

Investigating the Effects of Written Corrective Feedback and Revision on EFL Learners' Production of Grammatical Structures

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Abstract

The study was an attempt to examine the effects of three types of written corrective feedback namely direct, indirect, and metalinguistic, and the related responses (with and without revision) on the production of grammatical structures by Iranian intermediate EFL learners. 180 language learners were chosen out of a population pool of 260 participants and assigned to six groups of 30 learners based on their performance on Oxford Quick Placement Test (QPT): DCF with and without revision, ICF with and without revision, MCF with and without revision. Provided with different types of feedback, the students in any of six experimental groups were given instruction on present and past perfect tenses. A pre-test -post-test design was applied to conduct the study. Participants in each group were required to take Dicto-Comp as a pre-test. After being offered with the relevant treatments, a parallel post-test was run. The results showed that students in all experimental groups outperformed their knowledge of present/past perfect tenses from the pre-test to the post-test. Students in the 'DCF with revision' outperformed all other groups, and the groups required to make revisions (i.e., DCF / ICF / MCF with revision) outperformed the corresponding groups with no revision, and the only groups whose scores (between pre-test and post-test) showed more variation were MCF with and without revision. The results provide valuable insights into the effectiveness of teacher feedback on L2 writing ability at large and learning these two tenses at least for the participants of the present study. Furthermore, these results suggested that providing written corrective feedback can be beneficial as an enhancing element in the curriculum development for improving EFL learners' writing ability.

Keywords: Direct Feedback; Indirect Feedback; Metalinguistic Feedback; Revision.

Влияние письменной корректирующей обратной связи и исправлений на использование грамматических структур учащимися EFL

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Аннотация

Исследование посвящено тому, каково влияние письменной корректирующей обратной связи на использование грамматических структур иранскими учащимися, владеющими английским языком на среднем уровне. Из 260 человек по результатам теста Oxford Quick Placement Test отобраны 180 участников, которые распределены в шесть групп по 30 человек. В группах была внедрена обратная связь одного из трех типов: прямая (DCF), косвенная (ICF) и металингвистическая (MCF), – а также через ответы с исправлениями и без. Работа проводилась в ходе изучения студентами тем, посвященных грамматическим временам – настоящему и прошедшему совершенному. На этапе предварительного тестирования участники написали сочинение, позволяющее судить об уровне их знаний по изучаемой теме. После внедрения предлагаемой технологии был проведен пост-тест. Результаты пост-теста показали, что у студентов всех экспериментальных групп увеличилось количество правильных ответов. Учащиеся в группе «DCF с исправлениями» показали самый лучший результат. Оценки студентов, где ошибки исправлялись («DCF / ICF / MCF с исправлениями») были выше, чем в группах, где ошибки не исправлялись. Оценки учащихся группы «MCF с исправлениями и без» показали наибольшую динамику между пре- и пост-тестом. Проведенное исследование позволило сделать вывод об эффективности разных типов обратной связи при изучении иностранного языка, в частности при изучении грамматических времен. Полученные результаты свидетельствуют о значимости письменной корректирующей обратной связи для улучшения письменных навыков студентов, изучающих английский язык как иностранный.

Ключевые слова: прямая обратная связь, косвенная обратная связь, металингвистическая обратная связь, исправления.

Introduction

Irrespective of the teaching approach one adopts, Zheng and Yu (2018) assert that teaching always proceeds in three stages. The process starts by the instructor providing some kind of input in the form of audio, visual or a combination of both. The students are then given the opportunities to use or produce language. Finally, they receive feedback on the language they produce or on the information they have retrieved. The feedback can be in the form of an action or information that people receive, or that they give as part of their daily routines. It is sometimes a mere response or an act of the person with whom we are negotiating.

Feedback is "information that is given to the learner about his or her performance of a learning task, usually with the objective of improving this performance" (Ur, 1996, p. 242). In an educational setting, corrective feedback (CF) is described as any remark, gesture or sign that lets learners know they used the target language incorrectly (Lightbown & Spada, 2019). Since giving Written Corrective Feedback (WCF) on learners' writing drafts is a frequent pedagogical activity for teachers who teach writing, finding the amount and the way students respond to WCF is apparent (Zheng & Yu, 2018). Moreover, the way individuals learn or acquire a second language as well as the way that Second Language Acquisition (SLA) researchers and teachers study and correct second language (L2) students' writing has attracted great attention. Language practitioners are very enthusiastic about the ways in which students succeed in dealing with the errors they make while acquiring the second language. Ferris (2002) held the view that replying to frequent errors, especially those errors which are rule-governed (verb tense and form, articles), may be more interesting than addressing all types of errors in an unfocused way. Accordingly, Bitchener (2008) asserted that writing teachers ought to answer very limited error categories each time. This interpretation contrasts with the study done by Bitchener (2008) and others (e.g., Ellis et al., 2008; Sheen et al., 2009) who directed their attention solely on one error type.

Nevertheless, other researchers (Ferris, 2010; Storch & Wigglesworth, 2010) hold that following a selective approach towards feedback (solely one type of error) is not suitable for the purpose for which it was intended such as improving students' writing because students need to concentrate on errors of various categories at once. Hence, teachers choose the middle ground, where they select separate error categories of feedback instead of one (Van Beuningen, 2010). As Lizzio and Wilson (2008) noted, such feedback is far more cost-effective and helpful,

and therefore students mentally link the types of feedback involving accounts to errors and the ways to improve them. Teachers almost always try to provide feedback on different aspects of learners' production, but it is WCF that has attracted most recent interest. Therefore, it can be implied that feedback provision in the classroom is necessary for additional information, to give directions and suggestions, and provide students with information that will ultimately help them revise what has been written. That is, the students' responses to the corrections frequently have the form of revision of the original draft. In order to determine what effect providing written CF has on students' text revision ability and whether it is practical to comprehend the process of written CF to improve students' writing ability, error correction has been one of the main concerns of research on written feedback for the last two decades (Ferris, 2010; Sachs & Polio, 2007; Truscott, 1996, 2007; Truscott & Hsu, 2008).

Revision is then described as a significant control that teachers have over the writing by formulating useful tips and guidelines as how to improve learners' final writing drafts. Realizing the most appropriate and useful ways of helping learners and enhancing accuracy in their writing ability has attracted much attention (Beuningen, et al., 2012; Garcia & Labandibar, 2017; Lee, 2009) since the number of students in a class, and the amount of time allocated for every session have always been a concern for teachers. To date, limited consideration has been given to the effectiveness of WCF on either redrafting or language learning and specifically learning verb tenses. Thus, this study is based upon selective WCF, that is treating students' errors by focusing on two verb tenses.

Considering these, this study is an endeavor firstly to determine how significantly the intermediate EFL learners receiving Direct Corrective Feedback (DCF), Indirect Corrective Feedback (ICF), and Metalinguistic Corrective Feedback (MCF) with revision differ from those with the same types of WCF without revision on the production of two English tenses (i.e., present perfect and past perfect), and secondly to access the importance of WCF in language learning when students attend to the teachers' error corrections.

Literature Review

Dominating most past and present research on written commentary, is the assumption that feedback on the students' compositions has a profound and positive effect on students' revisions (Burke & Pieterick, 2010). However, the major question is what feedback type is more influential. Written Corrective Feedback (CF) comes in a variety of forms. According to a typology provided by Ellis (2009), there are six different types of WCF strategies as follows: 1) Direct CF: Students are presented with the correct form, 2) Indirect CF: The teacher shows the error without correcting it, 3) Metalinguistic CF: The teacher offers some sort of metalinguistic clues regarding the error type, 4) The focus of the feedback: It considers if the teacher tries to correct all errors or chooses one or two particular types of errors made by students, 5) Electronic CF: The teacher shows an error, then provides a hyperlink to a related file that offers samples of right usage, 6) Reformulation: This is composed of a native speaker's attempt to make changes in the learners' whole text to make it look as native-like as possible with no change in the content.

By drawing on the concept of WCF, Brown (2007) has been able to show that CF involves answers to learners' produced utterances which causes students to feel interest to their errors. In EFL classrooms, when students utter or write something wrong, it might be immediately corrected by the teacher or other learners in the classroom. Telçeker and Akçan (2010) showed that learners' grammatical knowledge in L2 writings is strongly affected by written corrective feedback whereas the content of writing does not show any improvement. A study by Lim and Renandya (2020) on the efficacy of WCF in writing instruction implies that WCF is capable of increasing L2 written grammatical accuracy. Yet, their results showed noticeably less effect regarding long-term treatments and un-focused feedback provision. Other studies such as Bitchener (2008), Evans et al. (2010) and Koen et al. (2012) supported the view that feedback helps students improve their writing ability and understand what to do after receiving the intended feedback. In a more recent study, Tran (2020) indicated that students have a high positive attitude towards the effectiveness of the teachers' feedback provision especially relating to grammar since grammar seemed to be of great concern. One of the shortcomings of Tran's study is that very limited number of students participated in the study; therefore, the sample would not be sufficiently representative leading to lack of generalizability of findings. Still, there are some researchers who believe that feedback cannot be very effective in promoting students' writing abilities. Truscott (2009) totally rejects the constructive effect of error correction in L2 writing abilities. Furthermore, the outcomes of a study by Ghabanchi (2011) indicated that grammar correction

is ineffective in writing classes. Alkhatib (2015) has also found no considerable change on students' writing accuracy regarding feedback provision.

Revision has been defined as the way students respond to the type of corrections provided. For a better achievement in language learning, it is strongly recommended that students are provided with enough opportunities to revise their writing drafts. Fathman and Whaley's (1990) and Ashwell's (2000) studies on the effects of written CF on short-term revision showed that students with feedback provision did better in producing less errors and wrote more accurate revised drafts than those with no feedback. Chandler (2003) contrasted indirect CF with a chance for revision with indirect CF without any chance for revising. Chandler then concluded that students required to make revisions to all errors significantly outperformed those who were required only to indicate the errors from the first to their fifth pieces of writing.

Furthermore, regarding the long-term effects of WCF, most studies confirmed that all students could make improvement in some error categories over time (Chandler, 2003; Foin & Lange, 2007). Truscott and Hsu (2008) concluded that correction helps learners decrease their errors while writing, and that this can be considerable. A study by Sheen (2007) showed that direct corrective feedback (DCF) can be very effective in enhancing acquisition of specific grammatical features. In a study which set out to determine the usefulness of feedback on L2 written accuracy, Liu (2008) found both direct and indirect CF assisted students in revising their own composition. Another study by Schenck (2020) showed that explicit CF (DCF and MCF) is more fruitful for complicated features such as articles and the past hypothetical conditional both semantically and syntactically. Additionally, Goldouz and Baleghizadeh (2021) concluded that the most serious error types noticed by teachers were verb forms, verb terms and word order. They added that direct (non-negotiated) and indirect (negotiated) are the most effective feedback types. Their findings support the idea that rule-governed structures (regular past tense) are more treatable than those with no clear pattern. They noted that one of the drawbacks of their study was that they could only compare two groups of language proficiency regarding the error types as well as the feedback type received. The longitudinal impacts of both DCF and ICF were tested in a study by Maleki and Eslami (2013). They found that indirect WCF was more effective for second language students' writing abilities. In the same vein, Gunes (2020) in an investigation on the effect of WCF on exploring simple present tense concluded that the group receiving ICF outperformed the groups receiving DCF. A study by Ortiz et al. (2020) on the impact of MCF on the use of the third person singular suffices revealed that both indirect and direct MF fundamentally helped the acquisition of linguistic structures and that the use of metalinguistic clues offered learners a chance to acquire knowledge of the language.

Ferris (2010, p191) indicated that written corrective feedback is not only an instructional intervention but also helps students successfully edit and revise their texts and improve their writing, so that written corrective feedback as a learning device can help raise long-term L2 development. This view is supported by Diab (2015) who writes that feedback itself does not fulfill the intended purpose if we do not ask learners to do something with it (i.e., revision is needed). Mahmud (2016) also found that the most effective types were direct, metalinguistic and indirect CF. Meanwhile, DCF was the most familiar CF type teachers' practice.

In another study which set out to determine the impact of comprehensive error correction in short term revision and on new texts over time, Beuningen et al. (2012) concluded that, over time, learners with written CF did better than controls, and that feedback of various types seemed favorable for various linguistic fields (direct for grammatical errors; indirect for lexical ones). Additionally, learners did not paraphrase their passages to prevent errors. In another major study by Garcia and Labandibar (2017) on the exploration of how noticing and feedback processing affect subsequent revisions, found that lexical problems attracted participants' attention more, although they also paid attention to content features. Furthermore, in determining which sentence-level errors are judged to be most serious, Nushi, et al. (2021) showed that participants did not consider all errors as equally serious; rather, their judgments introduced errors in order. In other words, students regarded the semantic lexical errors as more acceptable and more intelligible type of errors in comparison with the formal lexical ones.

Commenting on teachers' corrective feedback and students' revision, Gonzales et al. (2018) argue that, although revising their errors differently at different levels, most students in each group self-correct the errors. They added that, even if students' revisions do not necessarily inform us if they can apply CF in another draft, making them correct the errors in addition to simply receiving feedback is essential for developing their linguistic

knowledge. Banaruee et al. (2018) in an investigation into determining the effect of recasts vs. DCF of high school EFL learners on writing abilities suggested that both recast and DCF greatly affect their writing performance.

A study by Boonpattanaporn (2008) on the notion of error correction, showed that those teachers who just read students' written texts and indicated students' errors and the required feedback may not be successful enough in assisting students to improve their writing ability. In their comprehensive investigation into conscious cognitive processing of peer feedback in which students were required both to determine and revise the errors in the essay, Berndt et al. (2017) were able to show that, based on text revision performance, there were no particular correlations for total glance duration on peer feedback through different conditions (elaborated specific feedback, concise general feedback, high and low). Some researchers (Gonzales et al., 2018; Ortega, 2012) agree that linguistic variables (syntactic and lexical errors), individual variables (motivation, aptitude, learning disabilities), and contextual variables (the first and the second language) must be noticed by teachers when giving feedback so that they can help students revise their text following feedback provision.

Even though numerous studies on the usefulness of WCF have been conducted, the authors of this study could not find any particular study conducted to understand how significantly the effect of direct/indirect/metalinguistic WCF + revision is different from direct/indirect/metalinguistic WCF–revision, specifically on the production of present/past perfect tenses among the Iranian intermediate EFL learners who frequently have problems with these two tenses. This lack called for an investigation into the effectiveness of applying different types of WCF + revision is in learning these two tenses. Accordingly, these research questions were devised:

1. Do 'DCF + Revision', 'ICF + Revision', and 'MCF + Revision' significantly affect Iranian intermediate EFL learners' production of present/past perfect tense?
2. Do 'DCF – Revision', 'ICF – Revision', and 'MCF – Revision' significantly affect Iranian intermediate EFL learners' production of present/past perfect tense?
3. Are there any significant differences among the experimental groups (i.e., 'DCF + Revision', 'DCF – Revision', 'ICF + Revision', 'ICF – Revision', 'MCF + Revision', and 'MCF – Revision') and the control group based on production of present/past perfect tense?

Method

Research Design

A pre-test-post-test design has been used in this study since it is often used in classroom experiments when experimental and control groups are such naturally assembled groups as intact classes having similar characteristics (Best & Kahn, 2006). The type of WCF (i.e., (DCF) + Revision, (DCF) – Revision, (ICF) + Revision, (ICF) – Revision, (MCF) + Revision, (MCF) – Revision, and the placebo for the control group) was considered as the independent variable of the study, and the students' production of English present/past perfect tenses after the treatment period was regarded to be the dependent variable.

Participants

The project used convenience sampling for selecting a cohort of at least 180 intermediate students out of 260 in three different English Institutes in Babol, Iran. They were selected based on their current proficiency level. These students were at intermediate level in different classes each containing 30 students of either sex between 14 and 16 years old. The students were divided into six experimental groups and one control group:

- Direct Corrective Feedback (DCF) + Revision,
- Direct Corrective Feedback (DCF) – Revision,
- Indirect Corrective Feedback (ICF) + Revision,
- Indirect Corrective Feedback (ICF) – Revision,
- Metalinguistic Corrective Feedback (MCF) + Revision,
- Metalinguistic Corrective Feedback (MCF) – Revision,
- Control group with no deliberate corrective feedback (NCF) – a combination of the usual instruction and classroom discussions.

Thirty intermediate EFL learners were included in each group. The subjects were assigned to the intermediate level of proficiency according to the standards defined by the institutes, and the researchers had the participants

take part in the Oxford Quick Placement Test (OQPT) before the treatment period to ascertain that they were really at the right level.

Instruments

Different instruments were applied including the OQPT and the Dicto-Comp test (production test), the details of which are presented below.

Oxford Quick Placement Test (OQPT): To ensure all participants in these six groups were equal regarding general English language proficiency, the OQPT test was run as a homogenizing test prior to the treatment. In line with the criteria defined by OQPT, the students who scored between 40-47 were regarded as the intermediate learners. Based on the results of the OQPT, the number of participants who has been selected for the current study were 210 intermediate EFL learners.

Dicto-Comp Test (Production Test): Dicto-comp is an easy procedure or technique for guided compositions, which provides an activity between fully-controlled writing practices and completely-free compositions. The text was read aloud once or twice at normal speed by the teacher. Then the teacher wrote the key verbs in the story on the board. Next, the students were asked to use the verbs in the intended tenses (i.e., present/past perfect) in their writing. This technique was used both as a pre-test and a post-test taken by the students in the groups to examine their production of these tenses. The students' scores on Dicto-Comp pre-test and post-test were calculated as the proportion of correct present/past perfect tenses to all the present/past perfect tenses required in students' writing.

Data Collection Procedure

The study aimed at finding out the effects of three types of WCF (i.e., DCF, ICF, and MCF) as well as two types of students' response (i.e., + revision and - revision) on the production of present/past perfect tenses. The following steps were taken to achieve the study goal:

- Administering the OQPT and choosing EFL learners at the intermediate level from the 260 first learners.
- Separating the learners into 7 groups ((1) DCF + Revision, (2) DCF - Revision, (3) ICF + Revision, (4) ICF - Revision, (5) MCF + Revision, (6) MCF - Revision, and (7) No Corrective Feedback (NCF) or the control group).
- Running the Dicto-Comp pre-test on the experimental groups.
- Administering the Dicto-Comp as the post-test to the students in each group.

Providing learners with the intended treatment, different types of instruction were offered to teach these tenses to participants in the 6 experimental groups. The treatment lasted four sessions, and four texts including present perfect and four more texts including past perfect tenses were used for teaching the two tenses through writing.

Using the Dicto-Comp technique for teaching the two tenses in the six experimental groups, the researchers asked the learners to summarize a text including the two target structures. First, a text was prepared that included examples of these tenses. Next, the text was read to the learners at normal speed while they took notes. Learners then prepared a summary of the text using present and past perfect tenses. This technique encourages learners to focus on the forms of the present/past perfect tenses while summarizing.

Later, different combinations of direct/indirect/metalinguistic feedback +/- revision to were utilized to teach the two intended tenses. For the 'DCF+Revision' group, the incorrect present/past perfect tenses were presented by writing the right form above the items. For the 'ICF+Revision' group, the wrong tenses written by learners were circled or underlined. But for the 'MCF+Revision' group, each error was shown via numbering. Notes for each numbered error were provided by the researchers in the margin of a learner's sheet. The notes represented the errors through applying metalinguistic clues and providing the right form. However, for those learners required to revise their passages (i.e., DCF, ICF, and MCF + Revision), the correction was done at home by writing the correct tenses, returning them to the students in the next session, and asking them to revise texts prior to giving their finalized writings to the researchers.

The control group received no specific instruction, but when they had any questions regarding the correct patterns of present/past perfect tenses, the researchers answered their questions with no specific attention drawn to the two structures.

Data Analysis

Procedures including descriptive and inferential statistics on OQPT and the Dicto-Comp pre- and post-test were used to analyze the data. For the inferential statistics, a series of paired-samples t-tests and an analysis of variance (ANOVA) were run to identify the effect of different types of WCF (i.e., DCF, ICF, and MCF) as well as two types of students' revision (\pm revision) on learners' production of the present/past perfect tenses.

Results

Effect of 'DCF/ ICF/ MCF + Revision' on Learners' Production

The first research question examined if 'DCF + Revision', 'ICF + Revision', and 'MCF + Revision' had any significant effects on Iranian intermediate EFL learners' production of present/past perfect tenses. The descriptive statistics (i.e., Mean and SD) for the pre-test and post-test scores of 'DCF/ICF/MCF + Revision' groups on the Dicto-Comp test are presented in Table 1 below. This shows the direct feedback + revision measured for both pre- and post-test groups. Using paired samples statistics, the mean of scores for direct CF + revision type was measured. In this table, the means of the pre-test and post-test for direct CF+ revision were 16.01 and 16.75 on the Dicto-Comp test. The standard deviations for the scores of pre- and post-test were 1.78 and 1.79 on the Dicto-Comp test. Regarding the means of both pre- and post-test scores, the dispersion of scores for post-test was less than that of the pre-test on the test type. Furthermore, the indirect CF + revision was measured using the scores obtained from pre- and post-test of the selected students in the group of 30. The means of scores on the Dicto-Comp test were 17.12 and 17.78. As it has been shown, the means obtained for the scores of pre- and post-test in metalinguistic CF + revision were 18.54 and 18.96, indicating the difference between means. The deviation of scores for pre-test has been reported to be more than that of the post-test in metalinguistic CF + revision.

Table 1. Descriptive Statistics for Comparing the Pre-test and Post-test of DCF, ICF, and MCF+ Revision on the Multiple-Choice Test and the Dict-Comp Test

Dicto-comp Test (production)		MEAN	N	SD	SEM
Pair1	DCF+Re-pre-test	16.01	30	1.78	.326
	DCF+Re-post-test	16.75	30	1.79	.327
Pair2	ICF+Re- Pre-test	17.12	30	1.36	.24
	ICF+Re- Post-test	17.78	30	1.39	.25
Pair3	MCF+Re- Pre-test	18.54	30	.99	.18
	MCF+Re- Post-test	18.96	30	.99	.18

Effect of 'DCF/ ICF/ MCF – Revision' on Learners' Production

The second research question investigated if 'DCF – Revision', 'ICF – Revision', and 'MCF – Revision' had any significant effects on Iranian intermediate EFL learners' production of present/past-perfect tenses. The descriptive statistics for the pre-test and post-test scores of 'DCF/ICF/MCF – Revision' groups on the Dicto-Comp test are given in Table 2. This shows that the means for both pre-test and post-test scores in direct CF - revision on the Dicto-Comp test was equal to 14.32 and 15.05, from which it can be concluded that there was a significant difference between the means. The amount of deviation for the scores obtained from pre-test was equal to 2.07 on this test type and 2.07 for post-test, indicating that the scores obtained for post-test has similar dispersion.

The means obtained for both pre- and post-test scores in indirect CF - revision were 1.54 and 1.52 on the Dicto-Comp test respectively. Thus, it can be concluded that there was a significant difference between the means. Furthermore, the amount of deviation for the pre-test scores for the Dicto-Comp test was 1.54 and 1.52 respectively which indicated greater dispersion. Based on the results, the means obtained for both pre- and post-test scores in metalinguistic CF - revision were 16.34 and 17.45 on the Dicto-Comp test. This showed that there was a significant difference between the means. Furthermore, the amount of deviation for pre-test scores was 1.08 and 1.90 on the Dicto-Comp test respectively which indicated better dispersion.

Table 2. Descriptive Statistics for the Scores of 'DCF/ ICF/ MCF – Revision' Groups on Pre-test and Post-test of the Dicto-Comp Test

Dicto-Comp Test		Mean	N	SD	SEM
Pair1	CF-Re, pre-test	14.32	30	2.07	.37
	CF-Re, post-test	15.05	30	2.07	.37
Pair2	ICF-Re, Pre-test	15.33	30	1.54	.28
	ICF-Re, Post-test	16.00	30	1.52	.27
Pair3	MCF- Re, Pre-test	16.34	30	1.08	.19
	MCF- Re, Post-test	17.45	30	1.90	.34

As it can be seen from Table 3, the value of Levene's statistic at the level of 2.45 on the Dicto-Comp test with degrees of freedom of 6 and 174 at the $p > 0.05$ indicated that the homogeneity of variances was verified. This test has been used as a preliminary hypothesis for conducting analysis of variance.

Table 3. Levene's Test of Equality of Error Variances (Homogeneity of Variances) on the Dicto-Comp Test

Levene's Statistic	df 1	df 2	Sig.
2.45	6	174	.050

This tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table 4 presents the effects between-subjects as the criterion, with a multivariate analysis of variance between six experimental groups and one control group regarding their pre- and post-test scores. There is a linear regression between six experimental groups and the control group. From the F-statistics ($F=2.23$) at $p > 0.05$ obtained from the interactive effect of both scores of six experimental groups and one control group, it can be concluded that the relationship between them is not significantly meaningful. In other words, no linear regression between pre- and post-test scores of the six experimental groups and the control group was observed and they do not intersect each other. Therefore, the equality of regression slopes is not rejected since no significant relationship between pre- and post-test scores exists. The data in Table 5 support the equality of regression slopes.

Table 4. Tests of Between-Subjects Effects: Dependent Variable: Production Post-test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	518.06 ^a	11	47.09	32.87	.00	.68
Intercept	99.92	1	99.92	69.74	.00	.29
Group	63.57	5	12.71	8.87	.00	.20
Production, pre-test	95.86	1	95.86	66.91	.00	.28
Group*production, pre-test	15.97	5	3.32	2.23	.09	.09
Error	240.68	168	1.43			
Total	52761.75	180				
Corrected Total	758.74	179				

^a R Squared = .683 (Adjusted R Squared = .662)

Table 5 was used to test the significance of the difference between pre- and post-test scores regarding F-statistics ($F= 101.217$) at the level of $p < 0.01$. Comparing the post-test mean scores of the six experimental groups and one control group, it can be observed that the difference is significant.

Table 5. Tests of Between-Subjects Effects: Dependent Variable: Production Post-test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	459.08 ^a	6	76.51	44.17	.00	.60
Intercept	70.59	1	70.59	40.75	.00	.19
Production, pre-test	175.32	1	175.32	101.21	.00	.36
Group	28.16	5	5.63	3.25	.00	.18
Error	299.66	173	1.73			
Total	52761.75	180				
Corrected Total	758.74	179				

^a R Squared = .605 (Adjusted R Squared = .591)

Comparative Effect of 'DCF/ ICF/ MCF +/- Revision' and Control Group on Learners' Production

The third research question investigated whether there were any significant differences among the experimental groups (i.e., 'DCF + Revision', 'DCF - Revision', 'ICF + Revision', 'ICF - Revision', 'MCF + Revision' and 'MCF - Revision') and the control group (i.e., NCF) with regard to their production of present/past perfect tenses. Figure 1 summarizes the data related to both scores of all seven groups on the Dicto-Comp test.

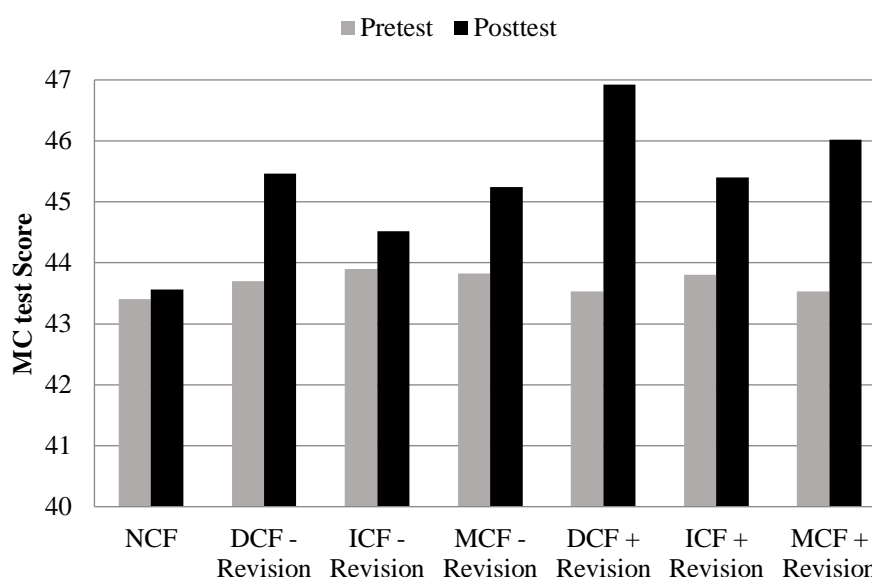


Figure 1. Pre- and Post-test Scores of the Experimental and Control Groups

As shown in Figure 1, the pre-test scores of all groups were nearly equal before the treatment sessions. However, the post-test scores indicate that the 'DCF + Revision' group outperformed all other groups. Moreover, all of the groups doing revision (i.e., DCF + Revision, ICF + Revision, and MCF + Revision) outperformed the corresponding groups without revision (i.e., DCF - Revision, ICF - Revision, and MCF - Revision). In order to check all of the results obtained through descriptive statistics, a set of inferential statistics was used to establish the facts more rigorously.

In order to check if these seven groups differ from each other on the Dicto-Comp pre-test, a one-way between-groups analysis of variance (ANOVA) was used. As illustrated in Table 6, no statistically significant difference exists at the $p < .05$ among all the groups: $F(6, 203) = 1.97, p = .17$.

Table 6: One-Way between-Groups ANOVA Comparing the Pre-test Scores of the Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	168.47	6	30.23	1.97	.17
Within Groups	1976.43	203	10.23		
Total	2442.90	209			

Another ANOVA was run for comparing the post-test scores of all seven groups on the Dicto-Comp test. Table 7 indicates that there is a statistically significant difference at $p < .05$ level among the seven groups: $F(6, 203) = 2.74, p = .01$.

Table 7: One-Way between-Groups ANOVA Comparing the Post-test Scores of the Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	195.18	6	32.53	2.74	.01
Within Groups	2409.70	203	11.87		
Total	2604.88	209			

Even though a significant difference observed in Table 8, a post-hoc Scheffe test was conducted to pinpoint the precise differences among the post-test scores of the seven groups. In Table 8 below, the asterisks (*) in the *Mean Difference* column imply that the seven compared groups significantly differ from one another at the $p < .05$. The precise significance value is presented in the column labeled *Sig.*

Post-hoc comparisons using the Scheffe test revealed that the experimental groups doing revision (i.e., DCF + Revision, ICF + Revision, and MCF + Revision) differed significantly from the corresponding groups without revision (i.e., DCF – Revision, ICF – Revision, and MCF – Revision). Moreover, the groups which were not significantly different based on the improvement of their knowledge of past/present perfect tenses were the ‘ICF + Revision’, ‘DCF – Revision’, and ‘MCF – Revision’ groups ($p > 0.05$), as shown in Table 6.

Table 8. Post-Hoc Scheffe Test Indicating the Point of Difference among the Post-test Scores of the Seven Groups

		Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DCF + Revision	DCF – Revision	6.63*	2.87	.01	.11	6.49
	ICF + Revision	-5.30†	2.87	.02	-1.72	4.66
	ICF – Revision	7.16‡	2.87	.01	-.86	5.52
	MCF + Revision	4.57*	2.87	.04	-1.56	4.82
	MCF – Revision	-6.73*	2.87	.01	-1.69	4.69
	NCF	8.63*	2.87	.00	-2.29	4.09
DCF – Revision	DCF + Revision	6.63*	2.87	.01	-1.36	5.02
	ICF + Revision	1.23	2.87	.07	-2.32	4.06
	ICF – Revision	5.37*	2.87	.01	-3.02	3.36
	MCF + Revision	-5.73†	2.87	.01	-4.66	1.72
	MCF – Revision	.55	2.87	.09	-3.16	3.22
	NCF	5.96‡	2.87	.00	-3.76	2.62
ICF + Revision	DCF + Revision	-5.30†	2.87	.02	-1.39	4.99
	DCF – Revision	1.23	2.87	.07	-3.22	3.16
	ICF – Revision	-4.39†	2.87	.02	-2.36	4.02
	MCF + Revision	2.89*	2.87	.04	-3.06	3.32
	MCF – Revision	.39	2.87	.11	-4.69	1.69
	NCF	3.67*	2.87	.03	-3.79	2.59
ICF – Revision	DCF + Revision	7.16‡	2.87	.01	-2.22	4.16
	DCF – Revision	5.37*	2.87	.01	-4.06	2.32
	ICF + Revision	-4.39†	2.87	.02	-3.89	2.49
	MCF + Revision	6.18*	2.87	.01	-5.52	.86
	MCF – Revision	4.46*	2.87	.03	-4.02	2.36
	NCF	2.97*	2.87	.04	-4.62	1.76
MCF + Revision	DCF + Revision	4.57*	2.87	.04	-.79	5.59
	DCF – Revision	-5.73†	2.87	.01	-2.62	3.76
	ICF + Revision	2.89*	2.87	.04	-1.76	4.62
	ICF – Revision	6.18*	2.87	.01	-2.46	3.92

	MCF – Revision	3.54*	2.87	.03	-4.09	2.29
	NCF	5.12*	2.87	.02	-2.59	3.79
MCF – Revision	DCF + Revision	-6.73*	2.87	.01	-1.52	4.86
	DCF – Revision	.55	2.87	.09	-3.36	3.02
	ICF + Revision	.39	2.87	.11	-2.49	3.89
	ICF – Revision	4.46*	2.87	.03	-4.82	1.56
	MCF + Revision	3.54*	2.87	.03	-3.32	3.06
	NCF	-2.83*	2.87	.03	-3.92	2.46
NCF	DCF + Revision	8.63*	2.87	.00	-5.02	1.36
	DCF – Revision	5.96*	2.87	.00	-4.16	2.22
	ICF + Revision	3.67*	2.87	.03	-4.86	1.52
	ICF – Revision	2.97*	2.87	.04	-6.49	-.11
	MCF + Revision	5.12*	2.87	.02	-4.99	1.39
	MCF – Revision	-2.83*	2.87	.03	-5.59	.79

* The mean difference is significant at the 0.05 level.

Discussion

An initial objective of the present investigation was to identify whether employing different types of feedback namely direct, indirect, and metalinguistic CF and the type of responses (with and without revision) significantly affect Iranian intermediate EFL learners' development of L2 learning, specifically on the production of present/past perfect tenses. Considering the first research question, the results indicated that participants with revised drafts showed better improvement in their later drafts. The approach of 'DCF/ICF/MCF + revision' affected significantly Iranian intermediate EFL learners' production of present/past perfect tenses. In response to the second research question, it can be concluded that 'DCF/ICF/MCF – revision' also affected learners' production of present/past perfect tenses.

Comparing the results of the descriptive statistics of all groups, it was found that the 'DCF + Revision' group performance exceeded other experimental groups, and the groups making revisions outperformed the groups receiving feedback without any elicited revisions. Concerning the efficacy of DCF, Chandler (2003) noted that teachers directed correction help ESL learners internalize the correct form more fruitfully. This also accorded with Sheen's (2007) and Liu's (2008) statement that DCF might be an influential factor in enhancing acquisition of certain grammatical features. Mahmud (2016) also found that DCF is the most common CF teacher-practice in their classes. Banaruee et al. (2018) suggested that both recast and WCF significantly affected the writing performance of language learners and that both of them could be profitable tools for motivating learners in writing and to correct their errors. Furthermore, the findings of the current study were consistent with Lim and Renandya (2020) on the usefulness of WCF in writing instruction which suggests that WCF improves L2 written grammatical accuracy. Yet, this outcome contradicts Maleki and Eslami (2013) who found that indirect WCF was more effective regarding second language students' writing abilities.

On the basis of the inferential statistics, the students' scores in all experimental groups involved in the first and second research questions improved from the pre- to the post-test due to the impact of the corrective feedback to which they were exposed. The results obtained from the first and second research questions accord with those of Ferris (2002), Bitchener (2008), Burke and Pieterick (2010), Telçeker and Akçan (2010), Evans et al. (2010), Koen et al. (2012), and Benson and Dekeyser (2018), who found that feedback provision helped L2 learners significantly improve their grammar in L2 writing. Ferris (2003) argued that answering students' errors in a focused manner, especially rule-governed items (e.g., verb tense) may be more effective than responding to all types of errors in an unfocused manner. It is encouraging to compare the findings of this study with that found by Goldouz and Baleghizadeh (2021) who found that the most serious error types noticed by teachers were verb forms and verb tenses. In contrast to earlier findings, however, no evidence was found by Truscott (2009), Ghabanchi (2011), and Alkhatib (2015) on the impact of providing feedback on students' writing accuracy. Additionally, commenting on teachers' corrective feedback and students' revision, the findings of the present study corroborates those of Chandler's (2003) study, suggesting that students' grammatical accuracy improved more significantly from the pre- to the post-test in groups that were required to revise their errors (i.e., DCF + Revision, ICF + Revision, and

MCF + Revision) than in groups that merely received feedback on their errors (i.e., DCF – Revision, ICF – Revision, and MCF – Revision).

Finally, the third question sought to determine whether there were any significant differences among the experimental groups (i.e., 'DCF + Revision', 'DCF – Revision', 'ICF + Revision', 'ICF – Revision', 'MCF + Revision' and 'MCF – Revision') and the control group with regard to their production of present/past perfect tenses. There was a difference among groups but contrary to the expectation, the present study could not find any significant difference among the 'ICF + Revision', 'DCF – Revision', and 'MCF – Revision' groups. Regarding the effectiveness of the revision on improving students' overall writing process and specially learning some grammatical features (as exercised in this study), the results observed mirror those of the previous studies on this issue (learners' response to teachers' feedback) being in line with Chandler (2003), Truscott and Hsu (2008), Garcia and Labandibar (2017), and Diab (2015). However, this may contrast with other studies including Boonpattanaporn (2008) and Berndt et al. (2017).

It is worth noting that indirect feedback, even when accompanied by revision, has nearly the same effect as the direct feedback and metalinguistic feedback without any revisions. Taken together, these results suggest the low effect of indirect feedback in learning grammatical items in L2 writing in comparison with the high effect of direct and metalinguistic WCF. This discrepancy could be attributed to teachers and learners' preferences for imparting and receiving DCF and MCF rather than ICF.

Conclusion and Implications

In this article, an effort has been made to find out the role of three various types of WCF strategies and types of responses (with and without revision) on the production of present/past perfect tenses by Iranian intermediate EFL learners through administering Dicto-Comp tests, while for the first three groups' participants were required to make revision on their drafts but for the other three groups no revision was asked. The six experimental groups representing different combinations of written corrective feedback and revision included DCF + Revision, DCF – Revision, and ICF + Revision, ICF – Revision, MCF + Revision, and MCF – Revision. The most striking results to emerge from the study are that (i) all experimental groups could improve their knowledge of past/present perfect tenses as a result of exposure to the relevant treatment types, (ii) the 'DCF + Revision' group outperformed all other groups, (iii) all of the groups making revisions (i.e., DCF/ ICF / MCF + Revision) outperformed the corresponding groups who were not asked to revise (i.e., DCF / ICF / MCF– Revision), and notably, (iv) no significant difference was observed on the scores of 'ICF + Revision', 'DCF – Revision', and 'MCF – Revision' groups.

Furthermore, this study supported the results that students required to make revisions on their final drafts outperformed the group without revision. The superiority of present study regarding the effectiveness of WCF+ revision on L2 grammar learning over other related studies and how the difference in the students' performance with/without revision can be attributed to the role of learners' proficiency level, and the uniqueness of the study done on only two verb tenses (present/ past perfect). One of the issues that emerges from these findings is that students will undoubtedly pay more attention if they are required to revise their drafts so as to become self-confident and work autonomously. Furthermore, students showed and valued feedback as a practical technique in improving language learning and specially writing skill. Yet, what distinguishes this study from others is that it was more focus-based since it focused on the production of only two verb tenses, and on only three types of WCF out of six different types of WCF addressed by Ellis (2009).

Some limitations and constrains should be considered for further research on how different methods of providing WCF work effectively for a certain proficiency level, thus making teachers aware of the most useful yet manageable CF types that are influential for enhancing their classroom potential. For the majority of L2 learners, however, teachers ought to choose certain error patterns (focused) based on learners' needs and intended instructional objectives to assist them in improving written accuracy. This exactly mirrors the outcomes of the current study.

Considering the achievements observed across the participants' level and error category (applying present/past perfect tenses) of the present study, WCF seemed to be an influential factor for teachers to encourage their students into more mutual interaction. Providing direct corrective feedback (DCF) for lower-proficiency learners causes them to be less anxious and makes them more self-confident. After all, when students are informed and provided

with information about their performance, they will be more motivated to apply their teacher's feedback. In addition, students at different levels of instruction reflect the variations in the production of verb tenses, which can help teachers provide and plan different classroom activities and exercises that reveal students' weaknesses in the learning process. Thus, teachers can adopt the most appropriate teaching materials that best suit students' needs and help them become proficient learners specifically in writing.

Follow-up studies and more research are needed as this study represents only a small step towards discovering more about the effectiveness of feedback provision on the production of some verb tenses. This study only examined two types of verb tenses (present and past perfect). Future studies need to examine closely the provision of WCF using a broader sample of other verb tenses with learners of different proficiency levels, and at several institutes with different textbooks.

Statement on Open Data and Ethics

The authors declare that the collected data are available and can be accessed through application to the authors. The participants provided their written informed consent to participate in this study.

Conflict of Interest Statement

The authors of this article certify that they have no conflict of interest, and that they have not received any financial support or forms of remuneration for the work related to this article.

References

- Alkhatib, N. (2015). Written corrective feedback at a Saudi University: English language teachers' beliefs, students' preferences, and teachers' practices. PhD thesis, University of Essex.
- 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, 227-58.
- Banaruee, H., Khatin-Zadeh, O. & Ruegg, R. (2018). Recasts vs. direct corrective feedback on writing performance of high school EFL learners. *Cogent Education*, 5:455333. <https://doi.org/10.1080/2331186x.2018.1455333>
- Benson, S. & Dekeyser, R. (2018). Effects of written corrective feedback and language aptitude on verb tense accuracy. *Language Teaching Research*, 23(6), 1-25.
- Berndt, M., Strijbos, J. W., & Fischer, F. (2017). Effects of written peer-feedback content and sender's competence on perceptions, performance, and mindful cognitive processing. *European Journal of Psychological Education*, 33, 31-49. <https://doi.org/10.1007/s10212-017-0343-z>
- Best, J. W. & Kahn, J. V. (2006). *Research in education* (10th Ed). Pearson Education Inc.
- Beuningen, C., 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.
- Bitchener, J. (2008). Evidence in supporting written corrective feedback. *Journal of Second Language Writing*, 17, 102-118.
- Boonpattanaporn, P. (2008). Comparative study of English essay writing strategies and difficulties as perceived by English major students: A case study of students in the school of humanities. *The University of the Thai Chamber of Commerce Academic Journal*, 28(2), 76-90.
- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Education.
- Burke, D., & Pieterick, J. (2010). *Giving students effective written feedback*. McGraw Hill Open University Press.
- 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, 267-296.
- Diab, N. (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>
- Ellis, R. (2009). A typology of written corrective feedback types. *ELT Journal*, 63(2), 97-107.
- 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
- Evans, N. W., Hartshorn, K. J., McCollum, R. M., & Wolfersberger, M. (2010). Contextualizing corrective feedback in second language writing pedagogy. *Language Teaching Research*, 14(4), 445-463.

- Fathman, A. & Whalley, E. (1990). Teacher response to students writing: Focus on form vs. content. In B. Kroll (ed.), *Second language writing: Research insights for the classroom*. Cambridge University press.
- Ferris, D. (2002). *Treatment of error in second language student writing*. University of Michigan 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, 181-201.
- Foin, A. & Lange, E. (2007). Generation 1.5 writers' success in correcting errors marked on an out-of-class paper. *CATESOL Journal*, 19, 146-82.
- Garcia, M. G. P., & Labandibar, L. U. (2017). The use of models as written corrective feedback in English as a foreign language EFL writing. Columbia University Library. <https://doi.org/10.1017/SO267190517000071>.
- Ghabanchi, Z. (2011). The effect of grammatical error correction on the development of learning English writing as a foreign language. *World Journal of English Language*, 1(2), 37-42.
- Goldouz, E. & Baleghizadeh, S. (2021). Iranian EFL teachers' perceptions about the most serious types of written errors and the most effective feedback types to treat them. *MEXTESOL Journal*, 45 (1), 1-13.
- Gonzales, M., Tejada, M., Krous, J., & Vasquez, D. (2018). EFL teachers' feedback and students' revision in a Peruvian University: A descriptive study. *International Journal of Foreign Language Teaching and Research*, 6(23).
- Gunes, C. (2020). The effect of written corrective feedback on exploring simple present tense. *ELT Research Journal*, 9(2), 233-251.
- Koen, M., Bitzer, E., & Beets, p. (2012). Feedback or feedforward? A case study in one higher education classroom. *Journal of Social Science*, 32(2), 231-242.
- Lee, I. (2009). Feedback revolution: What gets in the way? *ELT Journal*, 65(1), 1-12.
- Lightbown, P., & Spada, N. (2019). *How languages are learned*. Oxford University Press.
- 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, TESL-EJ*, 24(3), 1-26.
- Liu, Y. (2008). The effects of error feedback in second language writing. *Arizona Working Papers in SLA & Teaching*, 15, 65-79.
- Lizzio, A., & Wilson, K. (2008). Feedback on assessment: students' perceptions of quality and effectiveness. *Assessment & Evaluation in Higher Education* 33(3), 263-275.
- Mahmud, N. (2016). Investigating the practice of providing written corrective feedback types by ESL teachers at the upper secondary level in high performance schools. *Malasian Online Journal of Educational Sciences*, 4(4), 48-60.
- Maleki, A. & Eslami, E. (2013). The effect of written corrective feedback techniques on EFL students control over grammatical construction of their written English. *Theory and Practice in Language Studies*, 3(7), 1250-1257.
- Nushi, M., Jafari, R., & Tayyebi, M. (2021). Iranian advanced EFL learners' perceptions of the gravity of their peers' written lexical errors: The case of intelligibility and acceptability. *Interdisciplinary Studies in English Language Teaching* 1 (1), 41-56
- Ortega, L. (2012). Epilogue: Exploring L2 writing-SLA interfaces. *Journal of Second language Writing*, 21, 401-415. <https://doi.org/10.1016/j.jslw.2012.09.002>
- Ortiz, M., Diaz, C., & Inostroza, M. J. (2020). Effect of metalinguistic feedback on Chilean preservice teachers' written use of the third person singular suffix-s. *Journal of Research in Applied Linguistics*, 11(1).
- Sachs, R. & Polio. C. (2007). Learners' uses of two types of written feedback on L2 writing revision task. *Studies in Second Language Acquisition*, 29(1), 67-100.
- Schenck, A. (2020). Using meta-analysis of technique and timing to optimize corrective feedback for specific grammatical features. *Asian-Pacific Journal of Second and Foreign Language Education*, 5(16). <https://doi.org/10.1186/s40862-020-00097-9>
- Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of 'articles'. *TESOL Quarterly*, 41, 255-283.
- 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.
- 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.

- Telçeker, H. & Akçan, S. (2010). The effect of oral and written teacher feedback on students' revisions in a process-oriented EFL writing class. *Journal of TESL Reporter*, 43(1), 31-49.
- Tran, D. D. (2020). ESL students' comments on teacher's written corrective feedback in a freshman composition class. *MEXTESOL Journal*, 44(4), 1-13.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327-369.
- Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing*, 16, 255-272.
- Truscott, J. (2009). Arguments and appearances: A response to Chandler. *Journal of Second Language Writing*, 19(1), 59-60.
- Truscott, J. & Hsu, A. Y-P. (2008). Error correction, revision, and learning. *Journal of Second Language Writing*, 17, 292-305.
- Ur, P. (1996). *A course in language teaching: practice and theory*. Cambridge University Press.
- Van Beuningen, C. G. (2010). Corrective feedback in L2 writing: Theoretical perspectives, empirical insights, and future directions. *International Journal of English Studies*, 10(2), 1-27.
- Zheng, Y. and Yu, Sh. (2018). Student engagement with teacher written corrective feedback in EFL writing: A case study of Chinese lower-proficiency students. *Assessing Writing*, 37, 13-24. <https://doi.org/10.1016/j.asw.2018.03.001>