. & Saito, K. (2010). Effects of oral feedback in SLA classroom research: A meta-analysis. *Studies in Second Language Acquisition,* 32, 265–302. https://doi.org/10.1017/S0272263109990520.

Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language teaching*, 46(1), 1-40. https://doi.org/10.1017/S0261444812000365

Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning*, *60*(2), 309-365. https://doi.org/10.1111/j.1467-9922.2010.00561.x

Lim, S. C., & Renandya, W. A. (2020). Efficacy of written corrective feedback in writing instruction: A meta-analysis. *The Electronic Journal for English as a Second Language, 24*(3), 1-26.

Mackey, A., & Goo, J. (2007). Interaction research in SLA: A meta-analysis and research synthesis. In A. Mackey (Ed.), *Conversational interaction in SLA: A collection of empirical studies* (pp. 408–452). Oxford University Press.

Maftoon, P., Shirazi, M. A., & Daftarifard, P. (2010). The effect of recast vs. self-correction on writing accuracy: The role of awareness. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, *2*(1), 17-28.

Maguire, M. & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J,* 3. http://ojs.aishe.org/index.php/aishe-j/article/view/335

Makino, T (1993). Learner self-correction in EFL written compositions *ELT J,* 47(4), 337-341. https://doi.org/10.1093/elt/47.4.337

Martin, S., Alvarez Valdivia, I.M. (2017). Students' feedback beliefs and anxiety in online foreign language oral tasks. *International Journal of Educational Technology in Higher Education, 14*, Article 18. https://doi.org/10.1186/s41239-017-0056-z

Meihami, H. (2013). Truscott's claims in giving corrective feedback: Does it matter in EFL writing context. *International Letters of Social and Humanistic Sciences*, *8*, 8-23. https://doi.org/10.18052/www.scipress.com/ILSHS.8.8

Merry, S., & Orsmond, P. (2008). Students' attitudes to and usage of academic feedback provided via audio files. *Bioscience Education*,*11*(11), 1–11. https://doi.org/10.3108/beej.11.3

Miller, M. K., Mandryk, R. L., Birk, M. V., Depping, A. E., & Patel, T. (2017). Through the looking glass: The effects of feedback on self-awareness and conversation during Video Chat. In *CHI 2017 - Proceedings of the 2017 ACM SIGCHI Conference on Human Factors in Computing Systems* (pp. 5271-5283). Association for Computing Machinery, Inc. https://doi.org/10.1145/3025453.3025548

Mohammad, T. F. & Rahman, T. A. (2016). English learners' perception on lecturers' corrective feedback. *Journal of Arts & Humanities English*, 5(4). https://doi.org/10.18533/journal.v5i4.700

Mohebbi, H. (2013). Written corrective feedback in L2 pedagogy: Claims and counterclaims, recent finding, and future research directions. *International Journal of Innovative Ideas,* 13(2), 29-36.

Nemati, M., Alavi, S. M. & Mohebbi, H. (2019). Assessing the effect of focused direct and focused indirect written corrective feedback on explicit and implicit knowledge of language learners. *Language Testing in Asia*, 9(7), 2-18. https://doi.org/10.1186/s40468-019-0084-9

O'Sullivan, I., & Chambers, A. (2006). Learners' writing skills in French corpus consultation and learner evaluation. *Journal of Second Language Writing, 15*, 49-68. https://doi.org/10.1016/j.jslw.2006.01.002

Pakbaz, R. (2014). The effect of written corrective feedback on EFL learners' writing performance: Explicit vs. implicit. *International Journal of Language and Linguistics*. *Special Issue: Teaching English as a Foreign/Second Language*, *2*(5-1), 12-17. https://doi.org/10.11648/j.ijll.s.2014020501.12

Plonsky, L., & Oswald, F. L. (2014). How big is "big"? Interpreting effect sizes in L2 research. *Language Learning, 64*(4), 878-912. https://doi.org/10.1111/lang.12079

Poorebrahim, F. (2017). Indirect written corrective feedback, revision, and learning. *Indonesian Journal of Applied Linguistics,* 6(2), 184-192. https://doi.org/10.17509/ijal.v6i2.4843

Ramadhani, S. A. F. (2019). *Investigating corrective feedback in speaking practice: Students' preferences advances in social science, education and humanities research*, In the 3rd International Conference on Language, Literature, Culture, and Education (ICOLLITE 2019). https://doi.org/10.2991/assehr.k.200325.079

Saito, H. (1994). Teachers' practices and students' performances for feedback on second language writing: A case study of adult ESL learners. *TESL Canada Journal, 11*(2), 46-70. https://doi.org/10.18806/tesl.v11i2.633

Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and Second Language Instruction* (pp. 3-32). Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524780.003

Seliger, H. W., & Shohamy, E. (2008). *Second language research methods*. Oxford University Press.

Shamiri, H., & Farvardin, M. F. (2016). The effect of implicit versus explicit corrective feedback on intermediate EFL learners' speaking self-efficacy beliefs. *Theory and Practice in Language Studies*, *6*(5), 1066-1075. http://dx.doi.org/10.17507/tpls.0605.22

Shintani, N. and Ellis, R. 2013. The comparative effect of direct written corrective feedback and metalinguistic explanation on learners' explicit and implicit knowledge of the English indefinite article. *Journal of Second Language Writing, 22*(3), 286-306. https://doi.org/ 10.1016/j.jslw.2013.03.011

Storch, N. (2010). Critical feedback on written corrective feedback research. *International Journal of English Studies*, *10*(2), 29-46. https://doi.org/10.6018/ijes/2010/2/119181

Sultana N., and Yoko, N. T. (2021). Impact of teachers' feedback in improving students' writing skills: A study of tertiary level students in Dhaka, *British Journal of Arts and Humanities*, *3*(5), 128-139. https://doi.org/10.34104/bjah.02101280139

Taskiran, A., & Yazici, M. (2021*). Formative feedback in online distance language learning: Boosting motivation with automated feedback.* In H. Ucar & A. Kumtepe (Eds.), Motivation, volition, and engagement in online distance learning (pp. 100-125). IGI Global. http://doi:10.4018/978-1-7998-7681-6.ch005

Treglia, M. O. (2009). Teacher-written commentary in college writing composition: How does it impact student revisions? *Composition Studies*, 37(1), 67-86.

Umer, M., Ahmad, B. & Soomro, A. F. (2018). Saudi learners' perceptions of feedback on written tasks. *International Research Journal of Arts and Humanities, 46*(46), 63-76.

Van der Schaaf, M. F., Baartman, L. K. J., Prins, F. J., Oosterbaan, A., & Schaap, H. (2011). Feedback dialogues that stimulate students' reflective thinking. *Scandinavian Journal of Educational Research*, 57(3), 227–245. https://doi.org/10.1080/00313831.2011.628693

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wahyuni, S. (2017). The effect of different feedback on writing quality of college students with different cognitive styles. *Dinamika Ilmu*, *17*(1), 39-58. http://dx.doi.org/10.21093/di.v17i1.649

Westmacott, A. (2017). Direct vs. indirect written corrective feedback: Student perceptions. *Medellin*, 22(1), 17-32. https://doi.org/10.17533/udea.ikala.v22n01a02

Yi, H. (2019). Book review: Written corrective feedback for L2 development. *Iranian Journal of Language Teaching Research, 7(*1), 140-142. https://doi.org/10.30466/ijltr.2019.120637

Zacharias, N. T. (2007). Teacher and student attitudes toward teacher feedback. *RELC journal*, *38*(1), 38-52. https://doi.org/10.1177/0033688206076157

APPENDIX 1

Interview Questions

INTERVIEW QUESTIONS	
1.	Who do you think is the most qualified individual to provide feedback?
2.	Should errors be corrected immediately after receiving the indication of errors from your lecturer? Why?
3.	From your own experience, state two improvements that you have achieved after receiving the lecturer's indication of errors as implicit WCF in your writing task.
4.	Has the lecturer's indication of errors as implicit WCF promoted deep understanding on the language component learned? If yes / no, why?
5.	Does this the lecturer's indication of errors technique help you to assess your own progress in writing? How?
6.	Do you think the lecturer's indication of errors has helped to enhance your learning? If yes / no, why?
7.	During the correction phase, did you feel like you need to discuss the feedback orally with the lecturer or you prefer to do it by your own? Why?
8.	Would you suggest the lecturer's indication of errors as implicit WCF to be used often in any writing task as part of learning and acquiring English language? If yes / no, why?

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Experienced and Novice L2 Raters' Cognitive Processes while Rating Integrated and Independent Writing Tasks

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ABSTRACT

Background. Recently, there has been a growing interest in the personal attributes of raters which determine the quality of cognitive processes involved in their rating writing practice.

Purpose. Accordingly, this research attempted to explore how the rating experience of L2 raters might affect their rating of integrated and independent writing tasks.

Method. To pursue this aim, 13 experienced and 14 novice Iranian raters were selected through criterion sampling. After attending a training course on rating writing tasks, both groups produced introspective verbal protocols while they were rating integrated and independent writing tasks which were produced by an Iranian EFL learner. The verbal protocols were recorded and transcribed, and their content was analyzed by the researchers.

Results. The six extracted major themes from the content analysis included *content, formal requirement, general linguistic range, language use, mechanics of writing,* and *organization*. The results indicated that the type of writing task (integrated vs. independent) is a determining factor for the number of references experienced and novice raters made to the TOEFL-iBT rating rubric. Further, the raters' rating experience determined the proportions of references they made. Yet, the proportional differences observed between experienced and novice raters in their references were statistically significant only in terms of *language use, mechanics of writing, organization*, and the *total*.

Conclusion. The variations in L2 raters' rating performance on integrated and independent writing tasks emphasize the urgency of professional training to use and interpret the components of various rating writing scales by both experienced and novice raters.

KEYWORDS

cognitive processes, Independent writing task, Integrated writing task, Rating experience, Rubric, Task type, Verbal protocol

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INTRODUCTION

Rating writing tasks has always been challenging for raters since it often involves subjective evaluation or discriminating judgment (Brown & Abeywickrama, 2010; Leung & Lewkowicz, 2006). This is often the case in scoring second/foreign language (L2) writing tasks that comprise different skills, writing genres, and evaluation criteria (Barkaoui, 2010a; Pourdana et al., 2021). One way to reduce subjectivity in the rating process is to use writing rating scales, which have been the major concern in most large-scale standardized tests. With the growing popularity of these fine-grained rating scales in L2 writing assessment, the L2 researchers' focus has shifted to *how* L2 raters employ such scales and *what* cognitive processes they execute when they rate a piece of writing.

Providing fair and accurate scores to the test-takers' writing is vital for L2 raters because these scores have direct impacts on the future lives of many test-takers who plan to pursue their education at higher levels across the world. Since rating writing tasks is a complex and error-prone process usually performed by human beings of different characteris-

tics (Van Moere, 2014), there is a high demand to study the confluence of raters' attributes in the rating process. One of such important factors which need further investigation is the rater experience. Although some studies have been done to explore the in-depth contribution of the raters' experience in rating L2 writing (Attali, 2016; Barkaoui, 2010a; Davis, 2016; Lim, 2011; Şahan & Razı, 2020; Weigle, 1998), most of them have examined the *actual rating performance* by different raters with marginal attention to the cognitive or psychological processes incorporated into the rating process (Nikmard & Tavassoli, in press). It seems there is a gap in the L2 research literature about the extent to which the nature of cognitive processes can be represented in experienced and novice L2 raters' rating performance on various writing tasks, such as integrated and independent tasks, even though there have been studies on test takers' differing performance on these task types (e.g., Ahmadi & Mansoordehghan, 2015; Plakans, 2010; Shi et al. 2020). This study, therefore, employed the verbal protocol method of introspection to collect data on the underlying cognitive processes of L2 raters with varying degrees of experience (experienced vs. novice) while they engage in rating the test-takers' performance on integrated and independent writing tasks. The results of this study can have important implications for L2 raters and rater trainers to raise their awareness of the game-changing cognitive processes enacted in their rating performance.

Task-Based Assessment of L2 Writing

The quality of writing in L2 brings about enormous advantages to students such as showing their academic character, promoting effective communication, advancing their higher-order thinking skills, making logical and convincing arguments, demonstrating their ideas and re-assessing them, and promoting them to their future careers (Beck et al., 2018; Swales & Feak, 2004). Writing is probably the most complex L2 skill to teach and to assess in most EFL contexts such as Iran, unless the L2 teacher is experienced enough to manage the dilemma (Hyland, 2003; Klimova, 2013). Any teaching practice in a formal setting is accompanied by sequential and/or subsequent assessment. Accordingly, the teaching and assessment of writing are not exceptional. Writing can be assessed through various writing tasks which are vastly different in terms of their focus, the type of challenge they generate, the feedback type they provide to L2 writers, and their degree of correspondence to real-world tasks (i.e., authenticity) that L2 learners wish to perform. The outcome of assessing L2 writing is usually a gain score, which is the by-product of the dynamic interactions among the writer, the writing task, the written product, the rater, and the rating procedure.

Traditionally, the dominant writing task in large-scale international tests such as the International English Language Testing System (IELTS) or Test of English as a Foreign Language (TOEFL) has been the independent writing task. Defined by the TOEFL Family of Assessments (https://www.ets.org/toefl), an *independent* writing task requires L2 learners to draw on their personal experience, opinion, and knowledge when responding to a prompt. They are called independent tasks because the L2 learner alone is the source of information. However, independent writing tasks are argued for being decontextualized as students may not have any information about the topic to write about; also these tasks do not let students benefit from other available resources (Ahmadi & Mansoordehghan, 2015). That is why, more recently, integrated writing tasks have been accommodated to international tests.

The TOEFL Family of Assessments (https://www.ets.org/toefl) defines an *integrated* writing task as a task that demands test takers to integrate the database from various resources when responding to a prompt. In these tasks, test takers are required to read a short passage and/or listen to an academic lecture and write the response to the prompts by using the information incorporated into the passage and/or the talk. It is a common belief that integrated writing tasks are more contextualized and authentic (Ahmadi & Mansoordehghan, 2015). However, except few studies such as Michel et al. (2020) and Uludag et al. (2021), not much research has been done to cross-examine the L2 learners' performance on independent and integrated writing tasks or to analyze L2 raters' cognitive processes when they rate either of these tasks. Since performance on these two tasks requires different cognitive engagement (relying on one's own knowledge in independent tasks versus incorporating information from other sources in integrated tasks), it was presumed that L2 raters' cognitive processes may also differ when rating these two types of tasks. Therefore, these two popular task types were selected for further investigation in this study.

Scoring Rubrics and Rating Scales

Brookhart (2013) defined a rubric as a logical and clear-cut set of criteria to evaluate students' language production. A scoring rubric also includes precise descriptions of the performance levels that match those criteria. Relying on standard scoring rubrics, L2 teachers can provide informative feedback to their students by locating the problems in their output, identifying their errors, and providing diagnostic information about their strengths and weaknesses (Suskie, 2008). Various scoring rubrics are usually well-tuned to specific purposes. The most important purpose of selecting a scoring rubric is to evaluate performance, either while the student is producing language or after the language product or the task outcome is ended. Rubrics can also shape the teacher's/rater's rating behaviors. In a classroom assessment situation, for example, objective judgments can take place by corresponding the teacher/rater observation of a student's work to the descriptions embedded in the scoring rubric. The quality judgment based on a standard scoring rubric can subsequently be employed in terms of diagnostic feedback or formative assessment by L2 teachers and/or raters (Brookhart, 2013).

Rating scales are divided into three major types of *primary trait, holistic*, and *analytic* (Suskie, 2008). Suskie's classification is founded upon the binary aspects of rating scales; whether they are specific to a single task or several tasks and whether a single score or several scores are granted to each writing product. The primary trait is well-recognized by most task developers which enable L2 raters, teachers, and students to concentrate on a single characteristic of the task, such as appropriate text staging, creative response, reference to sources, and so on (Weigle, 2002). The primary trait rubric is usually used in assessing the test-takers' basic writing skills. The holistic rating scale has been widely used in various writing assessment programs and international tests over the past 25 years. It serves test-takers with a single unified score that summarizes the scoring criteria. The goal of this scale is to evaluate a writer's total proficiency through the quality of a given writing sample (Hyland, 2003). Finally, the analytic rating scale evaluates a piece of writing based on the microscopic features or linguistic criteria such as vocabulary, grammar, content, organization, cohesion, or mechanics of writing.

In this study, aligned to several other studies (Attali, 2016; Hyland, 2003; James, 2006; Shi et al., 2020; Zanders & Wilson, 2019), we adopted the holistic rating scale to assess independent and integrated writing task outcomes. According to Harsch and Martin (2013), one of the major pros of holistic rating scales is that they concentrate on the strong points of a written product rather than its flaws and weaknesses. Yet, the single rounded scores that holistic rating scales compose eradicate the chances of L2 teachers or raters to discriminate certain lower-level skills of writing such as rhetorical features, choice of words, or mechanics of writing. Neither do they offer substantial diagnostic information on L2 learners' task outcomes. Overall, using holistic rating scales is more time-saving and manageable than primary or analytic rating scales to most L2 teachers and raters.

Process of Rating Writing Tasks

As a critical step in the assessment process, rating writing connects the test-takers' writing performance to the descriptors in the rating scale. In other words, in the rating process, the attributes of a written product are converted into a rating that measures the extent to which the scale descriptors have been realized. Various factors can determine the reliability of a rating, including the raters' linguistic background, professional background, cognitive processes, gender, and rating experience. Rating experience is one of the most important *rater effects* which directly impact rating writing tasks (Davis, 2016; Duijm et al., 2018; Lim, 2011). Furthermore, rater training can also impact the process of rating writing. In training sessions, instructions on various rating scales are usually provided so that raters can perform the rating process systematically and consistently. A typical rating training session can be handled face-to-face or online through workshops or webinars (Attali, 2016). In rating training sessions, novice raters review the writing prompts, scoring rubrics, rating scales, and the benchmark written responses, and consult over controversial issues with more experienced raters. Their training is evaluated by rating sample responses and receiving feedback on their assigned scores from experienced raters. Finally, prospective L2 raters should pass a certification test to receive authorization to rate writing tasks. The process of rating writing tasks may also be affected by other factors such as the type of task or the scoring method. Recently, Khodi (2021) in a G-theory analysis of rater, task, and scoring method examined the affectability of writing assessment scores. Using various raters, tasks, and scoring methods, he found that to reach maximum generalizability, students should take two writing tasks and their performance should be evaluated by at least four raters using at least two scoring methods. In other words, a single rating of a single performance by a single rater cannot be trusted because of the subjectivity involved in the process of rating writing tasks.

The L2 research, however, has documented little evidence on the usefulness of rating training programs and the certification procedures or the potential impact of rating experience to determine the cognitive processes raters are involved in while rating writing tasks. Some researchers supported the positive impact of the rating training on lowering the rater subjectivity in terms of severity or leniency and enhancing their consistency in scoring (Elder et al., 2007; Fahim & Bijani, 2011; Weigle, 1998). On the other hand, several studies speculated the constructive role of training in eliminating rater variability by evidence of the recorded variance in experienced raters' assigned scores to a certain written performance (Eckes, 2012; Long & Pang, 2015). More importantly, there is a scarcity of research on L2 raters' cognitive processes they are involved in while rating different writing tasks (Nikmard & Tavassoli, in press). Barkaoui (2010a), for instance, examined the role of the rating scale and rating experience, and the variability they would cause in the rating process of an L2 essay. The verbal protocol method of introspection was carried out to investigate the roles of the rating experience, rating scales, and their interactions on raters' decision-making processes. He found that the type of rating scale had larger effects than the rating experience on the raters' rating processes. In another study, Barkaoui (2010b) cross-examined experienced and novice raters in their holistic and analytic scoring performance. The results showed that both groups prioritized the communicative quality of the writings. Yet, experienced raters were more severe to the linguistic accuracy than novice raters who were more critical to the argumentative voice of the writers.

To void the gap in the L2 literature on rating writing tasks, therefore, this study adopted a cognitive approach to the study of rater variability and aimed to analyze the differences between experienced and novice L2 raters in terms of the cognitive processes they incorporate into rating integrated and independent writing tasks. In this regard, the

TOEFL-iBT scoring rubric was used by both experienced and novice raters to rate integrated and independent writing tasks. Even though both experienced and novice raters in this study were familiar with rating mock TOEFL-iBT writing tasks, to ensure consistency in their rating, they attended a rating training session to get more information about the process of rating writing tasks in general and rating TOEFL-iBT integrated and independent writing tasks in particular. More details are provided in the procedure section. Accordingly, to serve the objectives of this study, two research questions were raised: (1) What difference does the type of writing task (integrated vs. independent) make on the rating performance of experienced and novice L2 raters? (2) What difference does the rating experience (experienced vs. novice) make on the L2 raters' rating of integrated and independent writing tasks?

METHODS

Participants

Since the focus of this study was on L2 raters' cognitive processes in rating writing tasks, the participants were 27 Iranian raters who were L2 speakers of English. They were selected through criterion sampling where only those who meet the researchers' predetermined criteria are selected (Dörnyei, 2007). This sampling was used since being an L2 rater of writing tasks was a prerequisite for the completion of this study. The researchers invited the participants who met this criterion from different language institutes to take part in this study. The selected participants were 13 experienced raters (six females and seven males) and 14 novice raters (10 females and four males) whose educational background was Master or Ph.D. in teaching English as a foreign language (TEFL), English literature, or English translation. All the raters agreed willingly to participate in this study. Initially, 30 raters (15 experienced and 15 novices) had agreed to participate in the study, however, when the study began, three raters (2 experienced and 1 novice) withdrew from the study. To check the suitability of the sample size, a prior power analysis was conducted (Hoenig & Heisey, 2012). Accordingly, the sample size of 15 in this study was acceptable to retain the 80% power at p = .05.

The trait of *rating experience* was operationally defined as having over five years of teaching EFL and rating experience for the 13 experienced raters. On the other hand, the 14 novice raters were those who had less than three years of teaching EFL and rating experience.

There was also a randomly chosen Iranian EFL learner who agreed willingly to participate in this study. She completed one integrated and one independent writing task from a mock TOEFL-iBT test to be scored by the 27 raters. The informant was a 25-year-old female undergraduate student who had been studying English for seven years in a language institute at the time of this research. The informant's mean score (M) on the integrated writing task was 3.55 (M of experienced raters = 3.46; M of novice raters = 3.64), and her mean score (M) on the independent writing task was 3.14 (M of experienced raters = 3; M of novice raters = 3.28). Overall, the informant's writing mean score from all the raters' scores was 3.34. When converted based on TOEFL-iBT score conversion tables (Gallagher, 2005), the informant's writing score changed to 22. The rationale for selecting only one informant was to ensure the rater participants would provide rich and detailed introspection while producing verbal protocols on their rating performance. However, the researchers acknowledge that having only one sample for each integrated and independent writing task would not be representative enough and would jeopardize the generalizability of the findings. Nevertheless, the EFL learner was chosen randomly to alleviate this problem as much as possible.

Instruments

Integrated and Independent Writing Tasks

The informant was asked to write one integrated and one independent writing essay prompted in a mock TOEFL-iBT test taken from Gallagher (2005). Prompt 1 was an integrated task that required the informant to read a passage, listen to a lecture about the earthworms and other soil dwellers, and describe *the problems caused by earthworms in the forest ecosystems* by explaining how these problems contradicted the information in the reading. The allotted time was 20 minutes for drafting an essay of around 150–225 words. Prompt 2 was an independent writing task that required the informant to write an expository essay on *the importance of what we learn inside the school and what we learn outside the school*, based on her knowledge and experience. The allotted time was 30 minutes for drafting an argumentation with a minimum of 300 words.

TOEFL-iBT Scoring Rubric

The TOEFL-iBT writing rubric, which was used in this study, consists of four components of language use (i.e., how well the examinee can use grammar and vocabulary), organization (i.e., how well the examinee can put the sentences into a logical order), clarity (i.e., how clear, concise, and ready to be read the examinee's writing is), and development (i.e., how coherent the examinee's essay is) on a 6-band scale (ranging from 0 to 5) (https://www.ets.org/s/toefl/pdf/toefl_writing_rubrics.pdf).

Introspective Verbal Protocol

In this study, the verbal (think-aloud) protocol was used as the method of data collection. As a methodological tool, the verbal protocol is a model of information processing based

on the verbalization of inner speech. Introduced by Ericsson and Simon (1993), the verbal protocol is a common technique to ask individuals to vocalize introspectively what is going through their minds as they are solving a problem or performing a task. Verbal reporting allows researchers to explore how individuals can be different in their approach to a certain problem (Krahmer & Ummelen, 2004). This technique was used since it is one of the most common ways of exploring the participants' mental or cognitive processes when they perform a certain task (Dörnyei, 2007).

Procedure

After the sample of 27 experienced and novice Iranian raters were selected, the purpose and the procedure of the study were explained to them. Then, they attended a two-session training course on rating writing tasks tutored by an experienced rater who had 14 years of experience in rating mock TOEFL-iBT writing tests. In the first 90-minute session, an introduction was made to writing tasks, the rating process, the TOEFL-iBT writing rubric and its components, and the procedure of the verbal protocol. In the second 90-minute session, the participants practiced rating four independent and four integrated writing tasks which were selected from TOEFL-iBT writing sample responses. The participants justified their assigned scores to the tasks in a post-rating discussion which was followed by comparing their scores to the designated scores by the TOEFL-iBT examiners.

Shortly after the rating tutorial, the informant completed two writing tasks of a mock TOEFL-iBT test which lasted for 50 minutes. Her task outcomes were distributed to the experienced and novice raters. They were required to use the 6-point TOEFL-iBT rating scale by assigning a holistic score to each writing task while they were introspectively producing verbal protocols on their rating process. The verbal protocols were recorded, transcribed, and inserted into QSR NVivo version 10. The recorded verbal protocols while rating the independent and integrated tasks were then subjected to content analysis. The process of content analysis was carried out by the researchers collaboratively to reach a full consensus.

Coding System

The contents of the raters' verbal protocols on rating the independent and integrated writing tasks were pooled and encoded to extract the most frequent themes and subthemes representing the criteria in TOEFL-iBT writing rating rubrics. The researchers collaboratively developed a coding system with six major themes, including *Content, Formal requirement, General linguistic range, Language use, Mechanics of writing,* and *Organization*, following TOEFL-iBT writing rating rubrics. Each of these major themes also consisted of several subthemes for each task. The subthemes were basically extracted from the raters' verbal protocols while rating each task. Table 1 presents the six major themes along with their subthemes and sample examples from the raters' verbal protocols. As it can be seen in Table 1, many of the subthemes of the integrated and independent writing tasks were similar. However, there were some differences in the subthemes of the two writing tasks which are notified in Table 1.

RESULTS

Proportional Distribution of Themes/ Subthemes in the Writing Tasks

Tables 2 and 3 represent the encoded themes, the respective subthemes, and their proportional distribution for the experienced and novice raters on the integrated and independent writing tasks, respectively. Illustrated in Table 2, on rating the integrated writing task, experienced raters made more references to the scoring rubric than novice raters (165 to 115, respectively). The experienced and novice raters' focus was mutually on the theme of *Language use: Structure* ($f_{experienced} = 40$, $f_{novice} = 20$), before their attention was shifted to the theme of *Content: Making connections between the passage and the lecture* ($f_{experienced} = 17$, $f_{novice} = 11$) and *Content: Selecting the important information from the lecture* ($f_{experienced} = 13$, $f_{novice} = 14$). As a point of departure, novice raters paid more attention to the subthemes of *General linguistic range: Accuracy, Clearness, Preciseness* (f = 17) than experienced raters who focused more intensively on the themes of *Mechanics of writing* (f = 7) and *Organization*, with special attention to its subtheme of *Using a concluding paragraph* (f = 10).

As Table 3 displays, on rating the independent writing task, both experienced and novice raters made more references to the rubric. Moreover, experienced raters had a higher record than novice raters (208 to 156, respectively). The experienced and novice raters focused mostly on the theme of *Language use: Structure* ($f_{experienced} = 45$, $f_{novice} = 28$) and *Language use: Vocabulary* ($f_{experienced} = 26$, $f_{novice} = 15$). They also showed rather similar interests in the theme of *Organization* ($f_{experienced} = 72$, $f_{novice} = 45$). Further, the theme of *General linguistic range: Accuracy* ($f_{experienced} = 0$, $f_{novice} = 2$), *Clearness* ($f_{experienced} = 4$, $f_{novice} = 5$), and *Preciseness* ($f_{experienced} = 0$, $f_{novice} = 1$) was the least noticed theme by both experienced and novice raters. Similar to rating the integrated writing task, experienced raters showed more interest than novice raters to *Mechanics of writing* ($f_{experienced} = 11$, $f_{novice} = 1$).

Analysis of Verbal Protocols on Rating the Writing Tasks

The total records of themes extracted from the verbal protocols on rating the integrated writing task were 280, of which 165 records were made by experienced raters and 115 by novice raters. Table 4 displays the proportional theme dis-

Table 1

Themes, Subthemes, and Examples from the Raters' Verbal Protocols

Theme	Subtheme	Example
Content	Addressing all aspects of the topic	In terms of task achievement, I can say that the examinee has done a good job.
	Conveying the message	The writer was successful to convey the message.
	Relevance to the prompt	The writing is not directly dealing with the question raised in the topic.
	Comprehending the passage and the lecture*	The comprehension regarding the listening or the lecture was quite well.
	Making connections between the passage and the lecture*	There isn't a clear connection between the points she made and the points made in the passage and the lecture.
	Expressing the main idea*	She was successful in expressing the main ideas.
	Selecting the important information from the lecture*	Some important parts from the lecture or the reading passage have been selected.
	Convincing the reader**	The reasons are not convincing or do not persuade the reader.
	Using exemplification**	Examples are not developed well.
	Using explanation**	Not sufficient explanations or details are provided.
Formal requirement	Number of paragraphs	She wrote just two paragraphs.
	Number of words	The number of words is really few here.
General linguistic range	Accuracy	There is some inaccuracy.
	Clearness	Some sentences are vague.
	Preciseness	Everything is precise.
Language use	Structure	Grammatical errors are noticeably present.
	Vocabulary	She had a good command of vocabulary.
Mechanics of writing	Punctuation	There is a lack of punctuation.
	Spelling	There is no important misspelling.
	Capitalization*	There are problems with capital letters.
Organization	Logical order of ideas	The writer should have first mentioned the problematic areas.
	Using a topic sentence	There is the absence of a well-developed thesis statement.
	Using supporting sentences	There is a lack of supporting ideas.
	Coherence	No proper connection is seen between the sentences.
	Good organization	The writer is clearly not familiar with the way to organize a piece of writing.
	Using an introductory paragraph	The introduction is missing.
	Using body paragraphs	Everything is right about the body paragraphs.
	Using a concluding paragraph	The concluding part could be more academically written.
	Development of ideas**	The development of ideas is good.
	Development of paragraphs**	There is limited development of the paragraphs.

Note. * *Specific to the integrated writing task*

** *Specific to the independent writing task*

Table 2

Proportional Distribution of Themes/Subthemes in Rating the Integrated Writing Task (f=frequency)

Theme	Subtheme	Experienced Raters' f	Novice Raters' f
Content	Addressing all aspects of the topic	2	0
	Conveying the message	5	8
	Relevance to the prompt	3	6
	Comprehending the passage and the lecture	2	0
	Making connections between the passage and the lecture	17	11
	Expressing the main idea	2	3
	Selecting the important information from the lecture	13	14
Formal requirement	Number of paragraphs	4	2
	Number of words	6	4
General linguistic range	Accuracy	2	7
	Clearness	8	7
	Preciseness	1	3
Language use	Structure	40	20
	Vocabulary	10	6
Mechanics of writing	Punctuation	1	1
	Spelling	5	0
	Capitalization	1	0
Organization	Logical order of ideas	5	2
	Using a topic sentence	5	1
	Using supporting sentences	2	1
	Coherence	8	10
	Good organization	5	5
	Using an introductory paragraph	7	0
	Using body paragraphs	1	0
	Using a concluding paragraph	10	4
Total		**165**	**115**

tribution for the experienced and novice raters in rating the integrated writing task along with the related chi-square values comparing the frequencies of each theme and the total. The level of significance was set at α = .05.

Displayed in Table 4, in the theme of *Content*, there was a small difference between the records of the two rater groups with insignificant chi-square measure (χ^2 = .04, p = .82 > .05). The themes of *Formal requirement* (χ^2 = 1.00, p = .31 > .05) and *General linguistic range* (χ^2 = 1.28, p = .25 > .05) likewise were recorded with small and insignificant differences by experienced and novice raters. On the other hand, experienced and novice raters had considerable differences in recording the themes of *Language use* (χ^2 = 7.57, p = .00 < .05), *Mechanics of writing* (χ^2 = 4.5, p = .03 < .05) and *Organization* (χ^2 = 6.06, p = .01 < .05), with experienced raters having almost twice more records than novice raters. Further, there was a significant difference between experienced and novice raters' records regarding the total themes they mentioned when rating the integrated writing task (χ^2 = 8.93, p = .00 < .05).

The other analysis was carried out on the content of verbal protocols produced by experienced and novice raters while rating the independent writing task. Here, the accounts of themes were 364, of which 208 belonged to experienced raters and 156 to novice raters. In Table 5, the proportional distribution of the themes produced by experienced and novice raters for the independent task was compared by running another set of chi-square tests.

Table 3

Proportional Distribution of Themes/Subthemes in Rating the Independent Writing Task (f=frequency)

Theme	Subtheme	Experienced Raters' f	Novice Raters' f
Content	Addressing all aspects of the topic and the task	10	12
	Conveying the message	1	4
	Relevance to the prompt	1	1
	Convincing the reader	1	2
	Using exemplification	11	12
	Using explanation	12	12
Formal requirement	Number of paragraphs	5	3
	Number of words	9	14
General linguistic range	Accuracy	0	2
	Clearness	4	5
	Preciseness	0	1
Language use	Structure	45	28
	Vocabulary	26	15
Mechanics of writing	Punctuation	7	1
	Spelling	4	0
Organization	Logical order of ideas	1	2
	Using a topic sentence	7	3
	Using supporting sentences	5	1
	Coherence	15	14
	Good Organization	11	10
	Using an introductory paragraph	5	1
	Using body paragraphs	2	0
	Using a concluding paragraph	9	3
	Development of ideas	10	10
	Development of paragraphs	7	0
Total		**208**	**156**

In Table 5, a similar pattern of distribution can be seen between the records of themes extracted from experienced and novice raters' verbal protocols. Accordingly, small and statistically insignificant differences were observed between experienced and novice raters on the themes of *Content* (χ^2 = .62, p = .43 > .05), *Formal requirement* (χ^2 = .29, p = .59 > .05), and *General linguistic range* (χ^2 = 1.33, p = .24 > .05). However, experienced raters had a meaningful difference in their much higher records of references than novice raters to the theme of *Language use* (χ^2 = 6.87, p = .00 < .05), *Mechanics of writing* (χ^2 = 8.33, p = .00 < .05) and *Organization* (χ^2 = 6.75, p = .00 < .05). Once again, there was also a significant difference between the total records of themes experienced and novice raters provided when rating the independent writing task (χ^2 = 7.43, p = .00 < .05).

Next, to check whether rating experience is associated with the type of writing task raters rate, a Correspondence Analysis was run. This is a multivariate technique to discover the relationships among categorical variables in graphical form (Zabihi et al., 2019). After identifying a link between the levels of the two categorical variables (rating experience and writing task type), a Correspondence Analysis was run by determining 2 dimensions corresponding to the two variables. Figure 1 shows the result of this analysis. Dimension 1 refers to the rating experience (experienced vs. novice) and Dimension 2 refers to the writing task type (integrated vs. independent). As it can be seen in Figure 1, there is a clear distinction between the two groups of raters (novice vs. experienced). This is a reconfirmation of the results of Tables 4 and 5 which showed a significant difference between the

Table 4

Theme Distribution in Rating the Integrated Writing Task by Experienced and Novice Raters (f=frequency)

Theme	Experienced Raters' f	Novice Raters' f	χ^2	p
Content	44	42	.04	.82
Formal requirement	10	6	1.00	.31
General linguistic range	11	17	1.28	.25
Language use	50	26	7.57	.00*
Mechanics of writing	7	1	4.5	.03*
Organization	43	23	6.06	.01*
Total	**165**	**115**	**8.93**	**.00***

Table 5

Theme Distribution in Rating the Independent Writing Task by Experienced and Novice Raters (f=frequency)

Theme	Experienced Raters' f	Novice Raters' f	χ^2	p
Content	36	43	.62	.43
Formal requirement	14	17	.29	.59
General linguistic range	4	8	1.33	.24
Language use	71	43	6.87	.00*
Mechanics of writing	11	1	8.33	.00*
Organization	72	44	6.75	.00*
Total	**208**	**156**	**7.43**	**.00***

two rater groups' rating of both writing tasks. However, rating both integrated and independent writing tasks is associated with rating experience. In other words, both novice and experienced raters rated either of the two writing tasks similarly.

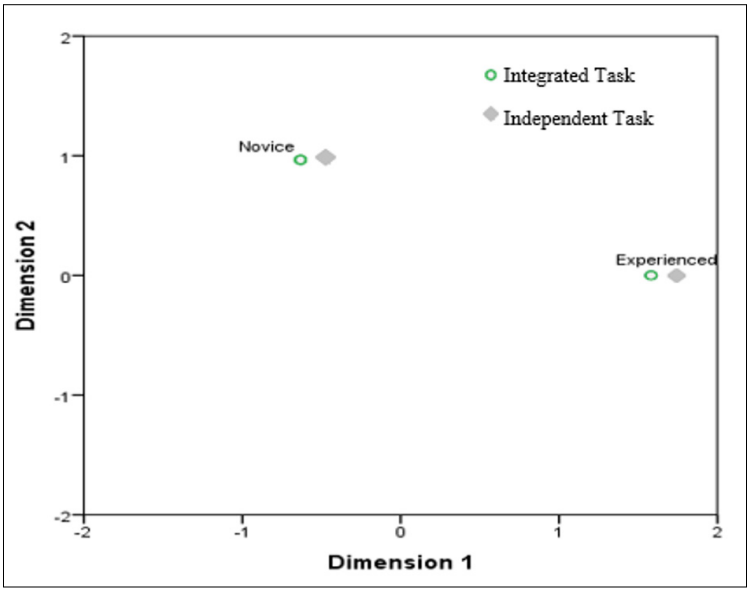
DISCUSSION

The purpose of this research was to explore the potential interplay between the rating experience and the type of writing task to determine the nature of L2 raters' cognitive processes involved in rating integrated and independent writing tasks. The results of the first research question in this study showed that the type of writing task (integrated vs. independent) was a determining factor in the number of references experienced and novice raters made to the TOEFL-iBT writing rating rubric. In other words, both experienced and novice raters produced higher records of references to the TOEFL-iBT rating rubric on rating the independent writing task than the integrated writing task, where experienced raters' records outnumbered novice raters' records. Moreover, the results of the second research question indicated that the rating experience was another determining factor in the proportion of references L2 raters made on both types of tasks. In other words, while experienced and novice raters incorporated similar cognitive processes (represented by the six major extracted themes) in rating the integrated and independent writing tasks, they had meaningful differences by the larger proportion of references experienced raters made to the themes of *Language use, Mechanics of writing,* and *Organization*, as well as the total themes on both tasks.

The first research question is discussed in terms of the heavy cognitive load independent writing tasks might cause which makes them more challenging for L2 learners to write about and subsequently for L2 raters to rate. This cognitive load to construct the textual meaning has been labeled as task representation by Wolfersberger (2007). In other words, when students face a writing task, they need to understand which skills, products, and processes the task requires and they should plan to prepare a written product that properly matches the task (Wolfersberger, 2007). Several studies suggested that task representation becomes much easier to fulfill when the L2 writer/learner has access to external resources as the writing task input that is the case in integrated tasks (Allen, 2004; Plakans, 2010; Ruiz-Funes, 2001; Wolfersberger, 2007), where the main concerns for the L2 writer/learner are how to employ resource texts in their writing and how to reiterate them appropriately (Plakans, 2010). Hence, it seems that integrated writing tasks become less challenging to L2 learners and raters. This was confirmed in this study as L2 raters provided less records in their ver-

Figure 1

Joint distribution of rating experience and writing task type



Dimension 1: Rating experience (experienced vs. novice);

Dimension 2: Writing task type (integrated vs. independent)

bal protocols while rating the integrated writing task which might mean that rating the integrated task requires fewer cognitive demands on raters as it is more content-controlled and less creative.

The findings on the first research question corroborated some previous studies (Allen, 2004; Wolfersberger, 2007) but partially contradicted several others (Ahmadi & Mansoordehghan, 2015; Michel et al., 2020; Plakans, 2010; Uludag et al., 2021). The results of the first research question did not match those of Ahmadi and Mansoordehghan (2015) since in contrast to this study, they found that task type (independent vs. integrated) did not have a significant effect on the students' writing performance. However, if test takers' cognitive processes rather than their writing performance are investigated while they complete independent and integrated tasks, differences may be found as it was the case regarding the raters' cognitive processes while they rated these two types of writing tasks in this study. Moreover, the results of this study were in contrast to Michel et al. (2020) and Uludag et al. (2021) who found that integrated writing tasks are more challenging for test takers and elicit more dynamic and varied behaviors and cognitive processes in test takers. This contradiction might be due to the nature of the participants in Michel et al.'s and Uludag et al.'s studies who were test takers versus the participants in this study who were raters. Most probably, raters and test takers go through different cognitive processes while dealing with writing tasks. Although writing integrated tasks may be more demanding for test takers since they have to integrate information from different sources, it seems that rating independent tasks requires more energy and mental processing in L2 raters. Also, dealing directly with the participants' cognitive processes through verbal protocols may be another important issue which resulted in differences between the findings of this study and other studies since verbal protocols chiefly explore mental processes, rather than speculating about them.

The second research question is discussed by the argument of the rater subjectivity and the potential interaction between rating experience, rater training, and rater severity/leniency. The term rater severity refers both to the general tendency of a rater to assign higher or lower ratings than the average raters, and to the observed differences among raters in terms of their interpretations of the rating rubrics (Lim, 2011). Rater severity is an integral component of rater biasedness which might be nurtured by rater experience or rater training (Eckes, 2011; Myford & Wolfe, 2003). However, as Eckes (2011) emphasized, there is a lack of research on factors affecting rater severity. Despite this lack of research, Khodi (2021) investigated the issue of rater experience and rater severity and their impact on writing scores and suggested that the test takers' writing performance should be rated by at least four raters using at least two scoring methods to avoid rater biasedness. Similarly, the findings of this study also recommend that since rater experience is an influential factor in the cognitive processes raters engage in when rating both integrated and independent writing tasks, asking raters with different levels of experience to rate writing tasks is necessary to have a better evaluation of the test takers' writing performance and to avoid rater severity and biased scoring. Moreover, paying attention to what cognitive processes experienced L2 raters focus on while rating

writing tasks and inform novice L2 raters about such processes in training sessions can be quite helpful. Yet, further studies are demanded on this venue of research.

Furthermore, although some research show that rating experience influences raters' scoring performance both in terms of leniency and focus (Duijm et al., 2018), some other research show that the type of rating rubric (analytic vs. holistic) (Barkaoui, 2010a), the depth of learning that happens in the process of training (Attali, 2016), and the text quality (Şahan & Razı (2020) are more determining factors than rating experience in the raters' unbiased rating and decision-making processes. In a nutshell, factors such as the rating rubric, rater training, rater knowledge, and text quality are as influential as if not more influential than rating experience in the scores raters assign to writing tasks. Therefore, following the results of different studies as well as this study, both rater experience and training should be regarded as important factors to consider when studying raters' scoring of writing tasks.

CONCLUSION

This study revealed that for L2 raters, their rating practice would be affected by the interplay of their rating experience and the type of writing task. Therefore, the findings of this study have several pedagogical implications. To reduce the rater variability and bias in the rating process, the most common solution is rater training, where L2 raters with various levels of rating experience are (re)introduced to the rating criteria followed by their immediate and delayed rating practice to safeguard the sustainability of the training. Further, since the standard rubrics most likely make the rating more reliable, raise clarity in rater judgment, and lessen rater subjectivity, L2 raters and teachers should receive the how-to instructions on using rubrics both as a grading and teaching device. Moreover, by employing verbal protocols or stimulated recalls as a pedagogical tool, L2 raters and teachers might raise in students the kind of self-awareness they need to engage in their writing process. Finally, making L2 learners familiar with instructions to rating rubrics can help them improve not only their self-directness but also their writing ability.

The findings of this study should be recognized in light of some limitations. One major limitation was the sample size. In this study, a single EFL learner's writing performance on integrated and independent writing tasks was rated by 27 raters in a one-shot comparative research. This research can be replicated by rating more writing samples from different EFL learners in an extended period of time to enhance the generalizability and sustainability of the findings. Another limitation of the study was not considering the text length in integrated and independent writing tasks. However, text length might be an influential factor in the number of records both experienced and novice raters provided. In future studies, this factor should also be investigated. Moreover, since various rater differences such as their educational background can infiltrate the findings of the study, their inclusion is highly recommended in future research. Also, the use of introspective verbal protocols has certain methodological limitations. It is a complex technique that may affect the raters' performance by causing distractions, stress, and low task representation, which eventually affect the transferring of results to natural rating contexts. Therefore, to remedy the shortcomings of using verbal protocols, it can be empowered with other techniques, such as interviews or stimulated recalls, which adopt a more emic approach to data collection by retrieving the raters' self-evaluation of their rating performance.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

K.Tavassoli: Conceptualization, Methodology, Supervision, Visualization, Writing- Original draft preparation, Writing-reviewing and editing.

L. Bashiri: Conceptualization, Data curation, Formal analysis, Investigation, Project administration, Software.

N. Pourdana: Conceptualization, Methodology, Visualization, Writing- Original draft preparation, Writing- reviewing and editing.

REFERENCES

Ahmadi, A., & Mansoordehghan, S. (2015). Task type and prompt effect on test performance: A focus on IELTS academic writing tasks. *Journal of Teaching Language Skills, 6*(3), 1-20. http://doi.org/10.22099/jtls.2015.2897.

Allen, S. (2004). Task representation of a Japanese L2 writing and its impact on the usage of source text information. *Journal of Asian Pacific Communication, 14*(1), 77-89. http://doi.org/10.1075/japc.14.1.06all.

Attali, Y. (2016). A comparison of newly-trained and experienced raters on a standardized writing assessment. *Language Testing, 33*(1), 99-115. https://doi.org/10.1177/0265532215582283.

Barkaoui, K. (2010a). Variability in ESL essay rating processes: The role of the rating scale and rater experience. *Language Assessment Quarterly, 7*(1), 54-74. https://doi.org/10.1080/15434300903464418.

Barkaoui, K. (2010b). Do ESL essay raters' evaluation criteria change with experience? A mixed-methods, cross-sectional study. *TESOL Quarterly, 44*(1), 31-57. http://doi.org/10.2307/27785069.

Beck, S. W., Llosa, L., Black, K., & Anderson, A. T. (2018). From assessing to teaching writing: What teachers prioritize. *Assessing Writing, 37*, 68-77. https://doi.org/10.1016/j.asw.2018.03.003.

Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*: Alexandria.

Brown, H. D., & Abeywickrama, P. (2018). *Language assessment: Principles and classroom practices* (3rd ed.). Pearson Education.

Davis, L. (2016). The influence of training and experience on rater performance in scoring spoken language. *Language Testing, 33*(1), 117-135. https://doi.org/10.1177/0265532215582282.

Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.

Duijm, K., Schoonen, R., & Hulstijn, J. H. (2018). Professional and non-professional raters' responsiveness to fluency and accuracy in L2 speech: An experimental approach. *Language Testing, 35*(4), 501-527. https://doi.org/10.1177/0265532217712553.

Eckes, T. (2011). *Introduction to many-facet Rasch measurement: Analyzing and evaluating rater-mediated assessments.* Peter Lang.

Eckes, T. (2012). Operational rater types in writing assessment: Linking rater cognition to rater behavior. *Language Assessment Quarterly, 9*(3), 270-292. https://doi.org/10.1080/15434303.2011.649381.

Elder, C., Barkhuizen, G., Knoch, U., & Von Randow, J. (2007). Evaluating rater responses to an online training program for L2 writing assessment. *Language Testing, 24*(1), 37-64. https://doi.org/10.1177/0265532207071511.

Ericsson, K. A., & Simon, H. (1993). *Protocol analysis: Verbal reports as data.* MIT Press.

Fahim, M., & Bijani, H. (2011). The effects of rater training on raters' severity and bias in second language writing assessment. *International Journal of Language Testing, 1*(1), 1-16.

Gallagher, N. (2005). *Delta's key to the next generation TOEFL test: Advanced skill practice for the IBT*. Delta Publishing Company.

Harsch, C., & Martin, G. (2013). Comparing holistic and analytic scoring methods: Issues of validity and reliability. *Assessment in Education: Principles, Policy & Practice, 20*(3), 281-307. https://doi.org/10.1080/0969594X.2012.742422.

Hoenig, J. M., & Heisey, D. M. (2012). The abuse of power: The pervasive fallacy of power calculations for data analysis. *The American Statistican, 55*(1), 19-24. https://doi.org/10.1198/000313001300339897.

Hyland, K. (2003). *Second language writing*: Cambridge University Press.

James, C. L. (2006). Validating a computerized scoring system for assessing writing and placing students in composition courses. *Assessing Writing, 11*(3), 167-178. https://doi.org/10.1016/j.asw.2007.01.002.

Khodi, A. (2021). The affectability of writing assessment scores: A G-theory analysis of rater, task, and scoring method contribution. *Language Testing in Asia*, *11*(30), 1-27. https://doi.org/10.1186/s40468-021-00134-5.

Klimova, B. F. (2013). Developing thinking skills in the course of academic writing. *Procedia-Social and Behavioral Sciences, 93*, 508-511. https://doi.org/10.1016/j.sbspro.2013.09.229.

Krahmer, E., & Ummelen, N. (2004). Thinking about thinking aloud: A comparison of two verbal protocols for usability testing. *IEEE Transactions on Professional Communication, 47*(2), 105-117. https://doi.org/10.1109/TPC.2004.828205.

Leung, C., & Lewkowicz, J. (2006). Expanding horizons and unresolved conundrums: Language testing and assessment. *TESOL Quarterly, 40*(1), 211-234. https://doi.org/10.2307/40264517.

Lim, G. S. (2011). The development and maintenance of rating quality in performance writing assessment: A longitudinal study of new and experienced raters. *Language Testing, 28*(4), 543-560. https://doi.org/10.1177/0265532211406422.

Long, H., & Pang, W. (2015). Rater effects in creativity assessment: A mixed methods investigation. *Thinking Skills and Creativity, 15*, 13-25. https://doi.org/10.1016/j.tsc.2014.10.004.

Michel, M., Révész, A., Lu, X., Kourtali, N. E., Lee, M., & Borges, L. (2020). Investigating L2 writing processes across independent and integrated tasks: A mixed-methods study. *Second Language Research, 36*(3), 307-334. https://doi.org/10.1177/0267658320915501.

Myford, C., & Wolfe, E. W. (2003). Detecting and measuring rater effects using many-facet Rasch measurement. *Journal of Applied Measurement, 5*(2), 189-223.

Nikmad, F., & Tavassoli, K. (in press). The impact of test length on raters' mental processes while scoring test-takers' writing performance. *Journal of Language Horizons*. https://doi.org/10.22051/LGHOR.2022.37340.1545

Plakans, L. (2010). Independent vs. integrated writing tasks: A comparison of task representation. *TESOL Quarterly, 44*(1), 185-195. https://doi.org/10.5054/TQ.2010.215251.

Pourdana, N., Nour, P., & Yousefi, F. (2021). Investigating metalinguistic written corrective feedback focused on EFL learners' discourse markers accuracy in mobile-mediated context. *Asian-Pacific Journal of Second and Foreign Language Education, 6*(7). https://doi.org/10.1186/s40862-021-00111-8.

Ruiz-Funes, M. (2001). Task representation in foreign language reading-to-write. *Foreign Language Annals, 34*(3), 226-234. https://doi.org/10.1111/j.1944-9720.2001.tb02404.x.

Şahan, Ö., & Razı, S. (2020). Do experience and text quality matter for raters' decision-making behaviors? *Language Testing, 37*(3), 311-332. https://doi.org/10.1177/0265532219900228.

Shi, B., Huang, L., & Lu, X. (2020). Effect of prompt type on test-takers' writing performance and writing strategy use in the continuation task. *Language Testing, 37*(3), 361-388. https://doi.org/10.1177/0265532220911626.

Suskie, L. (2008). Using assessment results to inform teaching practice and promote lasting learning. In G. Joughin (Ed.) *Assessment, learning and judgment in higher education* (pp. 1-20). Springer Science & Business Media. https://doi.org/10.1007/978-1-4020-8905-3_8.

Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students: Essential tasks and skills* (vol. 1). University of Michigan Press Ann Arbor, MI. https://doi.org/10.3998/mpub.2173936.

Uludag, P., McDonough, K., & Payant, C. (2021). Does prewriting planning positively impact English L2 students' integrated writing performance? *Canadian Journal of Applied Linguistics, 24*(3), 166-185. https://doi.org/10.37213/cjal.2021.31313.

Van Moere, A. (2014). Raters and ratings. In A. Kunnan (Ed.), *The companion to language assessment, Vol III: Evaluation, methodology, and interdisciplinary themes* (pp. 1358-1374). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118411360.wbcla106.

Weigle, S. C. (1998). Using FACETS to model rater training effects. *Language Testing, 15*(2), 263-287. https://doi.org/10.1177/026553229801500205.

Weigle, S. C. (2002). *Assessing writing*. Cambridge University Press.

Wolfersberger, M. A. (2007). *Second language writing from sources: An ethnographic study of an argument essay task* [Unpublished doctoral dissertation]. University of Auckland.

Zabihi, R., Mehrani-Rad, M., & Khodi, A. (2019). Assessment of authorial voice strength in L2 argumentative written task performances: Contributions of voice components to text quality. *Journal of Writing Research, 11*(2), 331-352. https://doi.org/10.17239/jowr-2019.11.02.04.

Zanders, C. J., & Wilson, E. (2019). Holistic, local, and process-oriented: What makes the University Utah's Writing Placement Exam work. *Assessing Writing, 41*, 84-87. https://doi.org/10.1016/j.asw.2019.06.003.

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EFL University Students' Self-Regulated Writing Strategies: The Role of Individual Differences

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ABSTRACT

Background. Self-regulated learning strategies play an essential role in the success of students' learning of writing. The use of these strategies might be influenced by the student's individual differences.

Purpose. This study was conducted to describe EFL university students' preferences for self-regulated writing strategies. It also examined the different use of self-regulated writing strategies by considering gender, interest in English writing, and writing achievement. Further, it measured the predictive effects of self-regulated writing strategies on the students' writing achievement.

Method. This research applied a quantitative approach and involved 58 English students. The students were required to respond to a self-report survey using the Self-Regulated Learning Strategy Questionnaire. The students' writing achievement was measured based on their scores in writing an argumentative essay. The data were then analyzed using descriptive statistics, an independent sample t-test, One Way Anova, and multiple regression.

Results. The results uncovered that the overall use of self-regulated writing strategies was at a high level with the social environment strategy dimension on the top rank and motive on the bottom. Further analysis showed that there is no significant difference in the use of self-regulated writing strategies based on gender, interest in English writing, and writing achievement. Meanwhile, multiple regression analysis indicated the predictive effect of self-regulated writing strategies on writing achievement. To this end, teachers need to encourage students to use self-regulated writing strategies more optimally to enhance their writing quality.

Conclusion. EFL students have invested high awareness of using self-regulated writing strategies. Along with this high awareness, students' individual differences such as gender, interest in English writing, and proficiency level might not strongly influence the use of SRW strategies. Though not strong, the use of self-regulated writing strategies contributes to the students' writing quality improvement.

KEYWORDS

frequency of use of self-regulated strategies in writing skills, different use of self-regulated writing strategies, predictive effect of self-regulated writing strategies on writing achievement

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INTRODUCTION

Research on the use of self-regulated writing (SRW) strategies, especially in EFL context, is demanded since writing is a complicated skill. EFL students generally deal with some difficulties in writing such as problems in content and organization, grammar, mechanics, and writing style. Some empirical evidence showed that SRW strategies are beneficial to promote students' writing quality (Forbes, 2019; Geres-Smith et al., 2017; Helsel & Greenberg, 2007; Kartika, 2015; Roderick, 2019; Rosário et al., 2019; Teng & Huang, 2019; Zimmerman & Bandura, 1994). SRW strategies fit the nature of writing as a process that consists of three stages (e.g., forethought, performance, and self-reflection) since SRW strategies involve similar phases such as self-planning, self-monitoring, and self-regulation (Hughes et al., 2019). The employment of SRW strategies, therefore, helps stu-

dents improve linguistic, cognitive, and regulation aspects which ameliorate the quality of writing (Cer, 2019). To this end, research on the use of SRW strategies provide teachers with insightful understanding which can be implemented to train their students with the appropriate SRW strategies to cope with the students' writing difficulties.

A few existing studies on SRW strategy issue focused on the intensity of use of SRW strategies. However, the previous findings are still inconclusive. Abadikhah et al. (2018), for example, reported that the frequency of the use of SRW strategies by Iranian students ranges from moderate to slightly high level. The next study conducted by Umamah and Cahyono (2020) revealed that Indonesian university students used SRW strategies at a high level of frequency. It was also reported that high achievers dominantly apply method, performance, and social environment dimensions of SRW strategies in the processes of writing. The limited number of studies and inconclusive findings imply the need to conduct further investigation on the intensity of use of SRW strategies.

Some SRW research highlighted the different use of SRW strategies based on specific individual differences. Most studies reported the difference based on proficiency levels. The previous studies agree that there is a significant difference in the use of SRW strategies by students with high and low levels of proficiency (Abadikhah et al., 2018; Bai & Guo, 2019; Hu & Gao, 2018). The previous investigation grouped the students into two: high and low achievers. Those who were at a moderate level seemed to be ignored. Whereas moderate achievers generally dominated normal classrooms (Yaduvanshi & Singh, 2019) as shown by a classroom normal curve indicating that 25% were high achievers, 25% were low achievers, and the rest 50% were moderate achievers. Therefore, investigating all groups of students is important since it will provide a more comprehensive insight into the strategies used by all students without exception. Meanwhile, other individual differences such as gender and interest in English writing have not sufficiently been studied. It is proven by very limited publications on these issues. In terms of gender, females outperformed males in the use of strategies in general (Valverde Zambrana, 2020), not specifically addressing SRW strategies. Concerning interest, so far no publication on the different use of SRW strategies based on this aspect was found. It indicates that interest was one of the individual differences still neglected in English language teaching and learning research (Tin, 2016), whereas interest is an important aspect to strive for students' learning goals because it affects how they do learning activities and how long they would do those activities (Lepper & Henderlong (2000) as cited in Sansone & Thoman, 2005).

Some previous studies concerned on the correlation between SRW strategy use and certain individual differences. Teng and Huang (2019) reported that age, gender, experience in learning English, the time investment for writing, topic familiarity, experience in doing an examination, school prestige, and interest in learning English were influential predictors of SRW strategies used by secondary school students in writing an essay. In addition, a growth mindset was found to have a significant correlation with school students' use of SRW strategies (Bai & Guo, 2019). The two existing studies were conducted in school level context; thus, it is essential to investigate similar topic in higher education level. Moreover, university students majoring at English have specific writing courses. Therefore, research on the predictive effect of SRW strategy use on writing achievement will give writing teachers insight into the role of SRW strategies in students' writing performance. To this end, the results of this study can be used as a consideration to integrate SRW strategies into writing instruction.

Based on the aforementioned review, a study on the deployment of SRW strategies at higher education levels by considering gender, interest in English writing, and writing achievement is still demanded. Additionally, investigating the predictive effect of SRW strategy use on writing achievement is essential since it can be used as a predictor and reference in providing an appropriate SRW intervention to help students attain the best writing performance possible. Therefore, this research comes up with three research questions.

(1) What is the profile use of SRW strategies employed by EFL university students?

(2) How do gender, interest in English writing, and writing achievement influence the reported use of SRW strategies?

(3) To what extent do SRW strategies predict EFL students' writing achievement?

The Notion of Self-Regulated Writing (SRW) Strategies

The idea of self-regulated learning (SRL) was proposed by Bandura in the 1980s based on the social cognitive theory covering personal aspects (e.g., cognition and emotions), behavioural aspects, and environmental aspects. In 1994, SRL strategies were introduced in the academic setting (Abadikhah et al., 2018) since regulating motivational, affective, and social aspects is prominent to attain an optimum learning result (Zimmerman & Bandura, 1994). In 1997, the notion of SRL was brought to a more specific scope of learning i.e. it was used as a learning strategy in the writing context. Zimmerman and Risemberg (1997) defined SRL strategies in writing as ideas, feelings, and actions personally initiated by writers to achieve literary goals such as improvement in writing skills and enhancement in the quality of their written text. Some researchers (Brunstein & Glaser, 2011; Reynolds & Perin, 2009) then used self-regulated writ-

ing (SRW) strategies instead of self-regulated learning (SRL) strategies in writing to simplify the term.

Further, Zimmerman (1994) proposed the classification of self-regulated writing (SRW) strategies comprising six dimensions: motive, method, time, physical environment, social environment, and performance. The motive dimension deals with the reasons to learn including setting goals, talking to self, and controlling emotion. The method dimension covers strategies to accomplish a writing task such as summarizing, taking notes, asking questions, practising, and making a visual representation. Time is about how learners manage their time in learning and performing writing tasks. The physical environment dimension describes how learners set their environment to support learning. The social environment dimension is when learners need to seek help from their surroundings. The performance dimension refers to how learners monitor and self-evaluate their learning and recognize self-consequences (as cited in Andrade & Bunker, 2009). The complete dimensions of SRW strategies lead students to be more autonomous. Accordingly, students with good self-regulation are better in their academic achievement (Zimmerman & Bandura, 1994) since they are aware of the qualities of their knowledge, beliefs, motivation, and cognition (Butler & Winne, 1995).

The Role of Self-Regulated Writing (SRW) Strategies in Writing

One of the causes of failure in the writing process is due to ineffective use of learning strategies (Graham et al., 2000). To date, SRW strategies are considered to bridge students with writing difficulties. Some studies confirmed the potential role of SRW strategies to promote the students' writing quality in preschool (Kim & Nor, 2019), at the primary level (Geres-Smith et al., 2017; Helsel & Greenberg, 2007), in secondary schools (Rosário et al., 2019; Teng & Huang, 2019; Zimmerman & Bandura, 1994), and at university level (Abadikhah et al., 2018; Kartika, 2015; L. S. Teng & Zhang, 2018; Umamah & Cahyono, 2020).

Kim and Nor (2019) unveiled that SRW strategies significantly affect preschool learners' self-efficacy and their writing performance. Strong predictors for self-efficacy were found in the use of self-monitoring and controlling, while planning and goal setting were predictors of early writing performance. Based on the survey, the students had a positive perception of the use of SRW strategies. They thought that their writing quality was improved due to the deployment of planning and goal-setting, self-monitoring, and self-evaluation. In addition, Geres-Smith et al. (2017) reported that SRW strategies positively influenced primary school students' writing quality, writing duration, and self-efficacy in composing persuasive text. Students' self-efficacy significantly changed greater after the intervention of self-regulated strategies development (SRSD) was conducted. Furthermore, it was found that SRW strategies and self-efficacy had a strong correlation though further investigation is still demanded. A similar finding was reported by Helsel and Greenberg (2007). They found that the employment of self-regulated strategy intervention helped struggling writers confront the complexities of different writing tasks.

Improvement in secondary students' quality of writing was reported by Rosário et al. (2019) after implementing SRSD and SRSD combined with story-tool interventions. They compared these interventions with the use of weekly journal activities. Teng and Huang (2019) revealed that SRW strategies (e.g., goal-oriented monitoring and evaluating) promoted the students' writing outcomes. In addition, students with higher regulatory skill levels obtained better writing achievement. Long before the SRW strategies gained prominent consideration, Zimmerman and Bandura (1994) unveiled a direct correlation between self-regulatory efficacy for writing beliefs and the students' perceived efficacy of writing course attainment. An indirect correlation was found between self-regulatory efficacy for writing beliefs and their final grades.

Kartika (2015) found that university students' writing scores improved after the implementation of the SRW strategy intervention. Conducting experimental research, Teng and Zhang (2019) reported a significant improvement after the students were trained in self-regulated strategy intervention. Compared with those who did not get involved in the intervention, the students in the experimental group were reported to be more active in applying the strategies. Using a self-report survey, Abadikhah et al. (2018) uncovered that the intensity of the use of SRW strategies ranged from moderate to slightly high level with strategies in the method dimension as the most frequently used by Iranian university students. In addition, fourth-year students were reported to have greater use of SRW strategies than third-year students, indicating that proficiency level affected the strategy use. Similarly, Umamah and Cahyono (2020) showed that Indonesian university students used SRW strategies at a high level of frequency. The social environment dimension was the most intensively used, while the motive dimension was the lowest. It was also revealed that high achievers dominantly applied the method, performance, and social environment dimensions of SRW strategies in the processes of writing (e.g. planning, execution, and evaluation). These dimensions also helped them deal with writing difficulties in terms of content and organization, grammar, mechanics, and writing style.

Overall, research on SRW strategies has grabbed prominent concern. The previous studies shared similar findings that SRW strategies could improve primary and secondary students' writing performance in composing different text types (e.g. narrative, persuasive, and argumentative). At the higher education level, two experimental studies (Kartika, 2015; Teng & Zhang, 2018) confirmed the positive effect of SRW strategy intervention on students' writing achievement.

In addition, students with different proficiency levels were reported to apply SRW strategies differently (Abadikhah et al., 2018). However, Abadikhah et al. (2018) compared fourth and third-year students in the use of SRW strategies, not addressing the students' specific writing achievement (e.g. high, moderate, and low achievers). Meanwhile, Umamah and Cahyono (2020) focused only on high achievers' strategies, ignoring moderate and low achievers. To this end, more comprehensive research investigating high, moderate, and low achievers is relevant to capture the SRW strategy used by all students with different writing achievements.

Self-Regulated Writing (SRW) Strategies and Individual Differences

Oxford (2017) pointed out that strategy preference was influenced by two factors: learners' multiple personalities and context. To date, the role of students' differences has been investigated by some researchers. Some of them investigated the different use of SRW strategies based on individual differences (Abadikhah et al., 2018; Bai & Guo, 2019; Hu & Gao, 2018; Teng & Huang, 2019), some others were concerned about the correlation between the SRW strategies and the student's individual differences (Bai & Guo, 2018, 2019), and another study dealt with the predictive effects of SRW strategies on writing achievement (Teng & Huang, 2019).

Abadikhah et al. (2018) reported that the use of SRW strategies by Iranian third-year and fourth-year students were different. Fourth-year students used SRW strategies (i.e. method and social environment) more intensively than did the third-year students. Furthermore, Hu and Gao (2018) unveiled differences in the self-regulated strategic writing used by high and low achievers in the ways of resource utilization, in the process of self-regulated writing, and in terms of why and how the two groups imitate and reorganize resources. Bai and Guo (2019) found that three motivational factors (e.g. growth mindset, self-efficacy, and interest in writing) influenced the use of SRW strategy very differently. Furthermore, the use of SRW strategies by primary students is significantly different based on gender, writing proficiency, and grade levels (Bai et al., 2020). A more comprehensive study was conducted by Teng and Huang (2018). They involved a total of 682 secondary students in China and eight moderating variables such as age, gender, experience in learning English, the time allotted to writing, topic familiarity, experience in doing an examination, school prestige, and interest in learning English. The findings proved that those eight individual differences significantly affected the employment of SRW strategies used by secondary school students in writing an argumentative essay. The findings of the previous studies give a broader insight into the fact that many factors might influence the preference for SRW strategies.

With regards to the correlation between SRW strategies and students' individual differences, Bai and Guo (2018), for example, revealed that SRW strategy use positively contributed to primary school students' self-efficacy in writing particularly their self-efficacy in the content aspect. It was also reported that planning and self-monitoring provided the strongest correlation with self-efficacy. In the following year, Bai and Guo (2019) reported that motivational factors (e.g. growth mindset, self-efficacy, and interest in writing) were associated with SRW strategies and the student's writing performance. However, interest had no significant correlation with high achievers' SRW use. They further explained that the growth mindset obtained the strongest and the most significant correlation with high, moderate, and low achievers' use of SRW strategies in writing narrative text.

A study on the predictive effects of SRW strategies on the students' writing achievement showed that SRW strategies could strongly predict the writing achievement of secondary school students. Goal-oriented monitoring strategies were reported to offer the strongest prediction. It means that the more the students employ SRW strategies, the more likely their writing achievement is good. As described above, the previous studies (Bai & Guo, 2018, 2019) did not consider gender as a moderating variable, and only one (Teng & Huang, 2019) reported that gender influenced the preference for SRW strategies. This means that further investigation is required to confirm the finding of Teng and Huang (2019). Moreover, female students were reported to have better writing test scores than their male counterparts (Ong, 2015; Troia et al., 2013) because female students tend to write more complex writing structures and more organized ideas (Waskita, 2008). The difference between males and females in their writing performance might be due to their employment of learning strategies. Therefore, knowing the role of gender in SRW strategy preference is essential since it can be used as a predictor and consideration in providing an appropriate SRW intervention based on gender.

Concerning interest, two studies (Bai & Guo, 2019; Teng & Huang, 2019) dealt with interest in two different contexts: interest in English writing and interest in learning English. Thus, it still leaves room to confirm the existing finding, especially of Bai and Guo (2019), who found an insignificant correlation between interest in English writing and high achievers' SRW strategy use. Moreover, Lepper and Henderlong (2000) proposed that interest played a pivotal role to lead students to strive for their learning goals due to its influence on individuals' choice to do learning activities and how long they will do those activities (as cited in Sansone & Thoman, 2005). A further study to investigate whether there is a significant difference in the use of SRW strategies by EFL students who enjoy and dislike English writing is required.

In terms of writing achievement, a study by Hu and Gao (2018) unveiled that high achievers used more SRW strategies. This finding is not significant enough to declare that

SRW strategy preference is influenced by the students' writing achievement. Moreover, this study compared only two groups: high and low achievers. At this point, the comparison among high, moderate, and low achievers will provide a more fruitful insight. Another important issue that is neglected is the predictive effects of SRW strategies on students' writing achievement. Most studies claimed that SRW strategies can improve the students' writing quality; however, they did not specify how much the contribution of these strategies. One of the limited studies concerning the contribution of SRW strategies on writing achievement revealed the strong predictive effects of SRW strategies on writing achievement. However, this study was carried out in a secondary school context. The question to arise is whether a similar finding will be obtained if the study is conducted in higher education.

METHOD

Research Design

This research applied a quantitative approach. A descriptive quantitative design was used to describe the SRW strategies used by EFL university students. Further, the ex-post-facto design was adopted to examine the difference in SRW strategy preference based on gender, interest in English writing, and writing achievement. Finally, a correlational design was used to see to what extent SRW strategies predict the students' writing achievement.

Participants

This study involved English education students from one of the private universities in Malang, Indonesia. The students were selected based on convenience sampling; only those who agreed to join the survey study were involved in this research. A total of 58 students agreed to participate in the survey. They were in the second year of their four-year undergraduate study and had taken an essay writing course in the previous semester. Of 58 students, 15 students were male whereas 43 were female students. A total of 45 students were interested in English writing, while 13 students said that they were not interested in English writing. Based on the student's writing scores, 30 students were categorized as high achievers, 21 students were categorized as moderate achievers, and 7 students were categorized as low achievers.

Instruments

This research drew on in-depth data from a 60-item Self-Regulated Learning Strategy Questionnaire (SRLSQ) with a 5-point Likert scale adopted by Abadikhah et al. (2018). It was required to gather profound information and generate ideas related to the strategies used in six dimensions (motive, method, time, performance, physical environment, and social environment). Detailed questionnaire distribution is in Table 1.

The questionnaire consisted of three parts. The first part of the questionnaire was the respondents' agreement page. The next part was about respondents' demographic information such as full name, gender, and interest in writing. The main part is the 60-item questionnaire with a 5-Likert scale (strongly disagree '1' to strongly agree '5'). To ensure that the respondents fully understood each item and to avoid bias, the questionnaire was translated into Indonesian. The translated questionnaire was validated by two experts in English language teaching. The validated questionnaire was then tried out on twenty students. The data from the try-out were then analyzed using SPSS 26 to check their validity and reliability. The result of the analysis showed that the questionnaire was valid and had high reliability as indicated by the overall Cronbach's alpha value of 0.946. More specifically, the reliability of the motive dimension was .784, the method dimension was .782, the time dimension was .794, the performance dimension was .937, the physical environment dimension was .861, and the social environment dimension was .620. This indicates that all of the Cronbach's alpha values were > .60 meaning that all of the items in each dimension were reliable and consistent. Therefore, the questionnaire was ready to use as the instrument of this study. The data obtained from the student's responses to

Table 1

Distribution of Self-Regulated Learning Strategy Questionnaire (SRLSQ)

Dimensions	Scales	Number of items
Motive	Goal-setting, self-efficacy	14
Method	Task strategies	10
Time	Time-management	8
Performance	Self-evaluation, self-consequence	17
Physical environment	Environmental structuring	5
Social environment	Help-seeking	6
Total		**60**

the questionnaire were interpreted and classified into three levels: high (means of 3.5-5.0), moderate (means of 2.5-3.4), and low (means of 1.0-2.4) based on Oxford and Burry-Stock (1995).

In addition, the student's interest was assessed based on their response to the questionnaire asking whether they like writing in English or not. They responded to this item by selecting the 'Like' or 'Dislike' button. Another data was obtained from the students' argumentative essay scores. Due to time constraints and the uncontrolled situation in the early phase of the Covid-19 Pandemic when the data was collected, it was impossible to conduct the writing test. Thus, we used the available writing scores from the writing teachers. The writing task was assessed only by the teacher of each class. Since the writing text was already handed out to the students, it was difficult to have inter or intra-rater reliability. This condition might influence the results of this study. Based on the scores, the students were grouped into three: high, moderate, and low achievers. The categorization of these groups is based on the assessment standard of the university where the data were collected. The categorization is presented in Table 2.

Table 2

Categorization of Students' Writing Achievement

Score	Grade	Category
80-100	A	High achievers
70-79	B	Moderate achievers
0-69	C	Low achievers

Procedure

Before the questionnaire distribution, a letter of consent was sent to the head of the English department to allow the students to get involved in this research as participants. The participants' agreement to join the survey was obtained by asking them to click the 'Agree' button on the first page of the questionnaire, which was distributed online. Next, they were assigned to respond to the demographic information part. To explore the use of self-regulated writing (SRW) strategies, the participants responded to the Self-Regulated Learning Strategy Questionnaire (SRLSQ). Due to the outbreak of Covid-19, the students had to learn fully from home, and it was something new in the Indonesian context. Some adjustments were in progress when the data of this research were collected. Thus, it was difficult for researchers to conduct both offline and online writing tests. Therefore, the student's writing achievement was obtained from the students' scores on argumentative essay assignments. The students were asked to write an argumentative essay with a free topic. Since the lecturers used the writing process approach, the students were assigned to finish the essay in two weeks. After some revisions, the writing texts were assessed by the lecturer using the writing scoring rubric consisting of content, organization, discourse, syntax, vocabulary, and mechanics (Brown, 2007). Based on the obtained scores, the students were grouped into three: high, moderate, and low achievers.

Analysis

The data from the questionnaire were analyzed based on the computation of descriptive statistics. The analysis of the mean score was done for each dimension (a total of six dimensions). Meanwhile, to see the difference in the preference of SRW strategies based on gender and interest in English writing, an analysis using an independent sample t-test was performed. One Way ANOVA was used to know the difference in strategy use based on the students' writing achievement. Finally, a multiple regression analysis was applied to see the extent to which SRW strategies might predict the students' writing achievement.

RESULTS

The Reported Use of Self-Regulated Writing (SRW) Strategies

Analysis using descriptive statistics (Table 3) describes the frequency of use of SRW strategies based on the student's responses to the survey. Based on the table, the overall use of self-regulated writing (SRW) strategies is at a high level (3.63) meaning that the students use the SRW strategies frequently. Accounting for 4.15, the social environment is reported to be the most frequently used dimension indicating that students tend to seek help from their surroundings to deal with writing problems. Meanwhile, the motive dimension is the least used strategy (3.03) showing that students rarely set learning goals and lack self-efficacy in writing.

Further, Table 4 presents the SRW strategy preference by high, moderate, and low achievers. The three groups of students apply social environment the most frequently (4.27, 4.02, and 4.05). It means that regardless of their achievement, students generally use help-seeking strategies when having difficulties in learning writing. Motive is the least used strategy dimension used by high achievers (3.09) and moderate achievers (2.88). This indicates that high and moderate achievers rarely set learning goals and lack self-efficacy. Meanwhile, low achievers deploy the performance dimension the least frequently (3.24) showing the minimum use of self-evaluation and self-consequence strategies.

The Difference in the Use of Self-Regulated Writing (SRW) Strategies

The results of the independent sample t-test (Table 5) indicate an insignificant difference in the deployment of SRW strategies based on gender and interest in English writing. A

Table 3

The Reported Use of Self-Regulated Writing (SRW) Strategies (Overall)

Strategy Dimensions	Mean	Std. Deviation	Rank
Social Environment	4.15	.65	1 (High)
Performance	3.87	.65	2 (High)
Method	3.81	.63	3 (High)
Physical Environment	3.63	1.00	4 (High)
Time	3.29	.60	5 (Moderate)
Motive	3.03	.64	6 (Moderate)
Overall	3.63		High

Table 4

The Reported Use of Self-Regulated Writing (SRW) Strategies Based on Writing Achievement

	Time		Motive		Method		Performance		Social Environment		Physical Environment		Overall
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
High Achievers	3.29	.54	3.09	.64	3.77	.62	3.86	.55	4.27	.57	3.88	.93	3.70
Moderate Achievers	3.22	.71	2.88	.68	3.88	.73	3.84	.80	4.02	.77	3.38	.96	3.52
Low Achievers	3.54	.45	3.24	.44	3.80	.41	4.04	.58	4.05	.52	3.40	1.30	3.51

significant difference (.008) is found only in the employment of the social environment based on the student's interest in English writing. Further analysis based on the means indicates that students who are not fond of writing in English apply strategies in the social environment dimension more frequently (4.67) than those who have a great interest in English writing (4.17). This result implies that students who have less interest in English writing are more likely to seek help when facing problems in learning writing, while those with high interest seem to be able to deal with the problems more independently.

Table 6 presents the result of One Way ANOVA, showing that there is no significant difference in the use of SRW strategies based on the students' writing achievement (e.g., high, moderate, and low achievers). In other words, regardless of their writing achievement, EFL students generally apply SRW strategies in all six dimensions. This result indicates that the use of SRW strategies is crucial for all students including those with high, moderate, and low achievement.

The Predictive Effects of Self-Regulated Writing (SRW) Strategies on Writing Achievement

Analysis using multiple regression was performed to see the extent to which self-regulated writing (SRW) strategies predict the students' writing achievement.

Table 7 displays the results of the multiple regression analysis to know the predictive effects of self-regulated writing (SRW) strategies on writing achievement. It is found that the variance is only 3.3% with p = .940 (p > .05), showing SRW strategies are very weak predictors of writing achievement. Overall, the predictive effects are insignificant. The strongest predictor is in the dimension of social environment (β = .267), followed by time (β = .060), motive (β = .004), and physical environment (β = .001). Meanwhile, method and performance dimensions are not identified as significant predictors of writing performance. This result shows that the use of SRW strategies can be used to predict students' writing achievement. The more frequently they use SRW strategies, the more likely their writing achievement is to improve. Considering the weak predictive effect, there might be other factors that influence the students' writing achievement.

DISCUSSION

Based on the statistical analysis, the overall use of self-regulated writing (SRW) strategies is at a high level. This finding confirms the earlier findings (Abadikhah et al., 2018; Umamah & Cahyono, 2020). These consistent findings are indicators that EFL students either consciously or subconsciously recognize the paramount importance of applying SRW strategies in learning writing skills. They use the SRW strategies in all six dimensions (e.g., time, motive, method, performance, social environment, and physical environ-

Table 5
The Different Use of SRW Strategies based on Gender and Interest

Categories	Gender			Interest		
	t	df	Sig. (2-tailed)	t	df	Sig.(2-tailed)
Time	.061	56	.952	.428	23	.673
Motive	.070	56	.944	-.421	23	.677
Methods	-.363	56	.718	-1.296	23	.208
Performance	.495	56	.622	-1.664	23	.110
Social Environment	-.477	56	.635	-2.889	23	.008
Physical Environment	.146	56	.884	-1.643	23	.114

Table 6
The Different Use of SRW Strategies Based on Writing Achievement

		Sum of Squares	df	Mean Square	F	Sig.
Time	Between Groups	.546	2	.273	.748	.478
	Within Groups	20.062	55	.365		
	Total	**20.608**	**57**			
Motive	Between Groups	.929	2	.465	1.147	.325
	Within Groups	22.284	55	.405		
	Total	**23.213**	**57**			
Methods	Between Groups	.157	2	.079	.188	.829
	Within Groups	23.024	55	.419		
	Total	**23.182**	**57**			
Performance	Between Groups	.225	2	.112	.258	.773
	Within Groups	23.957	55	.436		
	Total	**24.182**	**57**			
Social Environment	Between Groups	.924	2	.462	1.094	.342
	Within Groups	23.222	55	.422		
	Total	**24.146**	**57**			
Physical Environment	Between Groups	3.478	2	1.739	1.778	.178
	Within Groups	53.786	55	.978		
	Total	**57.264**	**57**			

Table 7
The Predictive Effects of Self-Regulated Writing Strategies on Writing Achievement

Predictor	*B*	*SE*	*β*
Time	1.561	5.121	.060
Motive	.107	4.033	.004
Method	-1.643	5.640	-.067
Performance	-5.230	5.620	-.218
Social Environment	6.404	5.573	.267
Physical Environment	.013	2.473	.001

ment). It is in agreement with Oxford (2003), who reported that the use of learning strategies was useful if the students linked their strategies to other relevant strategies to accomplish a certain task. In essence, explicit SRW strategy training is demanded to guide the students to use the strategies more appropriately and effectively so that the students are more self-regulated, strategic, and more resourceful in dealing with various writing tasks (Lam, 2014).

Furthermore, similar to the finding of the earlier research (Umamah & Cahyono, 2020), the social environment is reported to be the most dominant dimension. The frequent use of social environments shows that EFL students often seek help to accomplish their writing tasks. It is congruent with the finding of Yot-Domínguez and Marcelo (2017) that EFL university students generally required support from the social environment. The students might ask for help from peers and make use of available learning resources (offline and online resources). Moreover, a current research finding unveiled that online resources could facilitate self-regulated writing (Umamah & Cahyono, 2022). However, a different finding was presented by Papamitsiou and Economides (2019), who reported that help-seeking strategies negatively affected the students' learning autonomy. The possible reason for this is that relying too much on social support especially peers might hinder the students from being independent.

Meanwhile, the least use of strategies in the motive dimension is in agreement with the previous findings (Abadikhah et al., 2018; Umamah & Cahyono, 2020). These findings are evidence that the students are still not able to set goals. Goal setting is the forethought phase of the writing process (Hughes et al., 2019) that is necessary to direct the learning process to achieve personal learning goals (Kizilcec et al., 2017). Moreover, goal-oriented monitoring and evaluating (GME) strategies are considered to promote the students' writing outcomes (Teng & Huang, 2019). The minimum use of the motive dimension also reflects that the students, in general, do not have high self-efficacy that they have good ideas to write and can produce high-quality content (e.g., introduction, body, and conclusion). Self-efficacy is an essential factor in learning writing (Bruning et al., 2013) since it has a potential interaction with language gains (Yabukoshi, 2018). Previous studies reported that self-efficacy positively affected writing achievement (Cer, 2019; Rosário et al., 2019). Therefore, the students need to be encouraged to optimize the use of strategies in the motive dimension by implementing SRW strategy intervention.

Concerning writing achievement, all three student groups (e.g., high, moderate, and low achievers) employ strategies in the social environment dimension the most frequently. This finding indicates that all the students often seek help, showing their positive acceptance of collaborative learning to deal with the complexities of writing tasks (Kang & Lee, 2019; McDonough et al., 2018). The least use of strategy dimension by high and moderate achievers is motive, showing that they still cannot maximize their goal setting and self-efficacy in writing, which are not directly related to the content of the writing. Meanwhile, low achievers very rarely use strategies in the performance dimension. This depicts that low achievers fail to make use of the performance dimension dealing with self-evaluation including feedback. Feedback is a fundamental and determining factor in self-regulated learning (Butler & Winne, 1995). According to Kusumaningrum et al. (2019), peer feedback is important to improve students' writing quality. Further, Park (2018) reported that a combination of teacher and peer feedback was more helpful and meaningful. Thus, low achievers need to be encouraged to make use of feedback, especially from their peers.

Overall, this study unveils an insignificant difference in the use of SRW strategies based on gender, interest in English writing, and writing achievement. In other words, EFL students, generally, apply all six dimensions of SRW strategies regardless of gender, interest in English writing, and writing achievement. In terms of gender, this finding is a contrast to the reports that female secondary students and students with a greater interest in learning English deploy SRW strategies more frequently (Teng & Huang, 2019) and female primary students outperform their male counterparts (Bai et al., 2020). Different education levels might be the reason for the contrasting findings. Further, this current study found a significant difference in the use of strategies in the social environment dimension based on the students' interest in English writing. Students who do not like writing in English employ more strategies in the social environment dimension. This implies that the students who are not interested in English writing need more help to deal with their problems in essay writing. It is reasonable since most of the students (8 out of 13) who have no interest in writing, in this research context, have relatively poor writing achievement. It is supported by Bai and Guo (2019) reporting that interest is significantly correlated with moderate and low achievers, not with high achievers' SRW strategy use. In this sense, motivation is what low achievers need to have a greater interest in English writing which can lead them to better use SRW strategies, which in turn, improve their writing skills. This current study also unveils that there is no significant difference in the use of SRW strategies based on the students' writing achievement. Conversely, previous research findings reported that high achievers use strategies differently from low achievers (Bai & Guo, 2019; Hu & Gao, 2018). Moreover, it is reported that fourth-year students deployed SRW strategies more intensively than third-year students. This depicts that those with more knowledge and experience in writing tend to be more self-regulated. In general learning strategy research, it is also found a linear relationship between proficiency level and strategy use: the higher the students' proficiency level, the more strategies they employed (Alfian, 2018).

The finding that SRW strategies are very weak predictors of students' writing achievement is interesting since it is not consistent with the previous studies (Kim & Nor, 2019; Teng & Huang, 2019). The strongest predictor is found in the social environment dimension, reflecting that peers and learning resources play a pivotal role in promoting the students' writing achievement. This finding also reflects that some other factors might contribute more to the students' writing achievement (e.g., teachers, teaching method, test system, exposure to reading and writing practices, classroom size) (Fareed et al., 2016). Teachers, in this respect, serve as a key factor to provide the students with effective writing activities. The diverse finding of this research from the previous ones might be explained by the different subjects who participated in the research. The previous studies involved preschool children and secondary school students, while this current research invited university students to be the participants.

This study has some limitations which prevent it from generalizing. First, the writing score was obtained from the student's previous essay writing assignment and was assessed by the teacher only. The next limitation lies in the instrument to assess the students' interest because it only asked whether they like writing in English or not. Additionally, the number of students who participated in this study based on gender and interest was not equally distributed. Finally, this research involved a small sample size from one university. The abovementioned limitations might influence the validity and reliability of the data. Therefore, future researchers are suggested to conduct a writing test by considering inter or intra-rater reliability, using a specific questionnaire that can provide more comprehensive information to assess the students' interest, and involving groups of students with equal numbers as well as a larger sample size involving students from some universities.

CONCLUSION

This research sheds light on the EFL students' awareness of the importance of self-regulated writing (SRW) strategies to help them cope with the complexities of writing tasks. It is proven by the high intensity of use of the overall SRW strategies. Besides, this research comes up with a new paradigm that individual differences such as gender, interest in English writing, and proficiency level might not strongly influence the use of SRW strategies along with the increase in the student's awareness of the promising role of SRW strategies. Although this research fails to provide a piece of empirical evidence that SRW strategies strongly predict students' writing achievement, these strategies have been proven to contribute to the improvement of students' writing quality. As a result, teachers should train students with self-regulated writing strategies to enhance their writing quality.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

A. Umamah: Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Resources, Visualization, Writing-original draft.

N. El Khoiri: Funding Acquisition, Project Administration, Supervision, Writing-review and editing.

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REFERENCES

Abadikhah, S., Aliyan, Z., & Talebi, S. H. (2018). EFL students' attitudes towards self-regulated learning strategies in academic writing. *Issues in Educational Research*, *28*(1), 17.

Alfian. (2018). Proficiency level and language learning strategy choice of Islamic university learners in Indonesia. *TEFLIN Journal*, *29*(1), 1–18. http://dx.doi.org/10.15639/teflinjournal.v29i1/1-18

Andrade, M. S., & Bunker, E. L. (2009). A model for self-regulated distance language learning. *Distance Education*, *30*(1), 47–61. https://doi.org/10.1080/01587910902845956

Bai, B., & Guo, W. (2018). Influences of self-regulated learning strategy use on self-efficacy in primary school students' English writing in Hong Kong. *Reading & Writing Quarterly*, *34*(6), 523–536. https://doi.org/10.1080/10573569.2018.1499058

Bai, B., & Guo, W. (2019). Motivation and self-regulated strategy use: Relationships to primary school students' English writing in Hong Kong. *Language Teaching Research*, 136216881985992. https://doi.org/10.1177/1362168819859921

Bai, B., Shen, B., & Mei, H. (2020). Hong Kong primary students' self-regulated writing strategy use: Influences of gender, writing proficiency, and grade level. *Studies in Educational Evaluation*, *65*, 100839. https://doi.org/10.1016/j.stueduc.2020.100839

Bruning, R., Dempsey, M., Kauffman, D. F., McKim, C., & Zumbrunn, S. (2013). Examining dimensions of self-efficacy for writing. *Journal of Educational Psychology*, *105*(1), 25–38. https://doi.org/10.1037/a0029692

Brunstein, J. C., & Glaser, C. (2011). Testing a path-analytic mediation model of how self-regulated writing strategies improve fourth graders' composition skills: A randomized controlled trial. *Journal of Educational Psychology*, *103*(4), 922–938. https://doi.org/10.1037/a0024622

Butler, D. L., & Winne, P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research*, *65*(3), 245–281. https://doi.org/10.3102/00346543065003245

Cer, E. (2019). The Instruction of writing strategies: The effect of the metacognitive strategy on the writing skills of pupils in secondary education. *SAGE Open*, *9*(2), 215824401984268. https://doi.org/10.1177/2158244019842681

Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL Learners' writing skills: Problems, factors and suggestions. *Journal of Education & Social Sciences*, *4*(2), 83–94. https://doi.org/10.20547/jess0421604201

Forbes, K. (2019). The role of individual differences in the development and transfer of writing strategies between foreign and first language classrooms. *Research Papers in Education*, *34*(4), 445–464. https://doi.org/10.1080/02671522.2018.1452963

Geres-Smith, R., Mercer, S. H., Archambault, C., & Bartfai, J. M. (2017). A preliminary component analysis of self-regulated strategy development for persuasive writing in grades 5 to 7 in British Columbia. *Canadian Journal of School Psychology*, *34*(1), 38–55. https://doi.org/10.1177/0829573517739085

Graham, S., Harris, K. R., & Troia, G. A. (2000). Self-regulated strategy development revisited: Teaching writing strategies to struggling writers. *Topics in Language Disorders*, *20*(4), 1–14. https://doi.org/10.1097/00011363-200020040-00003

Helsel, L., & Greenberg, D. (2007). Helping struggling writers succeed: A self-regulated strategy instruction program. *The Reading Teacher*, *60*(8), 752–760. https://doi.org/10.1598/RT.60.8.5

Hu, J., & Gao, X. (Andy). (2018). Self-regulated strategic writing for academic studies in an English-medium-instruction context. *Language and Education*, *32*(1), 1–20. https://doi.org/10.1080/09500782.2017.1373804

Hughes, M. D., Regan, K. S., & Evmenova, A. (2019). A computer-based graphic organizer With Embedded Self-Regulated Learning Strategies to Support Student Writing. *Intervention in School and Clinic*, *55*(1), 13–22. https://doi.org/10.1177/1053451219833026

Kang, S., & Lee, J.-H. (2019). Are two heads always better than one? The effects of collaborative planning on L2 writing in relation to task complexity. *Journal of Second Language Writing*, *45*, 61–72. https://doi.org/10.1016/j.jslw.2019.08.001

Kartika, H. D. (2015). A learner's self-regulated learning in writing. *Indonesian Journal of English Education*, *2*(2), 120–131. https://doi.org/10.15408/ijee.v2i2.3085

Kim, S. S., & Nor, M. Md. (2019). The effects of self-regulated learning strategies on preschool children's self-efficacy and performance in early writing. *International Journal of Education*, *11*(2), 99. https://doi.org/10.17509/ije.v11i2.14504

Kizilcec, R. F., Pérez-Sanagustín, M., & Maldonado, J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education*, *104*, 18–33. https://doi.org/10.1016/j.compedu.2016.10.001

Kusumaningrum, S. R., Cahyono, B., & Prayogo, J. A. (2019). The effect of different types of peer feedback provision on EFL students' writing performance. *International Journal of Instruction*, *12*(1), 213–224. https://doi.org/10.29333/iji.2019.12114a

Lam, R. (2014). Understanding EFL students' development of self-regulated learning in a process-oriented writing course. *TESOL Journal*, *6*(3), 527–553. https://doi.org/10.1002/tesj.179

McDonough, K., Vleeschauwer, J. D., & Crawford, W. J. (2018). Exploring the benefits of collaborative prewriting in a Thai EFL context. *Language Teaching Research*, *23*(6), 685–701. https://doi.org/10.1177/1362168818773525

Ong, J. (2015). Do individual differences matter to learners' writing ability? *The Asian Journal of Applied Linguistics*, *2*(2), 129–139.

Oxford, R. L. & Burry-Stock, J. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning. *System*, 23(1), 1-23. https://doi.org/10.1016/0346-251X(94)00047-A

Oxford, R. L. (2003). Language learning styles and strategies: Concepts and relationships. *International Review of Applied Linguistics in Language Teaching*, *41*(4). https://doi.org/10.1515/iral.2003.012

Oxford, R. L. (2017). *Teaching and researching language learning strategies: Self-regulation in context* (2nd ed.). Routledge. https://doi.org/10.4324/9781315719146

Papamitsiou, Z., & Economides, A. A. (2019). Exploring autonomous learning capacity from a self-regulated learning perspective using learning analytics. *British Journal of Educational Technology*, *50*(6), 3138–3155. https://doi.org/10.1111/bjet.12747

Park, J. (2018). Effectiveness of teacher and peer feedback: Through the lens of Korean tertiary writing classroom. *The Journal of Asia TEFL*, *15*(2), 429–444. https://doi.org/10.18823/asiatefl.2018.15.2.11.429

Reynolds, G. A., & Perin, D. (2009). A comparison of text structure and self-regulated writing strategies for composing from sources by diddle school students. *Reading Psychology*, *30*(3), 265–300. https://doi.org/10.1080/02702710802411547

Roderick, R. (2019). Self-regulation and rhetorical problem solving: How graduate students adapt to an unfamiliar writing project. *Written Communication*, *36*(3), 410–436. https://doi.org/10.1177/0741088319843511

Rosário, P., Högemann, J., Núñez, J. C., Vallejo, G., Cunha, J., Rodríguez, C., & Fuentes, S. (2019). The impact of three types of writing intervention on students' writing quality. *PLOS ONE*, *14*(7), e0218099. https://doi.org/10.1371/journal.pone.0218099

Sansone, C., & Thoman, D. B. (2005). Interest as the Missing Motivator in Self-Regulation. *European Psychologist*, *10*(3), 175–186. https://doi.org/10.1027/1016-9040.10.3.175

Teng, L. S., & Zhang, L. J. (2018). Effects of motivational regulation strategies on writing performance: A mediation model of self-regulated learning of writing in English as a second/foreign language. *Metacognition and Learning*, *13*(2), 213–240. https://doi.org/10.1007/s11409-017-9171-4

Teng, L. S., & Zhang, L. J. (2019). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference? *Journal of Second Language Writing*, 100701. https://doi.org/10.1016/j.jslw.2019.100701

Teng, (Mark) Feng, & Huang, J. (2019). Predictive effects of writing strategies for self-regulated learning on secondary school learners' EFL writing proficiency. *TESOL Quarterly*, *53*(1), 232–247. https://doi.org/10.1002/tesq.462

Troia, G. A., Harbaugh, A. G., Shankland, R. K., Wolbers, K. A., & Lawrence, A. M. (2013). Relationships between writing motivation, writing activity, and writing performance: Effects of grade, sex, and ability. *Reading and Writing*, *26*(1), 17–44. https://doi.org/10.1007/s11145-012-9379-2

Umamah, A., & Cahyono, B. Y. (2020). Indonesian university students' self-regulated writing (SRW) strategies in writing expository essays. *Indonesian Journal of Applied Linguistics*, *10*(1), 25–35. https://doi.org/10.17509/ijal.v10i1.24958

Umamah, A., & Cahyono, B. Y. (2022). EFL university students' use of online resources to facilitate self-regulated writing. *CALL-EJ*, *23*(1), 108–124.

Valverde Zambrana, J. M. (2020). Use of communicative strategies in L2 learning: An intercultural study. *International Journal of English Studies*, *20*(3), 77–107. https://doi.org/10.6018/ijes.399631

Waskita, D. (2008). Differences in men's and women's ESL academic writing at The University of Melbourne. *Jurnal Sosioteknologi*, *7*(14), 448–463.

Yabukoshi, T. (2018). Self-regulation and self-efficacy for the improvement of listening proficiency outside the classroom. *The Language Learning Journal*, 1–14. https://doi.org/10.1080/09571736.2018.1472626

Yaduvanshi, S., & Singh, S. (2019). Fostering achievement of low-, average-, and high-achievers students in biology through structured cooperative learning (STAD Method). *Education Research International*, *2019*, 1–10. https://doi.org/10.1155/2019/1462179

Yot-Domínguez, C., & Marcelo, C. (2017). University students' self-regulated learning using digital technologies. *International Journal of Educational Technology in Higher Education*, *14*(1), 38. https://doi.org/10.1186/s41239-017-0076-8

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, *31*(4), 845–862. https://doi.org/10.3102/00028312031004845

Zimmerman, B. J., & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, *22*(1), 73–101. https://doi.org/10.1006/ceps.1997.0919

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Unfocused Written Corrective Feedback for Academic Discourse: The Sociomaterial Potential for Writing Development and Socialization in Higher Education

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ABSTRACT

Background. There is a prevailing belief that unfocused written corrective feedback may not be suitable to promote students' academic writing development.

Purpose. This perspective piece demonstrates how unfocused written corrective feedback reflects the principles of sociomateriality, which views learning as dynamic.

Perspectives. Unfocused written corrective feedback has the potential to support university students' academic discourse socialization. This perspective is based on the observation that actual written corrective feedback in a classroom setting is varied and contextual, and not focused on any particular grammar form or writing feature.

Conclusion. Unfocused written corrective feedback represents an optimal approach to support university students' awareness and engagement with variables found in their learning ecology. These variables can support students' academic writing development.

KEYWORDS

unfocused feedback, sociomaterial approach, academic socialization, learning ecology

INTRODUCTION

Unfocused written corrective feedback (WCF) in the context of academic writing development of students who learned English as a second language is believed to be less effective, especially when compared to its counterpart – focused WCF (see meta-analysis by Kang & Han, 2015). The general opinion of its lack of efficacy mainly stems from studies that report positive outcomes from employing focused WCF, in terms of the improved or accurate use of particular grammatical forms or writing features among university students. For instance, Ellis et al. (2008) reported improvements in Japanese university students' use of definite articles; Frear and Chiu (2015), who examined the effects of WCF feedback on Taiwanese university students' use of the past form (verb), also reported delayed post-test improvements; and in a more recent study, Reynolds and Kao (2021) found that the effects of focused WCF with other forms of intervention had a positive impact on Taiwanese university students in their use of English articles in academic writing.

Nonetheless, recent synthesis studies and critical voices have pointed out that pedagogical research in English as a second language environments, including studies on WCF, are typically conceived as a 'laboratory', where pedagogical interventions are deliberately planned and language forms or writing features for which feedback is given are pre-selected. These studies often take on a quasi-experimental or experimental setup, where distinct variables are examined, leading to rather contextualized results, which, to a large extent, may only be applicable to the setting of these studies (see discussion by Mao & Lee, 2020; Kang & Han, 2015). These studies are problematic not only because they present a narrow ac-

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count of how feedback can be delivered, but they also fail to account for the role that English teachers or writing instructors play, as well as other sociomaterial entities that may shape students' writing development (see Mao & Lee, 2020; McKinley, 2019; Rose, 2019).

To advocate for an alternate (and more realistic) view of WCF, this paper contends that unfocused WCF provides a greater learning potential, especially for university students. To this end, this paper discusses unfocused WCF as a sociomaterial prospect that supports academic discourse socialization. Viewing unfocused WCF as having sociomaterial potential positions students as having the agency to interact with social and material entities encountered in the writing process (Nieminen et al., 2021). It also recognizes that students' feedback interactions are not simply confined to their teachers; rather, students are viewed as social actors with the capacity to disrupt or even reject educational notions preferred or promoted by their teachers or the institutions (Zukas & Malcolm, 2019).

OVERVIEW: FOCUSED AND UNFOCUSED FEEDBACK

Before examining how unfocused WCF offers a sociomaterial prospect, this section will first present a brief overview of focused and unfocused WCF, drawn from research published over the last two decades. As stated earlier, focused WCF has been regarded more positively, as it has been shown to reduce the number of errors in the use of targeted language forms. Focused WCF typically aims to address only one or two error types that may be pre-selected by the writing instructor or researcher (Lee, 2020; Lee, Luo, & Mak, 2021). Some errors focused on by studies were indefinite article use (Ellis et al., 2008) and the past forms of verbs (Frear & Chiu, 2015). One of the primary reasons for using focused WCF is the belief that it helps students notice issues found in their writing (Rahimi, 2019). This belief may be a crucial contextual variable for studies on focused WCF, given that noticing may only be possible with older students, or those studying a particular program or with high English proficiency. For example, Frear and Chiu's (2015) study had participants who were English majors; Sheen, Wright, and Moldawa's (2009) study, on the other hand, was conducted with graduate students in the USA. There are some studies on focused WCF set in other school level settings, such as that by Lee, Luo, and Mak (2021); nonetheless, their participants were reported to have strong academic abilities and English competency. From these studies, it may be the case that focused WCF was effective given the nature of the participants' study program (e.g., English majors or graduate degrees) and their ability to monitor their own performance (e.g., graduate students), or having a high English proficiency. Focused WCF has also been purported as having a more lasting impact (e.g., Sheen, Wright, & Moldawa, 2009; Frear & Chiu, 2015); nonetheless, at least one study reported that its effect was not statistically different than that of unfocused WCF (Ellis et al., 2008).

On the other hand, unfocused WCF aims to highlight an array of errors or issues. Unfocused WCF is also referred to as comprehensive feedback (Lee, 2020; Rahimi, 2019). For instance, in the study by Sheen, Wright, and Moldawa (2009), unfocused WCF given to several language forms (articles, copula 'be', regular past tense, irregular past tense and preposition) were found to have no significant impact even in subsequent revisions. Because unfocused WCF covers an array of error types, it is assumed that this WCF approach may hamper students' capacity to notice and to correctly revise errors (Frear & Chiu, 2015). Furthermore, it has been claimed that dealing with various errors does not create a supportive environment for writing development (Sheen, Wright, & Moldawa, 2009). In settings where unfocused WCF did show an extent of significant effect, it was provided with other feedback or relevant tasks, such as that demonstrated by Brudermann, Grosbois, and Sarré (2021), where online unfocused indirect WCF combined with micro-tasks was given to written tasks in an online EFL course taken by first-year STEM university students. This was also reported by Nicolás–Conesa, Manchon, and Cerezo (2019), where unfocused WCF led to greater accuracy in subsequent revisions when used alongside languaging; that is, the identification and explanation or discussion of an error with peers or with the writing instructor. Moreover, Nicolás–Conesa, Manchon, and Cerezo (2019) found that unfocused direct WCF had a greater uptake and retention when compared to indirect WCF. It should be noted, however, that their study comprised participants who were studying English as a major, similar to the study of Frear and Chiu (2015).

From these studies, it becomes apparent that both forms of WCF yield different, and at times, contradictory results, mainly due to varying contextual factors, including the profile of the participants and the setting of the studies (Mao & Lee, 2020). The ambiguity of the efficacy of distinct WCF types is actually the constant of what is known in literature. In the case of unfocused WCF, the question whether it can be a catalyst to maintain or improve overall writing accuracy in subsequent writing tasks also remain elusive (Frear & Chiu, 2015). The use of unfocused WCF, however, is more likely to be a typified approach for feedback provision in different language learning settings. Lee (2020) states that, "[i]n real-world contexts, teachers are likely to vary WCF strategies based on error types and students' abilities and needs, whether they respond to errors comprehensively or selectively." (p. 2). In other words, real WCF, whether used in an English for academic purposes (EAP) writing class or in the supervision of a research paper being written, may be decided based upon the nature of the writing task, or the assessment tool used for the writing tasks, or the students' language/writing capabilities. Hence, paying attention to

only one error type, such as giving focused WCF, may not be a truthful reflection of classroom practice.

WRITING AS ACADEMIC DISCOURSE SOCIALIZATION IN HIGHER EDUCATION

Situating feedback as a part of academic discourse socialization is integral as it illustrates the processes of writing at different university levels. At these levels – undergraduate, master's, and doctoral – various studies that take a broader approach in assessing students' writing development show students' engagement with feedback as a process for academic discourse socialization. According to Morita (2009), academic discourse socialization can be defined as "learning how to participate in a competent and appropriate manner in the discursive practices of a given academic community" (p. 444). Anderson (2017) further explains that the process of academic discourse socialization may be informed by what is observed in external forces, such as expectations of supervisors or the communication conventions of the immediate community. These external forces then inform internal socialization, which consists of a student's own self-regulation of the learning experiences. In Anderson's study, the participants – all Chinese PhD students at a university in Canada – expressed concern over the quality of their academic discourse, particularly their writing, which they said would be scrutinized by their PhD supervisors, other academics, and potential employers. This issue was similarly raised by Kobayashi, Zappa-Hollman, and Duff (2017), but from the perspective of instructors who oversee processes pertinent to students' academic discourse socialization. Specifically, how are these socialization processes evaluated, or even established and made known to the students? One aspect in students' academic discourse socialization is feedback provided to their writing. When feedback is viewed as a variable for academic discourse socialization, it diminishes the view that processes of academic writing are confined only in a particular context; these processes are actually shaped by other confounding variables found within the writing task, the course, and even the students' learning ecology and the wider university environment. The next section illustrates this latter point through research findings regarding academic writing expectations and feedback provision across different levels of university.

Undergraduate Level

For many undergraduate students, the transition into university may be rather unnerving. In particular, undergraduate students might find themselves in uncharted territories of university-level academic literacy expectations. Their writing instructors, on the other hand, may take it for granted that students are familiar with academic writing expectations and conventions (Elliott et al., 2019). This concern is also observed among subject-content instructors, who expect students to know specific writing features found in their disciplinary areas (e.g., Dang, Bonar, & Yao, 2021). However, while these instructors may be experts of their subject-content, they may not have a clear understanding of the function of assignments or assessments, especially in terms of how these tasks might impact students' academic discourse socialization at a broader level (Kobayashi, Zappa-Hollman, & Duff, 2017). On the other hand, it may also be the case that university policies may overlook students' academic writing needs (see Pineteh, 2014). While there have been attempts to create an inclusive support system to address students' writing needs, universities may still find these efforts challenging, especially when there are students from different cultural backgrounds and English language experiences, with different academic writing needs for their university courses (e.g., Dimova, 2021). From these observations, it may be surmised that several factors, such as time, the feedback practices of the writing instructor, as well as the objectives of a writing assignment or course determine WCF.

Master's and Doctoral Levels

Some studies on academic writing at the master's level have reported a lack of understanding of WCF. For instance, Nguyen and Buckingham's (2019) study of Vietnamese master's students at the University of Auckland reported occasions where WCF was misunderstood. Feedback such as 'limited reading' was misread as not providing sufficient sources, instead of the students' lack of understanding in the sources cited, which was the intended meaning. This led to students citing sources that were recent and perceived as more prestigious. Furthermore, at the master's level, WCF may not necessarily come from instructors. At this stage, many graduate students find themselves commenting on the work of their peers. For some, it may be challenging to offer critical feedback to peers as it may not be culturally appropriate, or it may be that students have not been socialized into the practice of offering feedback to classmates. In such situations, students may offer basic WCF focused on language use. This was observed in Zhang, Yu, and Yuan's (2020) study, which found that master's students in a Chinese university who engaged in peer feedback focused mostly on language issues and hardly on content. The main reason for giving only language-based WCF was that these students did not think of them as the authority to offer comments, or constructive criticism, on their peers' work.

At the doctoral level, feedback is viewed as an integral process for knowledge validation. For example, Anderson (2021) reported that the doctoral students in his study did not view feedback as negative; instead, they viewed feedback positively and as a necessary element in being legitimized as (future) PhD holders. Anderson (2021) further demonstrates that at the doctoral level, feedback is offered through different modes and junctures as an effort to maximize students' academic discourse socialization. This is also possible due to the regular engagement that doctoral students have

with their supervisors over the period of a few years. At this point, it may also be useful to consider WCF provided at the workplace. From the study of Yusuf, Yunus, and Embi (2018), as well as the report by Knoch et al. (2016), we can see how former students find themselves learning about writing conventions at the workplace, with feedback given by their superiors. This feedback generally concerns the alignment of content with its genre (e.g., information presented through an email should be direct and concise) and the ability to comply with established text templates. Aside from having utility for the immediate work task, feedback was also deemed necessary by the graduates as a means of validating their positions within a company and discerning their professional progress.

SOCIALIZATION AS A SOCIOMATERIAL PROSPECT

So far, this paper has shown how a myriad of reasons can shape the provision of WCF. Research findings, particularly those that investigate academic writing as a whole, do not view WCF as having the singular goal of error reduction; it has instead viewed feedback as serving the purpose of preparing students to participate in knowledge production or to fulfil assessment requirements expected at the university level. In fact, in a recent large-scale study done in China, university English majors reported that WCF was actually the least employed feedback. Feedback that these students received was expressive, in the form of suggestions on how their work can be improved, or a hedged evaluation if they did not do well (Yu, Jiang, & Zhou, 2020). These observations also point towards the relevance of viewing students' writing development as a form of academic discourse socialization, as it provides information about which aspects of the work had been well-written and what may require further improvement. From this perspective, developing discourse literacy in academic English, including writing, should be seen in light of various factors (e.g., Loo et al., 2018). This constitutes a sociomaterial approach in conceiving the process of learning as it takes a keen interest in 'everyday work practices'. Moreover, the sociomaterial approach recognizes how "work is assembled and reassembled and academic learning is enacted but also how they are interrupted, resisted and rejected" (Zukas & Malcolm, 2019, p. 274). With regards to feedback, this calls into question the utility of a linear or causal effect of feedback provision. As Gravett (2020) argues, "feedback literacy may, likewise, be more appropriately conceptualised as a complex breadth of dynamic, nuanced, situated feedback literacies, with the employment of the plural here indicating a wider understanding of the concept of feedback literacy than has traditionally been adopted to date." (p. 11). Hence, pedagogy that is oriented towards a sociomaterial perspective will never assume teaching and learning as definite or an event that can be prescribed (Fenwick & Landri, 2012; Gourlay, 2017). For WCF shaped by a sociomaterial perspective, the goal is then to create opportunities for students to engage with various unpredictable social and material prospects from within the WCF event, along with the wider learning ecology (Guerrettaz, Engman, & Matsumoto, 2021).

CONCLUSION AND IMPLICATIONS: THE PROMISE OF UNFOCUSED WCF

Viewing academic writing as an academic discourse socialization process highlights the disconnect between studies that take a narrow view of WCF with studies that examine academic writing in broad terms. The disconnect is perhaps due partially to the positivist aim of identifying and justifying certain WCF that works and to the onus of a student's writing development being on the writing instructor (see discussion by Winstone & Carless, 2021). For researchers of WCF, it may also be due to the appeal of 'packaging' the provision of focused feedback, or a constrained form of WCF, as a neat classroom phenomenon for the ease of research investigation and subsequent publication (McKinley, 2019). Nonetheless, the perspective being argued for here is that WCF should not consist of just one type, as made evident earlier through the overview of studies on academic writing at different university levels. Thus, the main implication is that if the aim of WCF is for students to engage in a myriad of sense-making pursuits, then unfocused WCF would be suitable. Through unfocused WCF, students will need to work through language and writing concerns that affect their writing or academic discourse (see Anderson, 2017). Furthermore, the outcomes of the provision of unfocused WCF should not be viewed as positivist evidence to form feedback principles that are generalizable. Feedback outcomes should instead be seen as efforts that support learning from an ecological perspective (Lee, Luo, & Mak, 2021; Loo, 2020; 2021). Yet, with a broader view of WCF, there will be a more truthful representation of what really goes on in the classroom. In other words, "they can also see that TESOL research is inherently messy, leading to gains in confidence to conduct their own research without the pressure of producing something methodologically 'perfect.'" (McKinley, 2019, p. 882). This will lend support to the authentic representation of WCF provision and avoid oversimplifying learning processes as linear transactions between instructors and students.

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DECLARATION OF COMPETING INTEREST

None declared.

REFERENCES

Anderson, T. (2017). The doctoral gaze: Foreign PhD students' internal and external academic discourse socialization. *Linguistics and Education*, *37*, 1-10. https://doi.org/10.1016/j.linged.2016.12.001

Anderson, T. (2021). The socialization of L2 doctoral students through written feedback. *Journal of Language, Identity & Education*, *20*(2), 134-149. https://doi.org/10.1080/15348458.2020.1726758

Brudermann, C., Grosbois, M., & Sarré, C. (2021). Accuracy development in L2 writing: Exploring the potential of computer-assisted unfocused indirect corrective feedback in an online EFL course. *ReCALL*. https://doi.org/10.1017/S095834402100015X

Dang, T. K. A., Bonar, G., & Yao, J. (2021). Professional learning for educators teaching in English-medium-instruction in higher education: a systematic review. *Teaching in Higher Education*. https://doi.org/10.1080/13562517.2020.1863350

Dimova, S. (2020). English language requirements for enrolment in EMI programs in higher education: A European case. *Journal of English for Academic Purposes*, *47*. https://doi.org/10.1016/j.jeap.2020.100896

Elliott, S., Hendry, H., Ayres, C., Blackman, K., Browning, F., Colebrook, D., Cook, C., Coy, N., Hughes, J., Lilley, N., Newboult, D., Uche, O., Rickell, A., Rura, G.-P., Wilson, H., & White, P. (2019). 'On the outside I'm smiling but inside I'm crying': Communication successes and challenges for undergraduate academic writing. *Journal of Further and Higher Education*, *43*(9), 1163-1180. https://doi.org/10.1080/0309877X.2018.1455077

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, *36*(3), 353-371. https://doi.org/10.1016/j.system.2008.02.001

Fenwick, T., & Landri, P. (2012). Materialities, textures and pedagogies: Socio-material assemblages in education. *Pedagogy, Culture & Society*, *20*(1), 1-7. https://doi.org/10.1080/14681366.2012.649421

Frear, D., & Chiu, Y. H. (2015). The effect of focused and unfocused indirect written corrective feedback on EFL learners' accuracy in new pieces of writing. *System*, *53*, 24-34. https://doi.org/10.1016/j.system.2015.06.006

Gourlay, L. (2017). Student engagement, 'learnification' and the sociomaterial: Critical perspectives on higher education policy. *Higher Education Policy*, *30*, 23-34. https://doi.org/10.1057/s41307-016-0037-1

Gravett, K. (2020). Feedback literacies as sociomaterial practice. *Critical Studies in Education*. https://doi.org/10.1080/17508487.2020.1747099

Guerrettaz, A. M., Engman, M. M., & Matsumoto, Y. (2021). Empirically defining language learning and teaching materials in use through sociomaterial perspectives. *The Modern Language Journal*, *105*(S1), 3-20. https://doi.org/10.1111/modl.12691

Kobayashi, M., Zappa-Hollman, S., & Duff, P. A. (2017). Academic discourse socialization. In P.A. Duff & S. May (Eds.), *Language Socialization* (pp. 239-254). Springer. https:doi.org/10.1007/978-3-319-02255-0_18

Knoch, U., May, L., Macqueen, S., Pill, J., & Storch, N. (2016). Transitioning from university to the workplace: Stakeholder perceptions of academic and professional writing demands (IELTS Research Reports Online Series). IELTS Partners - British Council, Cambridge English Language Assessment and IDP: IELTS Australia. https://www.ielts.org/-/media/research-reports/ielts_online_rr_2016-1.ashx

Lee, I. (2020). Utility of focused/comprehensive written corrective feedback research for authentic L2 writing classrooms. *Journal of Second Language Writing*, *49,* 100734. https://doi.org/10.1016/j.jslw.2020.100734

Lee, I., Luo, N., & Mak, P. (2021). Teachers' attempts at focused written corrective feedback in situ. *Journal of Second Language Writing, 50,* 100809. https://doi.org/10.1016/j.jslw.2021.100809

Loo, D. B. (2020). Is Language awareness supported by grammar lessons, indirect and metalinguistic feedback? An examination of graduate students' writing across drafts. *rEFLections*, *27*(1), 1-21.

Loo, D. B. (2021). Am I promoting feedback cycle and sociomaterial learning? Insights from practitioner inquiry on written corrective feedback in final drafts. *Issues in Language Studies*, *10*(1), 1-19. https://doi.org/10.33736/ils.2573.2021

Loo, D. B., Keough, W., Sundaresan, A., & Thomas, D. (2018). Perceptions towards engagement: The case of Thai English majors in an international higher education environment. *LEARN Journal*, *11*(2), 116-133.

Mao, Z., & Lee, I. (2020). Feedback scope in written corrective feedback: Analysis of empirical research in L2 contexts. *Assessing Writing*, *45*. https://doi.org/10.1016/j.asw.2020.100469

McKinley, J. (2019). Evolving the TESOL teaching-research nexus. *TESOL Quarterly*, *53*(3), 875-884. https://doi.org/10.1002/tesq.509

Morita, N. (2009). Language, culture, gender, and academic socialization. *Language and Education*, *23*(5), 443-460. https://doi.org/10.1080/09500780902752081

Nguyen, Q., & Buckingham, L. (2019). Source-use expectations in assignments: The perceptions and practices of Vietnamese Master's students. *English for Specific Purposes*, *53*, 90-103. https://doi.org/10.1016/j.esp.2018.10.001

Nicolás–Conesa, F., Manchon, R. M., & Cerezo, L. (2019). The effect of unfocused direct and indirect written corrective feedback on rewritten texts and new texts: Looking into feedback for accuracy and feedback for acquisition. *The Modern Language Journal*, *103*(4), 848-873. https://doi.org/10.1111/modl.12592

Nieminen, J. H., Tai, J., Boud, D., & Henderson, M. (2021). Student agency in feedback: beyond the individual. *Assessment & Evaluation in Higher Education*. https://doi.org/10.1080/02602938.2021.1887080

Pineteh, E. A. (2014). The academic writing challenges of undergraduate students: A South African case study. *International Journal of Higher Education*, *3*(1), 12-22. http://dx.doi.org/10.5430/ijhe.v3n1p12

Rahimi, M. (2019). A comparative study of the impact of focused vs. comprehensive corrective feedback and revision on ESL learners' writing accuracy and quality. *Language Teaching Research.* https://doi.org/10.1177/1362168819879182

Reynolds, B. L., & Kao, C. W. (2021). The effects of digital game-based instruction, teacher instruction, and direct focused written corrective feedback on the grammatical accuracy of English articles. *Computer Assisted Language Learning*. https://doi.org/10.1080/09588221.2019.1617747

Rose, H. (2019). Dismantling the ivory tower in TESOL: A renewed call for teaching-informed research. *TESOL Quarterly*, *53*(3), 895-905. https://doi.org/10.1002/tesq.517

Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, *37*(4), 556-569. https://doi.org/10.1016/j.system.2009.09.002

Winstone, N. E., & Carless, D. (2021). Who is feedback for? The influence of accountability and quality assurance agendas on the enactment of feedback processes. *Assessment in Education: Principles, Policy & Practice*. http://doi.org/10.1080/0969594X.2021.1926221

Yu, S., Jiang, L., & Zhou, N. (2020). Investigating what feedback practices contribute to students' writing motivation and engagement in Chinese EFL context: A large scale study. *Assessing Writing*, *44*. https://doi.org/10.1016/j.asw.2020.100451

Yusuf, N. K., Yunus, M. M., & Mohamed, A. E. (2018). Workplace writing in L2 experiences among millennial workforce: Learning to write in English. *3L: Language, Linguistics, Literature*, *24*(1), 145-161. http://doi.org/10.17576/3L-2018-2401-11

Zhang, Y., Yu, S., & Yuan, K. (2020). Understanding Master's students' peer feedback practices from the academic discourse community perspective: A rethinking of postgraduate pedagogies. *Teaching in Higher Education*, *25*(2), 126-140. https://doi.org/10.1080/13562517.2018.1543261

Zukas, M., & Malcolm, J. (2019). Reassembling academic work: A sociomaterial investigation of academic learning. *Studies in Continuing Education*, *41*(3), 259-276. https://doi.org/10.1080/0158037X.2018.1482861

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Reconciling translingualism and second language writing: A Book Review

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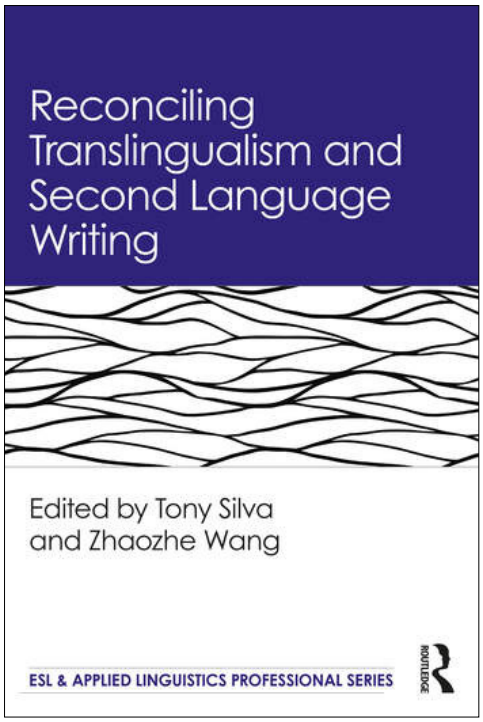

Translingualism, which concerns the freedom to use different languages and use them for different purposes (Horner & Alvarez, 2019), has recently become a trendy topic in language education. Despite the fresh perspectives brought by translingualism, some disputes have emerged regarding how this concept could coexist alongside scholarship in second language writing (SLW). A group of L2 writing studies scholars even expressed their concern over the misunderstanding that translingual writing would replace SLW (Atkinson et al., 2015). Given this, the book is a timely volume that revisits and reconciles the tension between scholars of translingualism and SLW. The purpose of this book, as stated by the authors, is to achieve a constructive and productive interaction between the two entities, thereby improving the L2 writing instruction practice in multilingual classrooms.

The book is composed of six parts: an introductory chapter and five sections devoted to reconciling translingualism and SLW under respective themes, namely discourses, languages, scholarship, institutions, and curriculum and pedagogies. To achieve a balanced view, the book authors intentionally invited a similar number of contributors representing the translingual writing camp and the SLW camp.

In the introduction, Wang and Silva trace the divergent attitudes towards languages between translingualism (language as a fluid, dynamic repertoire) and SLW (language as a bounded linguistic system). They also argue that the two fields are incompatible in L2 writing pedagogies. Given these divergent theorizations and practices, "writing teachers often find themselves caught up in the ongoing battle between a celebratory and a critical view of translingual approaches to teaching writing, feeling increasingly disoriented and less certain as to how to pedagogically deal with students' languages" (p. 3). Therefore, there is a necessity to address and disentangle the relationship between translingualism and SLW. The authors call for a reconciliation of the two entities to co-exist and mutually develop. Definitions of key terms, for example, translingualism, are then provided, thus ensuring a proper understanding for the readers.

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In Chapters 2 and 3, Tardy and Jordan offer reasoned discussion regarding how the dichotomy between translingualism and SLW is created discursively and, consequently, could be resolved in the same way. Tardy, based on her examination of publications concerning the relationship between SLW and translingualism, identifies incompatible discourses characterizing the two areas, for example, SLW as a field and translingual writing as an approach. She then argues that similar rhetorical strategies should be employed to avoid creating and deepening dichotomies, to acknowledge the diversified perspectives, and to consider the relationship between composition studies, SLW, and translingualism. In Chapter 3, Jordan discusses the rhetorical concept of *kairos* as a way to shift the focus from the mastery of proficiency to a sense of fluid interaction among contexts, resources, and bodily movements across time and space. He further argues that, rather than targeting at the correctness, more attention should be directed to the spatial and temporal dimensions involved in teaching and learning L2 writing.

In the next four chapters, Canagarajah, Horner, Donahue, and Gevers examine the language relationships in translingualism and SLW. Canagarajah draws on his life story and illustrates how one's language identities could change due to historical and sociopolitical reasons. He further proposes that the SLW actually could draw some insights from translingualism without losing its legitimate position as a field of academic exploration. Horner approaches translingualism as a set of language ideology which does more than implying certain geographic, linguistic, and social characteristics. The debate on the divide between translingualism and SLW seems to be the consequences of monolingualism. Given this, Horner argues that the two research entities should develop in a complementary way as they are not totally against each other. Donahue reviews research on SLW, translingualism, and foreign language writing and gives a detailed examination of the divergence and convergence between the former two. She suggests collaborative research on the shared terms, labels, theories, key documents, and so on. Gevers cautions the oversimplified attribution of translingualism as fluidity and SLW as fixity. He proposes a shared recognition of fluidity and fixity as interconnected dimensions of language in use rather than two exclusive categories. Such understanding, in his opinion, could also help us move forward in thinking the relationship between translingual writing and SLW.

Chapters 8 to 12 are grouped under the theme of scholarship, indicating an effort to reconcile translingualism and SLW through a revisit of their theorizing trajectories. In Chapter 8, Matsuda draws on his personal and professional story to illustrate his struggle with the "translingual bandwagonism" (p. 111). He suggests that SLW researchers should make use of the attention to language as initiated by translingualism. Employing an emotional labor interviews approach, Cox (an SLW researcher) and Watson (a translingual writing scholar) in Chapter 9 discuss their positionalities, experiences, and perspectives. They argue that the identity labeling of SLW researchers and translingualism researchers actually causes divide. In Chapter 10, Ferris rightly points out the tension between translingualism and SLW comes from the hurtful possibility that one might replace the other. She then calls for a shift of attention from the scholarship divide to the pedagogical implications. Given this, Ferris suggests that translingual writing research should undertake more empirical inquiries and draw on the expertise of SLW scholars. Besides, for SLW research, it needs to recognize contributions brought by translingual studies and embrace transparency. Ruecker and Shapiro (in Chapter 11) start with an insightful comparison of idealists (critical of the standardized writing conventions) and pragmatics (embracing accepted norms) in teaching English academic writing. To resolve the tension between the two orientations, they employ the perspective of critical pragmatism and situate their argument within the feminist rhetorical tradition. Based on a detailed discussion of theories, practice, and implementation of critical pragmatism, Ruecker and Shapiro propose a *both/and* approach to academic writing (i.e., teaching and problematizing the standardizations), thereby shedding light on how to reconcile a similar tension between translingualism and SLW. In the next chapter, You expresses his concerns on the wide-spreading nationalism and calls for a yin-yang or dialectical perspective in dealing with the tension between writing studies and translingual writing research.

The fourth section is composed of two chapters and calls for institutional efforts to mediate the dichotomy between translingualism and SLW. In Chapter 13, Kubota problematizes the divide between plurality and fixity. She urges for performative engagement to transform theorizations in translingualism into actions for change, especially with the following five recommendations: (1) remaining open to language variations, (2) allowing for negotiation in classroom assessment, (3) encouraging plurilingualism, (4) reaching out to wider audiences including policymakers, and (5) addressing the institutional and epistemological heterogeneity of power. Hall and Jerskey, in Chapter 14, describe a diversified student body of linguistic backgrounds at the City University of New York where a monolingual institutional structure prevails. They propose a strong argument that translingualism and SLW researchers should, regardless of their disciplinary and departmental underpinnings, work together to promote linguistic justice in institutions and in wider society as well.

The last section (Chapters 15 to 19) addresses the troubled relationship between translingualism and SLW with an emphasis on writing curricula and pedagogies. Arnold proposes *weight* as a term to acknowledge the power dynamics of language and illustrates how translingual writing might become undesirable in practice due to the weight of English. She suggests a further exploration on weighing English in the theorization of languaging and translanguaging so as to develop writing pedagogies in a way accommodating the

needs of multilingual students. In the next chapter, Ayash, instead of examining the divide between translingualism and SLW, focuses on how the two could work collaboratively and transdisciplinarily, especially through the pedagogy of translation. In Chapter 17, Du, Kim, Lee, Lenz, Sahranavard, and Sok reflect on their recent curriculum development that is generally inspired by translingualism. However, they consciously avoid using this term for *branding* (i.e., a strategy for concept valorization) and consider their approach as "with or without translingualism" (p. 212). They conclude with a call for less attention on translingualism as a brand and more on developing writing curriculum that meets local students' needs. In the next chapter, Schreiber problematizes the translingual pedagogy of negotiating language differences and considers it a pedagogical shift rather than a fully translingual approach. She draws on two major principles, the first concerning linguistic boundaries as normal and overlapping and the second viewing linguistic conventions as "historical codifications" (p. 228). She then proposes three tenets in defining a translingual approach to writing pedagogy. In the last chapter, Severino suggests two strategies to reconcile the relationship between translingualism and SLW, i.e., mapping the controversy and learning to write in an additional language.

Taken together, the 19 chapters represent a joint effort to address the relationship between translingualism and SLW. Whether their divergent positions are constructed rhetorically or for the fear of being replaced, translingualism and SLW, as argued by most chapter contributors, should draw on strengths from each other and develop in a mutually respectful way.

The chapter contributors of this volume are all top scholars in their research fields. They mobilize their expertise and altogether present a multifaceted examination of translingualism, SLW, and the interaction of the two. This book is recommendable for researchers, especially novice scholars, interested in translingualism and/or SLW. Most of the chapters are reflective and concern historical development of L2 writing research. Thus, this volume serves as an excellent resource to navigate through the mounting discussion on translingual writing and SLW. Moreover, this book is of value for multi/bilingual writing teachers. Some of the chapters contain practical suggestions regarding how teachers could reconcile the tension between the emerging translingual writing and the well-developed SLW instruction. Such pedagogical implications are especially abundant in the last two sections, *Reconciling Institutions* and *Reconciling Curricula and Pedagogies*.

This book contains rich insights that could elicit reflection from writing instructors on their teaching practices. For example, as discussed in several chapters, how to treat writing errors remains a big challenge. Teachers, from a translingual perspective, might view errors as commingling of diversified languaging means. At the same time, institutional requirements regarding writing improvement propels teachers to focus on well-established writing conventions. As pointed out by Hall and Jerskey in Chapter 14, writing teachers need to "keep in mind that they [multilingual students] are more than their errors or their awkward sentences, they have lives and personal experiences and histories of education in other languages and/or other systems" (p. 183). This is particularly prominent in the current research on L2 writing feedback. With its primary focus on effective feedback practices, feedback research might ignore students' overall linguistic repertoires, cultural values, education background, and experiences. Such an orientation might lead to feedback practices effective in improving students' academic performance but ineffective in sustaining learning motivation (Yu et al., 2021).

Relating to the organization of this book, the overall clustering of the chapters shows a coherent, logical organization of stances and focus of argument. A few chapters might contain several parallel argumentations and assigning them into these single-focused section could cause confusion. However, this is inevitable given the complexity and multiplicity of issues involved in each chapter. Besides, even though some chapters may overlap regarding their content, it does not leave an impression of unnecessary duplication.

To conclude, with its insights into language education, this book is highly recommended for postgraduate students, university teachers, and researchers. It could help them to have some fresh understanding of translingualism and SLW and also to think more deeply about these issues when applied to teaching and learning L2 writing.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTION STATEMENT

Ch. Liu: Drafting and revising the review.

T. Huang: Drafting and revising the review.

REFERENCES

Atkinson, D., Crusan, D., Matsuda, P. K., Ortmeier-Hooper, C., Ruecker, T., Simpson, S., & Tardy, C. (2015). Clarifying the relationship between L2 writing and translingual writing: An open letter to writing studies editors and organization leaders. *College English*, *77*(4), 383–386. http://www.jstor.org/stable/24240054

Horner, B., & Alvarez, S. P. (2019). Defining translinguality. *Literacy in Composition Studies*, *7*(2), 1–30. https://doi.org/10.21623/1.7.2.2

Yu, S., Geng, F., Liu, C., & Zheng, Y. (2021). What works may hurt: The negative side of feedback in second language writing. *Journal of Second Language Writing*, *54*, 100850. https://doi.org/10.1016/j.jslw.2021.100850

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Innovative Approaches in Teaching English Writing to Chinese Speakers: A Book Review

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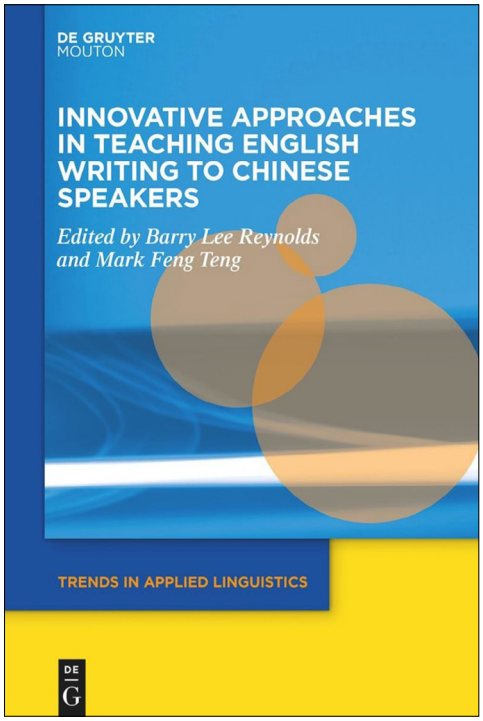
ABSTRACT



Innovative Approaches in Teaching English Writing to Chinese Speakers, edited by Barry Lee Reynolds and Mark Feng Teng and published by De Gruyter Mouton in 2021, addresses the needs and directions for innovation in English writing teaching. Based on the Chinese-speaking contexts, this book's empirical studies highlight teacher-researchers' attempts on pedagogical innovations, showcasing stakeholders' mixed attitudes and perceptions regarding these innovative approaches when teaching English writing. The book illustrates the shared features and challenges of the assessment-driven teaching of English writing. The qualitative studies and small-scale action research in this collection provide deeper insights into the innovative teaching of English writing. Additionally, it includes practical suggestions for future reforms of curriculum designs, pedagogies, and education systems in the regions. Thus, it benefits various readers concerned with the design, process, and outcome of teaching English writing. This book review summarizes the eleven chapters firstly. It critically discusses three critical issues in the volume. This review concludes with an overall evaluation of this book's contribution to the innovation of teaching English writing.

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In the first chapter, Barry Lee Reynolds and Mark Feng Teng clearly define Chinese speakers and Chinese-speaking regions, forming the basis of the collection. It clearly explains the contextual features of English writing education in these regions: mainland China, Hong Kong SAR, Macau SAR, and Taiwan. Drawing on the existing challenges and needs for innovative approaches in L2 English writing teaching across the levels of education from primary to tertiary, it introduces the aim of the collection to present the teacher-researchers' voices by closely looking into their practices. Furthermore, it suggests the book's aims to become "a valuable source of reference" (p. 13) to inspire teachers for their future innovation when teaching English writing to students.

In the second chapter, Anisa Cheung investigates technology implementation in a Hong Kong primary school through a

quasi-experimental case study, focusing on its influences on students' learning experiences and the writing outcome, alongside exploring teachers' concerns and obstacles to the implementation. Underpinned by process writing, the study compares student groups using e-learning tools and those using paper and pencil. The study presents a detailed dataset produced by focus groups, interviews, classroom observations, and student writings. It offers in-depth views into the effectiveness of e-learning in primary English writing classes and the staffs' views of its potential barriers.

In chapter 3, adopting activity theory in a dual case study, Amy Kong investigates two pairs of Hong Kong secondary L2 writers' views of the strategy-based training and how it influences their peer review practices. The researcher offers twelve training sessions to the student participants. Students' perceptions of peer review and training are generated from the semi-structured interviews conducted before and after the training sessions. Moreover, the recorded interactions enable the researcher to understand how students adopt the strategies during peer review sessions. The stimulated recall sessions after each peer-review session further demonstrate the reasons for their behaviors and feelings to some circumstances. The study highlights four mediators during peer review procedures, including "artefacts, roles, rules and community within the peer review activity system" (p. 57). The study demonstrates to teachers the value of strategy-based training in teaching English writing. Thus, it inspires to shift the teacher-centered classroom to a student-centered one by highlighting the feasibilities of collaborative writing among students.

Based on Macau's secondary school in chapter 4, the three-month case study conducted by Wilson Cheong Hin Hong attempts to minimize the complexity of grammar teaching for secondary students and see its effectiveness by comparing it with the traditional teaching of grammar categorization. To investigate the influence of this innovative grammar teaching approach on students' writing performances, this quasi-experiment study compares twenty-nine writings written by four students who are equally allocated in the experimental group and the control group. Although the findings do not showcase the significant effect of this innovation in grammar teaching, the study has important proposals for future innovations in grammar teaching. For instance, he advertises the aspects of the design and usage of textbooks, curriculum design, material design, and using L1 as a learning resource.

In the fifth chapter, underpinned by English as a lingua franca (ELF) in Taiwan, Melissa H. Yu employs a qualitative TESOL inquiry by student questionnaire, teacher questionnaire, and teacher interviews to explore students' needs of learning writing for international communication. She investigates the development of students' writing skills and the support provided by materials and university curricula. She also explores teachers' pedagogical choices and perceptions regarding teaching writing for international communication. Classroom observation data helps relate teacher perceptions to their classroom practices. She finds the development of students' L2 writing skills is prioritized by neither students nor teachers in Taiwan's secondary and tertiary education. Meanwhile, the curricula and materials are insufficient to support such teaching. They justify the limited feasibility of implementing ELF-informed teaching in writing classes in Taiwan, though the possibility remains. The study proposes integrating in-service teachers' teaching ideas and practices in teacher education programs. It will inspire pre-service teachers for future curriculum innovation and resources development. Furthermore, in-service teachers are advised to integrate ELF into their existing teaching practices rather than initiating ELF courses, which will direct in-service teachers to consider the feasibility of ELF-informed curriculum innovation gradually.

In chapter 6, adopting an ecological perspective in their action research in Hong Kong, Maggie Ma and Mark Feng Teng explore the influence of a process writing course on the metacognitive knowledge development of tertiary students with low writing proficiency. After focus groups, student drafts, teacher and peer feedback, and teacher reflective journals, this study provides more profound insights into the similarities and differences in two students' metacognitive knowledge development. It concludes the significance of student sample analysis activities, genre instruction, and tailormade learning resources and activities in the process writing course. Meanwhile, students treat the teacher as the authority in writing classes, but peer support is not fully utilized for their writing development. The study also indicates that individual differences contribute to the different degrees of engagement in students' learning process and metacognitive knowledge development. Accordingly, they offer multiple pedagogical implications, mainly aiming to increase the communication between teachers and students and understanding students' learning needs and reasons for their views. Then, it will assist teachers' pedagogical innovation in process writing courses.

In the seventh chapter, also in Hong Kong tertiary education, Dureshahwar Shari Lughmani and Dennis Foung introduce several tools to facilitate students' metacognitive strategies and investigate if these strategies can help students improve their writing performances, alongside the exploration of student perceptions of these strategies. This study is distinguished from other qualitative research because a correlation analysis is performed to investigate the relationship between assignment scores and other numeric variables. They propose practical suggestions to writing teachers, including writing assignment guidelines, checklists, and an interactional feedback process.

Still in Hong Kong tertiary education in the following chapter, by a narrative inquiry, Anora Yu presents an L2 English teacher's perspective on high-stake and low-stake testing

and this teacher's teaching approaches. Also, 'as an experienced L2 English teacher in Hong Kong' (p.184), the researcher regarded herself as a rich source of data in the study to 'co-construct new meanings and new knowledge' (p.184) with the data provided by her teacher participant, while this could have been utilized more in the data presentation. Through three vignettes, the study demonstrates that teacher beliefs and intuitive assessment influence her teaching approaches. Student motivation related to exams also helps explain their behaviors. The researcher proposes that teachers switch to the process approach from the product approach in English writing classes. Accordingly, it is advised that teachers understand student motivation more and focus on the process approach.

Switching to mainland China, in chapter 9, under an integrated genre-based approach in a case study, (Luna) Jing Cai localizes her teaching for the academic writing skill development to Chinese graduate students in the Applied Linguistics discipline. This study explicitly states these students' suggestions to improve the effectiveness of this writing course by answering the open-ended questions in the survey. They propose changes regarding course schedule arrangement, the use of research papers as materials, and pedagogies. Finally, she highlights how content teachers in other disciplines collaborate with linguistic teachers to improve students' writing skills in academia, which echoes the trendy proposals of content and language integrated learning (CLIL) (Lo, 2020).

In chapter 10, also focused on a postgraduate writing course in Taiwan, Yun-yin Huang and Hsiao-Hui Wu conduct action research under the activity theory to explore the factors contributing to students' writing and publishing process. Unlike those one-sided stories, this study involves the department faculties, writing instructors, and graduate students. Focus groups and interviews with them show their difficulties in teaching and learning in writing courses. The detailed demonstration and figures skillfully unpack the complexity of the findings. Through the instructors' voices, more supports from the school authority, resources, online tools, and pedagogical alternatives are required. Vividly, it also reveals the current situation of postgraduate students who lack such supports from their supervisors and the school. The study shows the mismatch between the school's expectations and the needs of postgraduate students and their instructors regarding academic writing and publishing. Similarly, these researchers also propose collaborative teaching between linguistic and content teachers, which again resonates with CLIL (Lo, 2020). Along with the proposal for blended pedagogy, writing instructors are advised to receive "continuous professional development regarding ESP pedagogies" (p. 252).

In the eleventh chapter, Barry Lee Reynolds and Mark Feng Teng critically reflect on the innovative approaches studied and proposed in this volume to point out the future directions of pedagogical reforms and research in teaching English writings. Consequently, they conclude the research gaps for future studies, which will benefit researchers interested in investigating English writing innovations across the levels of education from primary to postgraduate. They also highlight the extended absence of research in English writing teaching in Macau's context, especially large-scale quasi-experimental studies. Apart from promoting technology in innovative writing teaching practices and research, they also emphasize the need to explore language teacher agency (Tao & Gao, 2021) by comparing what they say and what they do in the actual classroom, which is not yet addressed in this volume but will significantly contribute to the field.

A CRITICAL DISCOURSE OF THREE KEY ISSUES RAISED IN THE BOOK

Among the varied research foci in this collection, three key issues are brought up. Firstly, it is found that students' individual differences may implicitly influence the innovative approaches in English writing teaching, whereas this issue is not explicitly explored in the book. For instance, chapter 2, chapter 6 and chapter 7 could benefit more if students' individual differences were studied. Then, process writing assisted by technology is investigated by the researcher in chapter 2 and highly recommended in chapter 11. Furthermore, in chapter 11, the editors also propose collaborative teaching between content teachers and linguistic teachers for the innovation of teaching writing to students.

Although individual differences are not explicitly mentioned or explored in this volume's empirical studies, they are found as the partial implicit findings, potential factors, or even obstacles to teacher-researchers' innovation in teaching English writing. Most of these action research studies attempt to influence students' writing learning experiences and metacognitive development by introducing metacognitive and strategy-based training sessions or courses. However, even though some of them explore students' perceptions of these innovative approaches, such as chapters 2 and 6, they do not provide a clear understanding of students' individual differences. Instead, understanding these would allow researchers to realize why the same innovative approaches would result in different outcomes. If students' individual differences were explored in detail before the training sessions, it would become another lens for the researchers to propose more practical suggestions, highlighting learners' needs.

The book has offered in-depth data to rationalize the suggestions for process writing assisted by technology, whereas more works need to be done by replicating the studies in other areas or institutes in the same regions to see its feasibility and effectiveness. As the book indicates, process-writing is more challenging to stakeholders, including

both students and writing instructors. It is necessary to see how language teacher agency (Tao & Gao, 2021) is achieved or inhibited in such a curriculum innovation environment by both attitudinal and classroom observation data through more longitudinal studies. More should be done to understand the barriers to language teacher agency achievement from an ecological approach (Priestley, Biesta, & Robinson, 2015) when implementing process writing in varied contexts, primarily where administrators' encouragement, support for students and in-service teachers, and suitable materials are absent.

Moreover, the idea of collaborative teaching between discipline and linguistic teachers has already been proposed recently. In recent years, a few case studies and action research have started to investigate CLIL's effectiveness and explore some stakeholders' perspectives, for instance, focusing on teachers and students in Europe and Asia (Ito, 2019; Piacentini, Simões, & Vieira, 2019). However, the complexity of such an innovative approach still needs to be unpacked by robust data including the actual comparison of students' learning outcomes and views from multiple stakeholders such as policymakers, administrators, content teachers, language teachers and students. Although inviting experts from disciplines and linguistics to support students' writing skill development is an alternative to English writing teaching, it would benefit more by fully demonstrating the practice, reasons, and effectiveness of collaborative teachings for students' writing skill development.

A FINAL EVALUATION OF THE OVERALL CONTRIBUTION

This volume sheds light on the needs for and the explorations of innovative pedagogies through small-scale case studies and action research in the Chinese-speaking communities, covering primary, secondary, and tertiary educations. It significantly bridges the gap between theoretical development in teaching English writing and the actual practices in the classroom. The book makes a significant contribution by involving studies from different stages of education, addressing the need to reform the pedagogies and curricula of English writing courses from even the primary and secondary levels, which has been long ignored. Meanwhile, it enables theorists and researchers to understand stakeholders' perspectives and practical experiences from these empirical studies to assist with the future theorization and research design when aiming to shed light on the pedagogical reform for teaching English writing. It provides valuable pathways for researchers to consider the urgent need for longitudinal classroom studies to follow up and investigate the feasibilities of these proposed innovative pedagogies and approaches. Furthermore, many of the studies are highly valuable as they set an excellent example for practitioners who would like to implement process writing in their classrooms to explore efficient pedagogies to teach students who are somehow demotivated by the product approach. It will integrate these learners' communicative and social needs in the changing world. It is a must-read for teacher educators and policymakers, reminding them of the vital need to shift the focus from helping students graduate from the exam-oriented education to shaping successful English writers who can communicate through English writing effectively. Overall, this volume will benefit theorists, researchers, teachers, students, teacher educators, and policymakers, who are keen on exploring, adopting, or adapting innovation to English writing teaching.

DECLARATION OF COMPETING INTEREST

None declared.

REFERENCES

Ito, Y. (2019). The effectiveness of a CLIL basketball lesson: A case study of Japanese junior high school CLIL. *English Language Teaching*, *12*(11), 42. https://doi.org/10.5539/elt.v12n11p42

Lo, Y. Y. (2020). *Professional development of CLIL teachers*. Springer Singapore. https://doi.org/10.1007/978-981-15-2425-7

Piacentini, V., Simões, A. R., & Vieira, R. M. (2019). Teachers' view of language(s) in (CLIL) science education: A case study in Portugal. *Problems of Education in the 21st Century*, *77*(5), 636–649. https://doi.org/10.33225/pec/19.77.636

Priestley, M., Biesta, G., & Robinson, S. (2015). *Teacher agency: An ecological approach*. Bloomsbury Academic. https://doi.org/10.5040/9781474219426

Tao, J., & Gao, X. (2021). *Language teacher agency*. Cambridge University Press. https://doi.org/10.1017/9781108916943

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