

Comparison of the Effects of Peer- versus Self-editing on Linguistic Accuracy of Iranian EFL Students

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ABSTRACT

The present study aims at investigating the relative effects of peer versus self-editing on EFL students' linguistic accuracy in writing composition... Forty-five Iranian EFL students were divided into two experimental groups (n=30) and one control group (n=15). The experimental groups received four treatment sessions, in which they were required to write two compositions and revise them. The first experimental group (editors) provided peer-editing without receiving any feedback from their peers or teacher, and the second experimental group (receivers) received peer-editing from the editors. Both groups received training on how to edit and revise their compositions based on coded feedback. In the next session, the receivers were asked to revise their papers based on the symbols and write a second draft. In addition, the editors were required to self-edit their own drafts and compose a second draft. In order to determine the effectiveness of the treatments in their writing accuracy, pre- and post-tests were administered to all groups including the control group. The analysis of data indicated that both editors and receivers made significant improvements from pre-test to post-test compared to the control group. Considering the accuracy of linguistic features, it was found that out of 10 linguistic features targeted in this study, capitalisation, spelling, verb tense, and wrong word improved significantly for both groups.

Keywords: written corrective feedback; self-editing; peer-editing; revision; writing accuracy

INTRODUCTION

Over the past few decades, ESL and EFL writers have adopted the *process-oriented approach* to composition writing, in which writing is regarded as “a process of discovering and revising ideas” (Mangelsdorf 1992, p.274). In this approach, writing is viewed as a recursive process which involves planning, generating, translating and editing (Flower & Hayes 1981, cited in Mohd Nor et al. 2012). The belief behind the process-oriented approach is that one can never achieve perfection in writing, but producing, reflecting on, discussing and reworking successive drafts of a text would help one to produce a perfect text (Nunan 1999). Proponents of this approach have declared that students should write frequently and receive clear feedback during drafting and re-drafting their writings (Emig 1971, Zamel 1983). It is claimed that corrective feedback can move learners through multiple-draft writings toward self-expression (Hyland & Hyland 2006). Second language (L2) writing instructors have predominantly focused on how corrective feedback should be provided on the students' writing drafts (Mansourizadeh & Abdullah 2014) since providing individual learners with detailed feedback in a large class may be too demanding for the teachers. In addition, due to time constraints, a one-to-one writing conference between teacher and student is almost impossible in some EFL contexts (Vengadasamy 2002).

A common type of corrective feedback in the process-oriented approach is peer-editing during which students read each other's drafts in order to improve the quality of their

writings (Mangelsdorf 1992). With the inclusion of peer-editing feedback in EFL classes, the focus is shifted from the teachers to the learners with students assuming part of the authority (Kwok 2008). The benefits of peer-editing for L2 writing have been emphasised in several studies (Lee 1997, Nelson & Murphy 1993, Paulus 1999). Nonetheless, there is a scarcity of studies on the effectiveness of peer-editing on the editor's own writing accuracy. The current study is an attempt to extend this line of research by comparing the effectiveness of peer-editing and self-editing in EFL students' writing accuracy.

WRITTEN CORRECTIVE FEEDBACK AND L2 LEARNERS' WRITING ACCURACY

Written corrective feedback has recently attracted a great deal of attention in the process-based, learner-centered writing classrooms. According to Lightbown and Spada (1999), corrective feedback is “any indication to the learners that their use of the target language is incorrect” (p.171). As Brandet (2008) stated, corrective feedback generally constitutes any information supplied to learners on related aspects of their performance on a task. He argues that this piece of information can be provided to learners by the teacher and peers. When learners are provided with written corrective feedback, they have the opportunity to compare their own output with the target language which could increase the likelihood of attending to the linguistic structure in the input (Beuningen 2010), and subsequently ‘noticing the gaps’ (Schmidt 1990). Schmidt (1990) introduced noticing as the equivalent to attention and argued that conscious attention to linguistic form is a prerequisite for the development of interlanguage. It follows that corrective feedback as an attention drawing technique may support L2 development. Gass (1988, 1990, 1991) has also stated that for input to affect the acquisition process, learners must not only comprehend the input, but also notice the differences between input and their own interlanguage system. In other words, corrective feedback functions as a kind of attention drawing technique which enables learners to notice the mismatch between their interlanguage and the target language. Further support on the role of corrective feedback comes from the hypothesis testing model of acquisition. According to Ohta (2001), by providing the correct form to learners, they can have the chance to compare their own output with that of another. In this way, corrective feedback triggers hypothesis testing.

Some other researchers have taken a different stance on the issue of feedback in L2 learning by looking at the question from the perspective of the sociocultural theory of mind (Aljaafreh & Lantolf 1994, Swain 1997). Many scholars believe that sociocultural framework can provide new and important insights into the process of L2 writing. For instance, Olson (1995) stated that “cognitive processes and structures are transformed significantly by the acquisition of our best-recognised cultural (and intellectual) tool, namely, writing (p.96). According to Vygotsky (1978, 1986), the basic theme of the sociocultural perspective is that knowledge is social in nature and is constructed through a process of collaboration, interaction and communication in social settings. To explain the relationship between the interpersonal plane and the intrapersonal plane, he developed the concept of zone of proximal development (ZPD), which is defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky 1978, p.86). Therefore, learning is mutually created in a structured dialogue, in which the more capable peer advances the learning of the less able one by building and dismantling (Barnard & Campbell 2005). Based on the concept of ZPD, if the support, which is given by the more knowledgeable peer or teacher, is not at the student's level of potential development, it will not lead to L2 improvement. On the other hand, Lantolf and Pavlenko (1995) have argued that “the construction of a ZPD does not require the

presence of expertise” (p.116), that is, the presence of experts like teachers is not necessarily a prerequisite for the development but individuals who jointly construct their ZPDs in a way that they could contribute something to or take away something from interactions. One of the important implications of this notion for second language learning is that learners need to be scaffolded and helped in their complex task of learning a second language as they interact with the teacher or peers (Nassaji & Swain 2000). Drawing on the notion of ZPD, error correction is considered as a social activity involving joint participation and meaningful transactions between the learners and the teacher (Aljaafreh & Lantolf 1994).

Empirical evidence in support of corrective feedback comes from numerous studies in SLA (Ashwell 2000, Bitchener 2008, Chandler 2003, Fathman & Whaley 1990, Ferris 1997, 1999a, 1999b, 2006, Ferris & Helt 2000, Mansourizadeh & Abdullah 2014 Ohta 2001). Despite the fact that many theoretical insights in the field of SLA support the efficacy of corrective feedback in L2 development and many empirical studies provide evidence in its support (see also meta-analyses by Li 2010 and Lyster & Saito 2010), there are still considerable debates on the effectiveness of written corrective feedback (Truscott 1996, 2004). As Bitchener (2008) argued, the debate over the issue of providing feedback would not be resolved without extensive investigations on the impact of different types of corrective feedback over time on new pieces of writing and by comparing the writings by students who do not receive corrective feedback. Although many studies have been carried out on the usefulness of corrective feedback in ESL writing, very few of them involved a control group. Among those who made the comparison (Ashwell 2000, Fathman & Whaley 1990, Ferris & Roberts 2001, Kepner 1991, Polio et al. 1998), three of them confirmed the effectiveness of corrective feedback (Ashwell 2000, Fathman & Whaley 1990, Ferris & Roberts 2001). Given the importance of corrective feedback in SLA theory, the present study is going to uncover the relative effects of self- and peer-editing on EFL students’ writing accuracy.

THE EFFECTIVENESS OF PEER-EDITING FEEDBACK

Research on the use of peer feedback in L2 writing classrooms has generally supported it as a potential aid “for its social, cognitive, affective, and methodological benefits” (Rollinson 2005, p.23). This line of research has mainly focused on the effectiveness of peer feedback versus teacher feedback on students’ writing quality (Chaudron 1984, Connor & Asenavage 1994, Hyland 2000, 2003, Paulus 1999, Yang Badger & Yu 2006, Zhao 2010). Some of these studies revealed that teacher-feedback was more effective than peer-feedback in improving the students’ writing quality and revision (Hyland 2003, Zhao 2010). It was also found that the students revised their drafts based on both teacher- and peer-feedback (Paulus 1999, Yang, Badger & Yu 2006). For example, Paulus (1999) analysed undergraduate international students’ essays in a writing course and found that students revised their drafts as a result of both teacher and peer feedback although they preferred teacher-editing to peer-editing. Yang et.al (2006) compared two groups of participants in multi-draft composition writing class and found that students used both teacher- and peer-feedback to improve their writing quality; and peer-feedback led to greater student autonomy. In a recent case study, Zhao (2010) investigated EFL learners’ use of peer- and teacher-feedback in their writings. The researcher used content analyses of students’ first and revised drafts. Although the results showed that students adhered to teacher-feedback more than peer-feedback in their revisions, they could actually comprehend better peer-feedback than teacher feedback. This is in line with the findings of earlier research on native English speakers’ L1 which suggested that much of the teacher feedback was vague and often misunderstood by students (Conner & Lunsford 1993, Ferris 2003 cited in Hyland & Hyland 2006).

According to Lundstrom and Baker (2009), peer-feedback in the form of editing enhances learners' various writing skills, such as discussing their writings with their peers, writing to the real audience and knowing other learners' views about their own writings. As Lee (1997) has stated, this technique accords with the goals of learner-centered classroom and it fosters learner autonomy through collaborative learning. He adds that peer-editing technique provides a driving force for students to revise their writings and helps them develop critical thinking skills. The effectiveness of peer-editing versus self-editing on students' revisions of linguistic errors was also investigated in some studies (Diab 2010, 2011, Sadeghi & Daulati Baneh 2012). For instance, Diab (2010) compared the efficacy of self-editing to peer-editing in improving students' revised drafts. The study included an experimental group that practiced peer-editing and a control group which engaged in self-editing. Results indicated that training in both peer-editing and self-editing assisted students to revise their essays. The analysis of data also showed that there was a statistically significant difference in revised drafts in favour of peer-editing group. However, those who engaged in self-editing revised more errors compared to the writers who received peer-editing.

The study conducted by Lundstrom and Baker (2009) is one of the few studies investigating the effect of peer-editing on the editors' writing accuracy. They speculated that students who effectively edit their peers' compositions can be better self-editors. The participants constituting ninety-one students at Brigham Young University were divided into a control group (receivers of editing) and an experimental (editors) group. While one group of students (the editors) reviewed their peers' drafts without receiving any feedback on their own writings, the other group (the receiver) received feedback on their writings in the form of editing. Next, a sample essay written by a student with the same proficiency level but not attending their classes was given to both groups. The student editors were asked to provide their suggestions to the essay in the margin, and the receivers were required to revise the essay based on the comments that were written on the sample essay. As pre-test and post-test, writing samples were collected both at the beginning and end of the treatment to reveal their gains in writing ability. Results showed that the editors, who focused only on giving feedback to their peers made more significant gains in their writings than their counterparts who only used feedback to revise their writings. It is, however, worth noting that majority of these studies neither involved a control group nor the production of new pieces of writings by the participants, that is, they revised peer-edited drafts written by other students with the same proficiency levels as theirs. This means that since the participants did not write those drafts, it is likely that they were not fully engaged in the writing process.

As indicated in the literature, several issues deserve consideration. First, relatively little attention has been devoted to exploring the effect of peer and self-editing on editors' writing accuracy. Second, studies investigating this issue seldom engage learners at various stages of writing including drafting, editing, revising and composing stages. Finally, many questions concerning accuracy gains of the learners on various linguistic features still remain unanswered. In order to deepen our understanding of how peer-editing might affect EFL students' writing accuracy, the present study is designed and guided by the following research questions:

1. Do EFL students make any progress in the accuracy of their compositions after editing their peers' drafts?
2. Do EFL students make any progress in the accuracy of their compositions after being edited by their peers?
3. What linguistic features would be produced more accurately after receiving these treatments?

METHODOLOGY

PARTICIPANTS

The participants of this study consisted of 45 freshmen pursuing their bachelor degree in a university in Mazandaran province, Iran. All of them were native speakers of Persian with an average age of 19. Based on their proficiency test scores, they could be categorised as intermediate students. These students were randomly assigned to be the experimental groups (n=30) and a control group (n=15). A one-way analysis of variances showed no significant difference in the proficiency scores (TOEFL) of the three groups (DF=2; F=.418; p=.661). Prior to the study, the participants were informed of the general purpose of the study and they expressed their agreement (in consent forms) to participate in the study.

PROCEDURE

The study was a quasi-experimental study of pre-test treatment and post-test design. During the pre-test, all participants were required to write a 200 word composition in 30 minutes on a cause-effect topic. The decision for choosing the topic for the pre-test and post-test compositions and the time limit for composing the drafts were made after a pilot session which took place two weeks before the main study. The students were asked to write in-class compositions on several topics. After collecting the students' drafts, it was found that they had a great deal of difficulty in writing an argumentative topic while they produced the highest number of words on a cause-effect topic. Through an informal interview with the whole class, the students expressed their satisfaction on the cause and effect paragraphs. Therefore, to limit the scope of the study, we narrowed down the topic of compositions to the cause-effect essays. After taking the pre-test, in the next session, the experimental groups received training on how to edit and revise their drafts. During this session, the editing symbols were introduced and clarified using an editing guideline sheet (see Appendix); they were further provided with a sample paragraph in which the accuracy errors were underlined and symbolised. Following that, the editors practiced editing a sample paragraph written by another student of the same level not participating in this study. The paragraph contained some accuracy errors which illustrated the types of errors they were going to detect and edit in their peers' papers.

In the next four treatment sessions, both experimental groups were required to write a 120 word composition in 20 minutes in class. After collecting the first drafts from all the students, the editors edited their peers' drafts using the editing symbols sheet. For example, if the error was related to word order, they wrote WO under the erroneous structure. During this time, the second experimental group in class, i.e. the receivers, did not edit anything but received a placebo in which they read a short article followed by some multiple choice comprehension questions.

After the first drafts were edited by the editors, all compositions were collected by the researchers to be checked whether the editing was correctly carried out. In the next session, the researchers returned all drafts to both groups so that they could revise their papers and write the second drafts. The receivers revised their first drafts based on the coding symbols and wrote a second draft. The editors who did not receive any feedback on editing from either the researchers or other students also edited and revised their own first drafts. At the end of the session, all participants in both groups gave their first and second drafts to the researchers. Following the four treatment sessions, which lasted for two weeks, a post-test was administered where all groups including the control group were required to write a composition on the same topic as in the pre-test.

DATA ANALYSIS

The writing samples of students were compared for accuracy before and after the revision to examine if the students noticed the gaps in their interlanguage and made any improvement. For example, if students made some errors related to subject-verb agreement in their first drafts, their revised drafts were checked to see if there is any improvement in accuracy in relation to this grammatical feature. In this study the writing accuracy of the participants were calculated through "errors per 100 words" (Mehrnet 1998, cited in Ellis and Barkhuizen 2005). Moreover, the gains in the writing accuracy of the experimental groups including editors' and receivers', and those of the control group were compared using SPSS software. To ensure the reliability, the two researchers scored the pre-test and post-test papers separately. The analysis showed a high agreement rate (80%) between the two raters.

RESULTS

TABLE 1. Descriptive statistics

Groups	Pre-test			Post-test	
	N	M	SD	M	SD
Editors	15	8.88	1.86	7.53	1.73
Receivers	15	8.16	3.00	7.04	2.80
Control	15	9.00	2.22	9.33	2.53

As can be seen in Table 1, the treatment and control groups' scores were almost similar during the pre-test session. However, to ensure that there was no significant difference prior to the treatment sessions a one-way analysis of variance was run to detect any differences. The result of this analysis showed no significant difference in the pre-test scores of the three groups ($df=2$; $F=.527$, $p=.594$).

To answer the first and second research questions, two paired-samples t-tests were run for the experimental groups' accuracy scores to detect whether there was any progress from pre-test to the post-test.

TABLE 2 Paired samples t-test comparing the pre- & post-test of the experimental groups

Groups	t	df	sig
Editors	4.945	14	.000*
Receivers	11.082	14	.000*

* The mean difference is significant at the .05 level.

As shown in Table 2, both groups made significant improvements from pre-test to post-test. To detect the differences in the progress among the three groups of participants, we compared the gain scores of all groups including editors, receivers, and control. Table 3 presents the descriptive statistics of all groups' gain scores.

TABLE 3. Descriptive statistics for the three groups' gain scores

	N	Mean	Std. Deviation	Std. Error
Editors	15	-1.35	1.06	.27
Receivers	15	-1.11	.39	.10
Control	15	.331	.84	.21

A one-way analysis of variance was carried out to compare the mean scores of the three groups. The result of this analysis showed a significant difference among the three groups, suggesting that they were different from each other in terms of the gains made in their writing accuracies ($df= 2$; $F = 18.81$, $p= .000$). To further investigate the location of the differences, an LSD test was conducted (refer to Table 4).

TABLE 4. Multiple comparisons of the three groups gain scores

Dependent Variable	(I) GROUP	(J) GROUP	Mean Difference (I-J)	Std. Error	Sig.
GAIN	Editors	Receivers	.2373-	.29	.430
	Editors	Control	-1.6880(*)	.29	.000
	Receivers	Control	-1.4507(*)	.29	.000

* The mean difference is significant at the .05 level.

As displayed in Table 4, a significant difference was observed between the gain scores of the editors and the control group ($p<.05$), and between the receivers and the control groups ($p<.05$). However, no significant difference is detected between the editors and receivers' gain scores ($p= 0.430$). Based on these results, it can be concluded that the peer-editing technique was beneficial to both editors who were engaged in peer- and self-editing, and receivers who received peer-editing feedback and revised their drafts based on the editing symbols.

Regarding the third research question, *What linguistic features would be produced more accurately after receiving the treatments?*, several paired samples t-tests were carried out to detect if there was a significant difference between the mean scores of target linguistic features in both receivers' and editors' groups during the two testing sessions. Tables 5 and 6 present a summary of these analyses. As can be seen in Table 5, except for punctuation, subject verb/agreement, word order, and conjunction, the mean differences of other linguistic features were statistically significant from pre to post-test. It can be said that the editors' accuracy of producing those linguistic features was improved from the pre-test to the post-test.

TABLE 5. Paired samples t-tests on 10 linguistic features in editors' group

Linguistic features	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Capitalization	2.20	2.21	.57	3.85	14	.002*
Punctuation	.27	.59	.15	1.74	14	.104
Spelling	1.60	2.26	.58	2.74	14	.016*
Word Formation	-4.67	2.38	.61	-7.59	14	.000*
Subject/Verb Agr.	.60	1.40	.36	1.66	14	.120
Verb tense	1.13	1.36	.35	3.24	14	.006*
Wrong Word	1.13	1.25	.32	3.52	14	.003*
Word Order	.20	.56	.14	1.38	14	.189
Plural / Singular	1.60	1.95	.51	3.17	14	.007*

(continued)

Conjunction -0.73 1.62 .42 -1.75 14 .102
 * The mean difference is significant at the .05 level.

TABLE 6. Paired samples t-tests on 10 linguistic features in receivers' group

Linguistic features	Paired Differences			t	df	Sig.(2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Capitalization	1.40	1.50	.388	3.61	14	.003*
Punctuation	.33	.90	.232	1.43	14	.173
Spelling	1.20	1.32	.341	3.52	14	.003*
Word Formation	.13	1.41	.363	.37	14	.719
S-V Agreement	-1.87	2.64	.682	-2.74	14	.016*
Verb tense	1.33	1.99	.513	2.60	14	.021*
Wrong Word	1.13	1.36	.350	3.24	14	.006*
Word Order	.63	1.18	.303	2.20	14	.045*
Plural /Singular	.53	1.77	.456	1.17	14	.262
Conjunction	-.40	1.40	.363	-1.10	14	.288

* The mean difference is significant at the .05 level.

With respect to the receivers' performance on the accuracy of those linguistic features, several paired samples t-test were also conducted. From Table 6, out of 10 linguistic features targeted in the study, the mean error rate of capitalisation, spelling, subject/verb agreement, verb tense, wrong word, and word order were significantly different from pre-test to post-test. Therefore, the receivers' performance in the accuracy of those six linguistic features improved from pre- to post-test.

DISCUSSION

The present study explored the effectiveness of peer-editing of EFL students' L2 writing accuracy. It was found that both editors and receivers improved on their writing accuracy from the pre-test to post-test. This finding indicated that the editors who edited their peer's drafts without receiving any type of feedback and the receivers who were only involved in revising their papers based on the comments improved on their writing accuracy. The result of this study is in line with previous studies on the effectiveness of peer-editing technique (Diab 2010 2011, Nelson & Murphy 1993, Lee 1997, Lundstrom & Baker 2009, Yang, Badger & Yu 2006). Using a pre-test/post-test quasi-experimental design, Diab (2010) compared the effects of peer-editing to those of self-editing on students correction of specific errors in their revised drafts. Findings showed that the peer-editing group significantly reduced their rule-based errors in their revised drafts compared to their counterparts in self-editing group. As Rollinson (2005) mentioned, the reason that learning to edit others' writings improves one's own writing accuracy may be due to the fact that students learn from these kinds of activities to critically self-evaluate their own writings. In addition, regarding the impact of direct- versus indirect written corrective feedback on improving L2 writing

accuracy, several studies have been carried out (Bitchener & Knoch 2008, Chandler 2003, Ferris & Helt 2000, Sampson 2012, Sheen, Wright & Moldawa 2009). The finding of the present study is in line with the findings of some of the previous studies (Ferris & Helt 2000, Sampson 2012). Unlike Sampson's (2012) study which showed that certain types of errors such as spelling, verb tense and wrong word are more persistent and less likely to be influenced by any type of corrective feedback, this study showed the opposite. This contradictory finding may be due to the fact that all the experimental groups focused on these linguistic features during the training session in this study.

This finding is also contrary to Lundstrom and Baker's findings (2009) which found that editors outperformed the receivers in their writing accuracy. According to Lundstrom and Baker (2009), based on sociocultural theory and more specifically the zone of proximal development (ZPD), it is possible that the editors' ZPDs were not at the same level as the receivers'; thus, they may not make themselves understood. As Nassaji and Swain (2000) also asserted, if the level of writers' ZPD is not the same as the editors' ZPD, the editing which is given by them may not scaffold the receivers' learning. Since the participants of the present study were at the same level of language proficiency, and their pre-test scores were not significantly different from each other, it can be assumed that the receivers' levels of ZPD were almost similar to those of the editors at the beginning of the study. Therefore, the linguistic features that were considered by the editors to work on fell within the ZPD of the receivers.

Regarding the third research question, the present study found that out of 10 selected linguistic features under the study, both editors and receivers showed a steady decrease in the percentage of errors in verb tense, capitalisation, spelling, and wrong word from their pre- to the post-test. This shows that the experimental groups progressed through their writing processes in these linguistic features. Very few studies have shed light on this aspect of process writing, and considered some linguistic features during the process of the research. The present study showed that for a non-rule-based error such as *wrong word* there was a significant decrease in the error rate in both editors and receivers L2 writing. This is contrary to Diab's (2010) study which found that regarding non-rule-based errors, there was no significant decrease in reduction of errors in students' revised drafts in peer-editing group. This may be due to the training session provided for both groups which may have focused the participants' attention on their output. Considering those linguistic features whose mean differences were not statistically significant from the pre- to the post-test, it can be inferred that peer-editing may not be effective for their writing accuracy in those features and more explicit and direct feedback such as metalinguistic explanations may be required to make improvement in the accuracy of the students.

CONCLUSION

Considering the findings of this study, it can be concluded that written corrective feedback in the form of peer-editing has indeed fostered EFL writers' accuracy by offering them an opportunity to notice the gaps in their developing interlanguage system. We found that although the editors and receivers were at the same level of language proficiency, they could scaffold each other and improve on their writing accuracy from the pre to the post-test. The findings of this study suggest that peer-editing technique can be regarded as a valuable and important asset for teachers to incorporate in their writing classrooms. Peer-editing can give teachers the chance to offer partial autonomy to the students and follow their progress regarding both feedback which they offer to themselves and the revision that they make to their writings drafts (Rollinson 2005). Nonetheless, to gain better results, it is recommended that teachers train students on how to edit their peers' writing drafts effectively and check if

the editing is correctly carried out. Giving students time and opportunity to critically read and edit other students' writing drafts may make them more critical readers.

As was proposed by Storch (1999), the collaboration process and the metatalk occurring during that process positively affect the overall grammatical accuracy. She argues that when students interact with each other in collaborative activity such as writing and editing, they themselves learn how to write. The present study demonstrated that the editors who gave peer-editing to receivers were also aware of their own accuracy errors and tried to obviate them during revising their first drafts.

It should be noted that this study had some methodological limitations that need to be considered. The study was a classroom-based research with intact groups; therefore, other variables such as gender, sampling, number of participants and learners' exposure to other classes may intervene in the effect of feedback on their accuracy results. This suggests that the results may only be true under conditions similar to those of the current study and are limited in their generalizability. Another limitation of this study is that it has only considered one aspect of writing, that is accuracy, and global aspects of writing such as organisation, content, coherence, and overall writing quality were not tackled. Considering qualitative analysis, it is also suggested that further studies delve into the participants' metatalk and interaction during peer-editing sessions. This would shed more light on their writing processes and the misunderstandings that may arise during the editing process.

REFERENCES

- Aljaafreh, A. & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78, 465–483.
- Ashwell, T. (2000). Patterns of teacher response to student writing in a multi-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9(3), 227-257.
- Baleghizadeh, S. & Arab, F. (2011). The impact of pair work on promoting noticing among EFL learners. *3L: The Southeast Asian Journal of English Language Studies*, 17, 18–31.
- Barnard, R. & Campbell, L. (2005) sociocultural theory and the teaching of process writing: The scaffolding of learning in a university context. *The TESOL Journal*, 13, 76-88.
- Beuningen, C. V. (2010). Corrective feedback in L2 writing: Theoretical perspectives, empirical insights, and future directions. *International Journal of English Studies*, 10, 1-27.
- Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing*, 17, 10–18.
- Bitchener, J. & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research*, 12 (3).
- Brandt, C. (2008). Integrating feedback and reflection in teacher preparation. *ELT Journal*, 62, 37-46.
- 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.
- Chaudron, C. (1984). The effects of feedback on students' composition revisions, *RELC Journal* 15, 1-14.
- Connor, U. & Asenavage, K. (1994). Peer response groups in ESL writing classes: How much impact on revision? *Journal of Second Language Writing*, 3, 257–276.
- Diab, N. M. (2010). Effects of peer-versus self-editing on students' revision of language errors in revised drafts. *System*, 38, 85-95.
- Diab, N. M. (2011). Assessing the relationship between different types of student feedback and the quality of revised writing. *Assessing writing*, 16, 274-292.
- Ellis, R. & Barkhuizen, G. (2005). *Analysing learner language*. Oxford: Oxford University Press.
- Emig, J. (1971). *The composing process of twelfth graders*. Urbana, IL: National Council of Teachers of English.
- Fathman, A. & Whaley, E. (1990). Teacher response to student writing: focus on form versus content. In: Kroll, B. (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). Cambridge University Press, Cambridge.
- Ferris, D. R. (1997). The influence of teacher commentary on student revision. *TESOL Quarterly*, 31, 315– 339.
- Ferris, D. R. (1999a). Teaching ESL composition students to become independent self-editors. *TESOL Journal*, 4 (4), 18-22.

- Ferris, D. R. (1999b). The case for grammar correction in L2 writing class. A response to Truscott (1996). *Journal of Second Language Writing*, 8, 1–11.
- 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, 49–62.
- Ferris, D. R. (2006). *Does error feedback help student writer?* 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: Cambridge University Press.
- Ferris, D. R. & Helt, M. (2000). Was Truscott right? New evidence on the effects of error correction in L2 writing classes. Paper presented at Proceedings of the American Association of Applied Linguistics Conference, Vancouver, B.C., March, 11–14.
- Ferris, D.R. & Roberts, B. (2001). Error feedback in L2 writing classes: how explicit does it need to be? *Journal of Second Language Writing*, 10, 161–184.
- Gass, S. M. (1988). Second language vocabulary acquisition. *Annual Review of Applied Linguistics*, 9, 92–106.
- Gass, S. M. (1990). Second and foreign language learning: Same, different or none of the above? In Van Patten, B. & Lee, L. (Eds.), *Second language acquisition* (pp. 34-44). Clevedon, UK: Multilingual Matters.
- Gass, S. M. (1991). Grammar instruction, selective attention and learning. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood Smith & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 124-141). Clevedon, UK: Multilingual Matters.
- Hyland, F. (2000). ESL writers and feedback: Giving more autonomy to students. *Language Testing Research*, 4, 33–54.
- Hyland, F. (2003). Focusing on form: student engagement with teacher feedback. *System*, 31, 217–230.
- Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39, 83–101.
- Kepner, C. G. (1991). An experiment in the relationship of types of written feedback to the development of second language writing skills. *Modern Language Journal*, 75, 305–313.
- Kwok, L. (2008). Students' perceptions of peer evaluation and teachers' role in seminar discussions. *Electronic Journal of Foreign Language Teaching*, 5, 84–97.
- Lantolf, J. P. & Pavlenko, A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.
- Lee, I. (1997). Peer reviews in Hong Kong tertiary classroom. *TESL Canada Journal*, 15, 58–69.
- Lightbown, P. M. & Spada, N. (1999). *How languages are learned*. Oxford, UK: Oxford University Press.
- 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, 30-43.
- Mangelsdorf, K. (1992). Peer reviews in the ESL composition classroom: What do the students think? *ELT Journal*, 46, 274–284.
- Mansourizadeh, K. & Abdullah, K. (2014). The effects of oral and written metalinguistic feedback on ESL students writing. *3L: The Southeast Asian Journal of English language Studies*, 20, 117-126.
- Nassaji, H. & Swain, M. (2000). A Vygotskian perspective on corrective feedback in L2: The effect of random versus negotiated help on the learning of English articles. *Language Awareness*, 9, 34–51.
- Nelson, G. & Murphy, J. (1993). Peer response groups: Do L2 writers use peer comments in revising their drafts? *TESOL Quarterly*, 27, 135-142.
- Nor Fariza Mohd Nor, Tan, K.H. & Noraini Ibrahim (2012). Investigating composing strategies in the project papers of Arab postgraduate students. *3L: The Southeast Asian Journal of English Language Studies*. 18(3), 135-153.
- Nunan, D. (1999). *Second language teaching and learning*. Boston: Heinle & Heinle.
- Ohta, A. S. (2001). *Second language acquisition processes in the classroom: Learning Japanese*. Mahwah, NJ: Lawrence Erlbaum.
- Olsher, D. (1995). *Words in motion: An interactive approach to writing*. Oxford: Oxford University Press.
- Olson, D. (1995). Writing and the mind. In J. Wertsch, P. Del Rio, and A. Alvarez (Eds.). *Sociocultural Studies of Mind*, (pp. 95–123). Cambridge University Press.
- Polio, C., Fleck, N. & Leder, N. (1998). If only I had more time: ESL learners' changes in linguistic accuracy on essay revisions. *Journal of Second Language Writing*, 7, 43–68.
- Paulus, T. (1999). The effect of peer and teacher feedback on student writing. *Journal of Second Language Writing*, 8 (3), 265–289.
- Rollinson, P. (2005). Using peer feedback in the ESL writing class. *ELT Journal*, 59(1): 23-30.
- Sadeghi, K. & Daulati Baneh, M. (2012). Relationship between student self-monitoring, type of peer feedback and EFL writing performance. *Theory and Practice in Language Studies*, 2(5), 909-915.
- Sampson, A. (2012). Coded and uncoded error feedback: Effects on error frequencies in adult Colombian EFL learners writing. *System*, 494-504.

- Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 128-158.
- Sheen, Y., Wright, D. & Moldawa, (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, 37, 556-569.
- Storch, N. (1999). Are two heads better than one? Pair work and grammatical accuracy. *Systems*, 27 (3), 363-374.
- Swain, M. (1997). Collaborative dialogue: Its contribution to second language learning, *Revista Canaria de Estudios Ingleses*, 34, 115–132.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes, *Language Learning*, 46, 327-369.
- Truscott, J. (2004). Evidence and conjecture on the effects of correction: a response to Chandler. *Journal of Second Language Writing*, 13, 337–343.
- Vengadasamy, R. (2002). Responding to student writing: Motivate, not criticize. *GEMA Online Journal of Language Studies*, 2, 40-49.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press, Cambridge, MA.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge: The MIT Press.
- 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. *Assessing Writing*, 12 (3), 180–198.
- Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly*, 17, 165–187.
- Zhao, H. (2010). Investigating learners’ use and understanding of peer and teacher feedback on writing: A comparative study in a Chinese English writing classroom. *Assessing Writing*, 15, 3-17.

Appendix

Editing symbols and examples adapted from Olsher (1995)

<i>Symbol</i>	<i>Kind of error</i>	<i>Example</i>
C	Capitalization	<i>My birthday is in <u>january</u>.</i>
P	Punctuation	<i>It's a great movie?</i>
Sp	Spelling	<i>We <u>luve</u> chocolate.</i>
WF	Word formation	<i>He is a <u>kindly</u> person.</i>
S/V	Subject-verb Agreement	<i>She <u>like</u> swimming.</i>
Vt	Verb tense Agreement	<i>I <u>have</u> a great party yesterday.</i>
φ	Delete	<i>I'm going <u>to</u> shopping now.</i>
WW	Wrong word	<i>Turn <u>write</u> at the corner.</i>
WO	Word order	<i>I <u>you see will</u> later.</i>
^	Add something	<i>It is <u>^beautiful</u> afternoon.</i>
Pl/Sg	Plural/singular	<i>I have three <u>sister</u>.</i>
Conj	Conjunction	<i>We studied very hard, <u>but</u> we passed the exam.</i>
/	Separate these words	<i>I go to school <u>everyday</u>.</i>
()	Should be one word	<i><u>Every bodyis</u> late today.</i>