

## Assessing the Effect of Direct and Indirect Corrective Feedback in Process-based vs Product-based Instruction on Learners' Writing

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### Abstract

The present study peruses EFL learners in a kind of process-product approach in writing and investigates the possible effects of teachers' direct and indirect corrective feedback in four English language institutes in Isfahan, Iran. Four groups of intermediate students participated as a case in this study. The total number of participants was 120 female EFL learners selected based on a convenient non-random sampling method but randomly divided into four experimental groups. In the first group, the product-based approach was used to teach writing, and the learners received direct corrective feedback. In the second group, again product-based approach was used to teach writing, and the learners received indirect corrective feedback. In the third group, the writing was taught using a process-based approach, and the learners received direct corrective feedback, and in the last group, the learners received indirect feedback in process-based writing. The writing performance of the students in all four groups was compared in terms of accuracy. ANOVA and Post-hoc tests revealed that the process-based approach through which direct feedback was provided was more effective than other teaching writing approaches.

**Keywords:** *Direct Corrective Feedback, EFL Writing, Indirect Corrective Feedback, Process-Based Approach, Product-Based Approach*

## Introduction

One of the most critical issues in second language acquisition (SLA) is the discussion of explicit and implicit proficiency in L2 learning. The main issue in explicit-implicit differentiation is to evaluate the probability of unconsciousness learning (Andringa & Rebuschat, 2015). In other words, the main distinction between explicit and implicit knowledge lies in the fact that whether learners are aware of what they know (Godfroid, Loewen, Jung, Park, Gass, & Ellis, 2015).

The topic of presenting written corrective feedback has been an ongoing issue in second language acquisition (SLA) for about three decades (Reinders & Mohebbi, 2018). There have been many debates for and against the benefits of teacher and learner feedback on L2 writing. Despite the importance given to the instructor feedback, L2 research findings challenge teacher feedback's discerned effect on improving L2 writing (Ferris, 1995). It is discussed that teacher feedback might have damaging effects on L2 learners' writing (Hyland, 2000). One of the essential skills in learning English as a second language is writing fluently. It is a fundamental skill in the process of learning English as a second language. Accuracy of writing is concerned as an essential skill in all EFL writing classes. The students' performance is usually evaluated according to their accuracy in different areas such as punctuation and spelling (as cited in Gholami-Pasand & Bazarmaj-Haghi, 2013). The most important task of the teachers in this way is motivating and encouraging the learners to write. Bulut and Erel (2007) also mentioned that most of the EFL/ESL teachers in the field of learning writing believe that reacting to the students' writing via corrective feedback is an integral part of any writing course. Also, Adams (2003) mentions that writing and giving feedback is very important in second language acquisition.

The important aspect, which is the central focus of this study, was the distinction between direct and indirect error correction strategies. Teachers use these two strategies to give comments, respond, and correct the students' grammatical errors to improve their writing accuracy. Teachers use these two main strategies to respond, comment, and correct grammatical errors to improve their writing accuracy (AlizadehSalteh & Sadeghi, 2012). Direct error feedback is provided when the correct form is written on a student's paper. In contrast, indirect error feedback is provided if the teacher indirectly indicates the error by highlighting, underlining, or circling without providing the correct form (Lee, 2004).

Also, there are two approaches to perform direct and indirect corrective feedback on EFL learners' writing in this study, process-based and product-based approach. Tangpermpoon (2008) stated that the process-based approach is an activity in which writing is regarded as discovering meaning and ideas, whereas in a product-based approach, writers first pre-write, then write and finally correct their writings. In a product-based approach, students' awareness is raised (Gholami-Pasand & Bazarmaj-Haghi, 2013). Kaplan (1982) distinguished between two kinds of writing: writing without composing and writing through composing. He believed that "writing is a process and the teaching of writing needs to deal with the process in all of its complexity and not merely with the product"(p.147), so writing tasks need to be set up in ways to reflect the writing process of good writers. In conclusion, writing accuracy is crucial in EFL writing

classrooms. Writing is usually evaluated according to their accuracy in grammatical areas, spelling, and punctuation. The positive or negative effect of direct and indirect corrective feedback in both process-based and product-based approaches is undeniable.

Writing is often a neglected skill in most EFL/ESL classes because writing is one of the most challenging and time-consuming tasks. It takes lots of time and mental energy. Also, teachers need a great deal of time to read, respond, and correct the learners' grammatical errors. According to Graves (1984), corresponding to this lack of attention to writing instruction has been a neglect of research in writing compared to other skill areas (Gomez, 1996). Most studies have investigated the effect of teacher's direct and indirect feedback on the students' writing. For example, in a study done by LanAnh (2008), he investigated the impact of indirect corrective feedback on EFL learners' writing. His overall result implied that using indirect feedback in EFL classes could be faithful and effective in reducing students' grammatical errors in the Vietnamese context. As teachers of the English language, the researchers wondered if the feedback given to students on English writing is retained. They wanted to test the effectiveness of two types of corrective feedback, direct and indirect corrective feedback, and find out why some corrections and some grammar aspects were remembered while others were lost. Also, they wanted to discover which corrective feedback technique is more effective, specifically for the learning of written English modals immediately. Additionally, they wanted to test the effectiveness of two approaches, the process-based approach and the product-based approach to teaching writing to EFL learners.

## **The Literature Review**

### **Direct and indirect feedback**

In the feedback literature, some scholars have made a distinction between direct and indirect feedback. One type of feedback that is commonly employed by teachers is direct feedback. Mahfoodh (2017) studies learners' emotional reactions to teacher feedback. The results of that study revealed that the learners felt confused after receiving teacher feedback. Some students favoured the teacher's feedback, while others rejected it, some expressed satisfaction, and some were dissatisfied with teacher feedback. Different aspects of direct and indirect corrective feedback helped learners in different ways to commit to different types of corrective feedback firmly (Karim & Nassaji, 2020). Regarding the direct corrective feedback, students who successfully corrected errors believed that explicit information or correction was an effective way of learning. Direct feedback refers to helping students correct their errors by providing the correct linguistic form (Ferris, 2006). Lee (2003) adds that immediate criticism might be fitting for novice understudies, or in a circumstance when blunders are untreatable. Direct feedback is provided when the writer is provided with the correct form; if the student revises the text, she/he needs to transcribe the correction into the final version. The positive effect of peer feedback could have the inherent effect of facilitating learner autonomy and inspiring learners to take a vital role in L2 learning. Peer feedback might evoke learners' consciousness of their strengths and weaknesses in L2 writing, help learners become familiar with L2 writing and critical reading

academic aspects, enhance reflection, facilitate mutual learning, and presuppose an active role for learners in L2 learning (Rouhi, Dibah, & Mohebbi, 2020). Indirect feedback helps students correct their errors by identifying an error without introducing the correct form (Burton, Chairperson, Lockee, Potter, Evans & Culver, 2011). In indirect feedback, teachers only make students aware that an error exists but do not provide them with the correction. The studies to examine the effects of these two types of feedback reported that indirect feedback helps students progress in accuracy over time more than direct feedback (Ferris et al., 2001). Boyer Hassani, Chalak, and Heidari Tabrizi (2020) investigated the effect of the synchronicity factor on the feedback types. The results showed that the highest frequency belonged to the comments on language use. This finding seems logical since the participants of that study were all non-native learners of English, and the occurrence of grammatical errors and mistakes was predictable. The findings of that study also revealed that the students in the asynchronous group provided significantly more global feedback on their peers' texts. Biria and Khaki (2016) in a study showed that the MA students who practice self-edition performed better in writing tests compared with those MA students whose writings were exposed to peer-edition. The PhD students who practice self-edition performed better in writing tests compared with those PhD students whose writings were exposed to peer-edition.

### **Product-based Approach**

The large sources of the literature review related to product-based writing have investigated the distinction between employing the product approach and other approaches. For example, Safari and Bagheri (2017) examined second language learners' writing performance on the strategies they employed in IELTS writing and proved the process's effectiveness over the product strategy. Teaching writing is a complex process with different approaches. One approach is a product-based approach in which students first pre-write, then compose, and finally correct it. In this approach, students' awareness is raised first. Nunan (1999) stated that the final product should be a coherent, error-free text in this approach. Murray (1980) believed that one disadvantage of this approach is that providing model texts prevents creativity. Furthermore, Saeidi and Sahebkhair (2011) believed that the product-based approach helps learners use the same plan in different situations. On the other hand, when models are suitably used for the writing process's content, they can be considered useful tools. In a comparative study between the product-based and the process-based approaches in writing, Haiyan and Rilong (2016) conclude learners not only enthusiastic in reading materials but also employed in their writing what they had learned in their reading, especially regarding the choice of vocabulary, coherence, and tense of verbs. In another study, Pasand and Haghi (2013) employed a process-product approach and showed that finishing an incomplete model instead of copying it improves learners' writing ability.

### **Process-based Approach**

Most of the process-based studies have paid their focus on the application of metacognitive strategies. In a metacognitive study, Bengisu and Seyit (2016) concluded that teaching these

skills could improve the students' narrative writing progress. In another study, Lam (2015) investigated the effect of direct teaching in process-oriented pedagogy on learners' writing improvement, metacognitive information, and self-regulation. He showed that the students' level of self-regulation improved in fulfilling several writing tasks. Mourssi (2013) found that instructors' metalinguistic feedback in process-based writing helps learners write more accurately and fluently. Sarhady (2015), Alodwan and Ibnian (2014), and Akinwamide (2012) also showed that process-based writing teaching was more helpful than the product-based for improving writing ability. In this approach, the main focus is on considering the steps involved in drafting and redrafting a workpiece (Nunan, 1999). Its chief concern is discovering what writers do when they write by focusing on different stages that the writers will go through. Matsuda (2003) states, "The idea of composing as the cycle was acquainted with L2 concentrates by Vivian Zamel (1976), who contended that best in class L2 journalists are like L1 essayists and can profit by guidance accentuating the way toward composing. As opposed to the perspective on composing as are creations of recently learned syntactic or talk structures, the cycle based methodology underscored the perspective on composing as a cycle of creating association just as significant (p. 21)". According to O'Brian (2004), the process approach is an activity in which writing is the meaning of discovery. Schmitt (2002) states that the process approach considers the composing act as a generative process. Myles (2002) also states that the process approach is only suitable when learners can receive feedback on their written text. Therefore, the process-based approach to writing seems to be more effective than the product-based approach because it allows students to develop a personal writing approach (Sutikno, 2008). According to Torghabeh, Hashemi, and Ahmadi (2010), the model can ease the burden of devising content from the learners.

### **Process-Product Approach to Writing**

According to Tangpermpoon (2008), if the writing approaches are taught separately, unbalanced writing may be produced. Therefore, by combining these approaches, EFL learners can transfer their skills from one approach to another. Accordingly, writing teachers can teach EFL learners the product-based approach patterns (GholamiPasand & BazarmajHaghi, 2013). Some studies have investigated the effects of feedback on student writing. Examples of such studies include Min (2006); Tsui and Ng (2000); Ferris and Roberts (2001); Frantzen, (1995); Hyland and Hyland (2001); Ashwell (2000); Bitchener (2008); Bitchener et al. (2005); Chandler (2003); Ferris and Roberts (2001); Bitchener et al. (2005); Goldstein (2004); Buck (2008); Liu and Sadler (2003); Matsumura and Hann (2004); Tuzi (2004). The numerous examinations on input in its numerous structures and its adequacy on understudy composing show the particular status of criticism in the educating and learning of composing.

Alharrasi (2019) investigated the effectiveness of direct and indirect written corrective feedback on improving Omani EFL students' grammatical accuracy regarding two newly-learned linguistic structures: the comparative and prepositions of space. A think-aloud protocol (TAP) was used to answer various questions about written corrective feedback. The participants were

assigned to a control group and two treatment groups: one group received direct corrections written above their errors, and one group received the underlining of errors only. The findings showed that the direct and indirect written corrective feedback improved the students' grammatical accuracy during revision for both linguistic structures, but a significant effect was found for direct written corrective feedback only. In another related study, Nematzadeh and Siahpoosh (2017) investigated the effectiveness of direct correction and indirect (underlining) written CF in improving intermediate Iranian EFL learners' grammatical accuracy in revising English use articles, prepositions, and verb tenses. They found that both types of written CF enhanced the learners' writing performance and 66 that statistically no significant difference was found between direct correction and the underlining of errors.

Shintani, Ellis, and Suzuki (2014) compared the effects of direct corrective feedback and metalinguistic explanation on Japanese university students' use of the indefinite article and the hypothetical conditional. The feedback types were given with and without an opportunity to rewrite. The feedback improved the accuracy in using the hypothetical conditional but not for the indefinite article. DCF led to more extended periods of accuracy than the ME. DCF followed by revision proved the most effective type of feedback. In the same line, Suarman (2013) studied the effect of direct, uncoded oral and written feedback on nine secondary school students' writing accuracy. Observation and documentary analysis were used to collect data. The result showed that overall, the feedback did not significantly affect the students' writing accuracy.

In the Iranian EFL setting, too, some research has been conducted on the influence of error correction and corrective feedback on learners' language development. Masoumi and Riasati (2014) investigated the effect of different corrective feedback types on Iranian EFL learners' language development. They investigated different types of corrective feedback strategies used by language teachers and examined the effect of corrective feedback strategies on learners' overall language development. Semi-structured interviews with language teachers and observations of the learners' performance in class during ten instructional sessions were used to gather the needed data. The results indicated that explicit correction, recast, clarification request, metalinguistic feedback, repetition, elicitation, and nonverbal signals were the teachers' main feedback strategies and attended to by the learners. The findings also showed a direct relationship between different corrective feedback strategies and EFL learners' output improvement based on produced errors. Latifi, Abedi, and Moinzadeh (2010), for example, investigated the effect of error correction vs error detection on Iranian pre-intermediate EFL learners' writing achievement. To this end, 60 pre-intermediate English learners were randomly divided into two groups: receiving feedback on their writing through error correction and receiving feedback in their writing through error detection using codes. Results indicated the positive effect of coded feedback on the learners' writing ability. The learners who had received coded feedback outperformed those receiving direct feedback in their writing performance. In another study, Rassaei and Moinzadeh (2011) examined three types of corrective feedback: recasts, metalinguistic feedback, and clarification requests, on the acquisition of English wh-question forms by Iranian EFL learners. Results indicated that recasts and metalinguistic

feedback had a significant influence on learners' performance on the post-test. Although the recast group outperformed the post-test's clarification and control groups, the metalinguistic group performed significantly better than the recast group.

## **The Study**

### **Research Questions**

Regarding the aims of the present study, the following research questions are posed:

RQ<sub>1</sub>: Is there any significant difference between the effects of direct corrective feedback in process-based writing instruction on EFL learners' writing?

RQ<sub>2</sub>: Is there any significant difference between the effects of indirect corrective feedback in process-based writing instruction on EFL learners' writing?

RQ<sub>3</sub>: Is there any significant difference between the effects of direct corrective feedback in product-based writing instruction on EFL learners' writing?

## **Methodology**

### **Design**

This research was a quasi-experimental design. The participants were chosen based on a convenient non-random method but were randomly divided into four experimental groups with two treatments. In this study, direct and indirect corrective feedback was considered independent, and writing is considered a dependent variable. The process-based and product-based approaches were the two modalities of this study.

### **Participants**

In the first phase of data collection, four groups of students receiving two different kinds of written feedback, direct and indirect corrective feedback, were compared using two writing approaches, process-based and product-based, and the frequencies of the grammatical errors appeared in their writings. The learners were studying at a language institute in Isfahan, Iran, and they were almost at the same proficiency level. A total number of 120 EFL learners were chosen among 160 participants studying English at a language institute in Isfahan, Iran. Those learners who scored between one standard deviation above or below the mean were chosen, and the others were discarded. The learners were female learners by the average age of 16. They were randomly classified into four experimental groups. They enjoyed the benefits of a real English classroom for an entire semester. The teacher of all four classes was the same, who was an experienced English teacher. In order to assess the learners' writing performance, the researcher chose a knowledgeable person to score the learners' writing performance. She was one of the experienced English teachers in the institute.

### **Instruments**

#### **Quick Oxford Placement Test (QOPT)**

The Oxford Quick Placement Test (OQPT) was used to measure the participants' language proficiency. The test consists of sixty items with different question formats comprising of two

parts. There are multiple-choice, item matching, and cloze test type items in the test. In each item, there is a missing word for which there are four options. Students should find the correct item among these options. All of the chosen participants for the present study were able to pass the test with a score of 30-45 out of 60. Based on the test scoring level chart of QOPT, those whose scores were between 28 and 37 were considered the intermediate-level and categorized to be at the same level according to the QOPT results.

### **Writing Pre and Post-tests and Rating Scale**

A writing composition test was administered both as a pre and post-test in all four experimental groups. The participants were asked to write a topic composition in 150-200 words in 45 minutes. To evaluate participants' writing achievement, the researcher used a reliable rating scale developed by Cambridge ESOL for the PET test. The rating was done based on the rating scale criteria, including the rating scale of 0-5.

### **Material**

The book used in this study was *Family and Friends 4*, written by Tamzin Thompson and Naomi Simmons and published by Oxford University Press. In every book unit, there is a lesson to train students to learn and produce English sounds. At levels 1-3, the lessons are supported by flashcards and more activities on the student Multi ROM.

### **Procedures**

Before starting the experiment, QOPT was administered among the language learners studying at a language institute in Isfahan, Iran. This test aimed to identify learners' overall language proficiency and homogenize them regarding their writing ability and language proficiency. To identify the effect of two corrective feedback processes and two methods of instruction of writing, the participants were divided into experimental groups which were chosen based on convenient non-random method, they randomly were divided into four experimental groups, 30 each. Before the semester, the researcher who was the teacher of all classes developed a series of writing tasks for the four groups' learners. The writing tasks were based on process, chronological order, cause and effect, and comparison and contrast methods of paragraph development. In the first session, the teacher provided some topics; the learners were asked to choose their topic of interest and then write about it. In a product-based approach, the teacher provided a composition model for the learners, and then she asked them to write a composition like the model. After reading and discussing the topic, its organization, lexical items, and grammatical points, the students started writing their paper based on the model text.

Students in both groups received direct or indirect corrective feedback, respectively. For direct corrective feedback, the error and target form were both identified, while in indirect corrective feedback, only error and its category were identified. In the first experimental group, the product-based approach was used to teach writing instruction, and the learners received direct corrective feedback. The process of writing was not important. The model texts were prepared

every session based on a short essay written about writing with some modifications to suit students' level. The students just wrote the paragraphs with 150-200 words as the final draft in 45 minutes. The teacher corrected the learners' mistakes, and the correct forms were written on the student's paper. The product-based approach was used to teach the other group participants, and they received indirect corrective feedback. The procedures were the same as the first group's procedures; the learners just received indirect corrective feedback instead of direct corrective feedback.

A process-based approach was used for another group in which they received direct corrective feedback. The language learners were asked not to finish their writing essays during the pre-writing stage. They were asked to complete their writing tasks in three pre-writing, writing, and post-writing stages. The teacher gave her feedback on their writing directly and indirectly. The other 30 learners were in Process-based approach was used to teach writing to the fourth group, and they received indirect corrective feedback. The participants received indirect corrective feedback instead of direct corrective feedback. The teacher corrected the learners' mistakes, and the correct form was written on the student's paper. In all process based groups, the learners were given a topic to write about, and in product-based groups, the teacher gave a model text for participants, and they were asked to write an essay according to that model. After the treatment, learners were asked to write their last composition. It was their post-test. The teacher collected their compositions and gave her feedback and response to the learners' performance; then, she gave them to the other teacher to receive their feedback on their writing performance.

## Results

As mentioned, the present study aimed to investigate the effects of direct and indirect corrective feedback on Iranian EFL learners' process vs product-based writing. Writing pre and post-tests were employed to compare the participants' performance. The following section presents the results.

Table 1

### *Descriptive statistics of Comparing the Pre-test of the Four Subgroups*

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	30	39.6000	4.04449	.90438	37.7071	41.4929	35.00	47.00
2	30	40.2632	4.88583	1.12089	39.3874	44.0863	34.00	49.00
3	30	38.2632	4.79400	1.09982	35.9525	40.5738	30.00	46.00
4	30	39.8421	5.70831	1.30958	37.0908	42.5934	30.00	48.00
Total	120	39.8571	4.94101	.56308	38.7357	40.9786	30.00	49.00

1= product-based direct feedback; 2= product-based indirect feedback; 3= process-based direct feedback; 4= process-based indirect feedback

According to the statistics presented in Table 1, there is no significant difference between the four subgroups' performance in the writing pre-test.

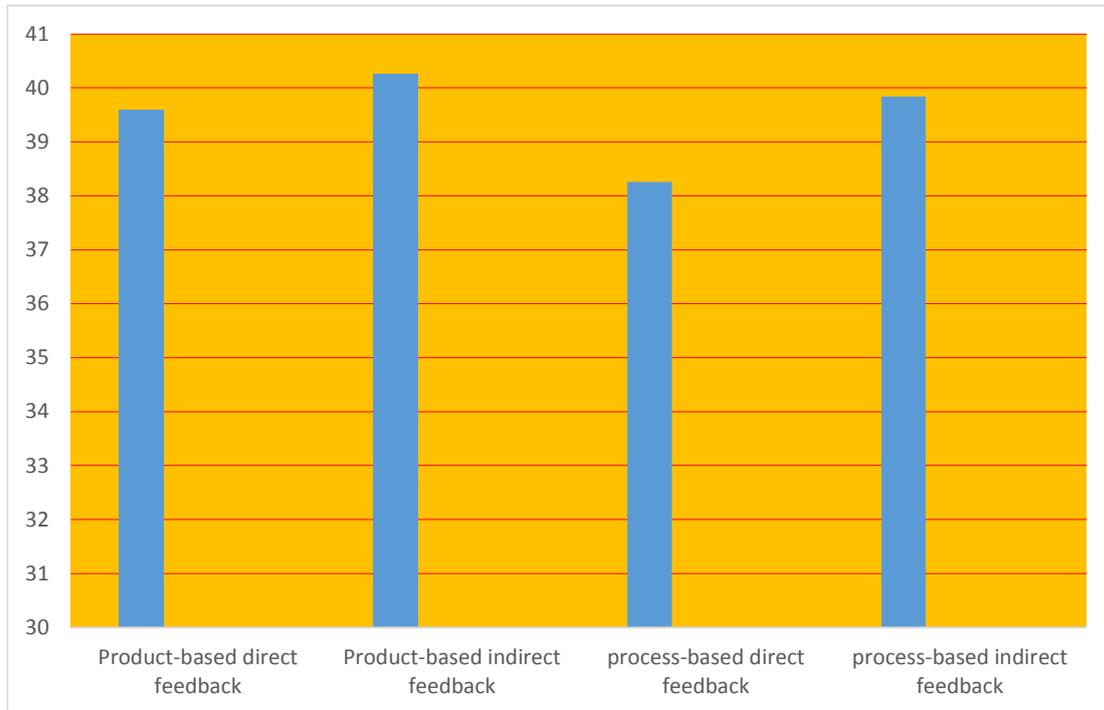


Figure 1. Mean difference of the writing pre-test of the four subgroups.

As shown in Figure 1, the bars presenting the difference among the four subgroups are not different. However, to be more accurate, a one-way analysis of variances (ANOVA) was conducted, the results of which are presented in Table 2.

Table 2

*The Results of ANOVA Comparing the Pre-test of the Four Subgroups*

Post-test scores					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	116.734	3	38.911	1.634	.189
Within Groups	1738.695	73	23.818		
Total	1855.429	76			

According to the figures presented in Table 2, the observed significance level is .189, which is higher than the identified level of significance, meaning that there was no significant difference among the four sub-groups in their writing pre-test after the treatment.

Table 3

*Descriptive Statistics of Comparing the Post-test of the Four Subgroups (N=30)*

	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
				Lower Bound	Upper Bound		
process-based direct feedback	50.6111	11.34040	2.67296	44.9717	56.2506	28.00	76.00
process-based indirect feedback	48.8636	8.22479	1.75353	45.2170	52.5103	35.00	68.00
product-based direct feedback	43.2222	8.50298	2.00417	38.9938	47.4507	30.00	62.00
product-based indirect feedback	45.8636	8.49815	1.81181	42.0958	49.6315	30.00	60.00
Total	47.1625	9.37738	1.04842	45.0757	49.2493	28.00	76.00

1= product-based direct feedback; 2= product-based indirect feedback; 3= process-based direct feedback; 4= process-based indirect feedback

As shown in Table 3, post-test means in the process-based direct feedback group was  $X=50.61$ , and for process-based indirect feedback equals  $X=48.86$ . The same results for post-test means for process-based direct feedback and process-based indirect feedback were found to be  $X=43.22$  and  $X=45.86$ , respectively. So a difference in post-test means groups could be observed. However, it was not clear yet whether the difference was significant or not.

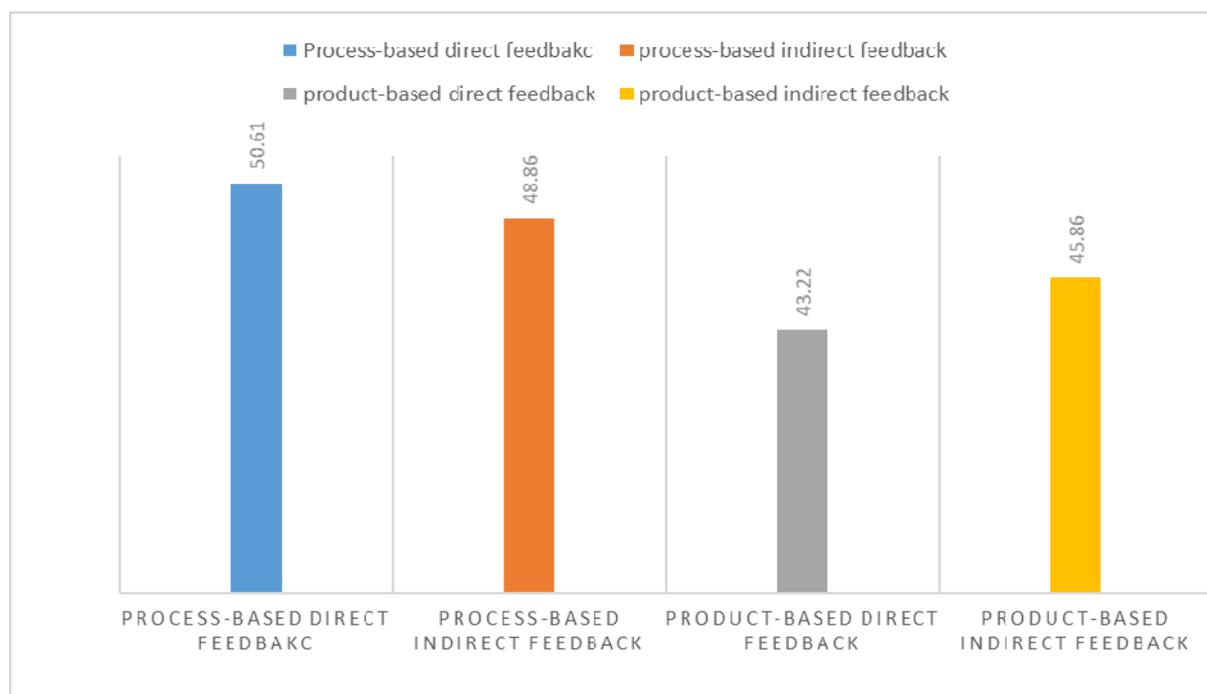


Figure 2. Means difference of Males and Females of both Groups

The next step was then to run a one-way analysis of variance (ANOVA) on the post-test results to compare the performance of all groups to see whether the difference is statistically significant or not. Table 4 represents the results.

Table 4  
*The Results of ANOVA Comparing the Pre-test of the Four Subgroups*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	594.317	3	198.106	2.370	.037
Within Groups	6352.571	76	83.586		
Total	6946.888	79			

As Table 4 indicates, the significant value is smaller higher than .05 ( $.03 > .05$ ), so there is a significant difference among the mean scores on the independent variable (post-test scores) for the four subgroups. In order to locate the difference and be more comprehensive, one can now look at the results of the post-hoc tests provided in Table 5.

Table 5  
*Results of Post-hoc Tests*

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	1.74747	2.90570	.549	-4.0397	7.5347
	3	7.38889*	3.04752	.018	1.3192	13.4586
	4	4.74747	2.90570	.106	-1.0397	10.5347
2	1	-1.74747	2.90570	.549	-7.5347	4.0397
	3	5.64141	2.90570	.056	-.1458	11.4286
	4	3.00000	2.75659	.280	-2.4902	8.4902
3	1	-7.38889*	3.04752	.018	-13.4586	-1.3192
	2	-5.64141	2.90570	.056	-11.4286	.1458
	4	-2.64141	2.90570	.366	-8.4286	3.1458
4	1	-4.74747	2.90570	.106	-10.5347	1.0397
	2	-3.00000	2.75659	.280	-8.4902	2.4902
	3	2.64141	2.90570	.366	-3.1458	8.4286

\*. The mean difference is significant at the 0.05 level.

1= product-based direct feedback; 2= product-based indirect feedback; 3= process-based direct feedback; 4= process-based indirect feedback

As Table 5 shows, the process-based writing group which received direct feedback was statistically different from other groups.

## Discussion

As mentioned above, different corrective feedback approaches have often been classified as either direct or indirect types of correction, and various theories concerning their relative effectiveness have been investigated. A large number of studies aimed to gain insights into the differential effects of direct and indirect CF on learners' written accuracy development. Regarding the fact that the insights from recent SLA oriented corrective feedback studies greatly

concentrate on the error correction debate by ignoring the question if corrective feedback can affect the written accuracy development, there are still many issues that need further exploration. This section will present some suggestions and directions for future CF research. Enhancing learners with corrective feedback has a long history of discussions. Some scholars (Ashwell, 2000; Chandler, 2003; Ferris, 1997, as cited in Bulut & Erel, 2007) suggest that error correction helps language learning while some others (Kepner, 1991; Truscott, 1996, as cited in Bulut & Erel, 2007) state that error correction does not help students improve their written accuracy, and it is even potentially harmful to students' writing ability. The present research aimed to investigate the effects of direct and indirect feedback delivered in the process and product-based writing. The results revealed that direct feedback provided during process-based writing was the most effective type of feedback. The findings can be explained because engaging learners in learning enables students to improve their performance in writing tests. Furthermore, this finding may be attributed to the fact that language learners prefer the process-based approach more than the product-based approach because they communicate with each other and the teachers during the writing process, so the class is not boring. Besides, according to (Okedara et al., 2002), the process approach is a generative, non-linear approach, which causes students to discover their ideas while doing the task. In terms of the interaction between processes based writing and feedback, it should be noted that this approach to writing seems to work the best when it interacts with feedback. In this regard, Myles (2002) believed that the process approach to writing works only when learners are provided with feedback on their writing. Therefore, the process-based approach provides language learners to reform their plans, ideas, and language (Myles, 2002, as cited in GholamiPasand & BazarmajHaghi, 2013). This finding supports Kolade (2012) findings, who investigated the effect of the process approach on ESL learners' performance in their writing performance. Kolade (2012) showed a significant influence of feedback on language learners' writing performance.

Most of the research studies on the field of corrective feedback in L2 writing have investigated the relationship between error correction and writing skill. The findings of this study concerning this issue have argued against the role of grammar correction in improving writing ability, especially grammatical proficiency. However, there are significant research studies that argue in the field of the effect of peer correction on improving writing. As mentioned earlier, the debate about the role of correction in helping L2 writers to self-edit their composition is still continuous. Error correction could notably improve the learners' writing skill. Also, corrective feedback is helpful for learners when their writing performance is considered as a whole; because the overall writing performance of the learners in this study improved significantly. A more promising result was found in Chandler's study (2003), in which the experimental group received underlining treatment and was asked to correct the underlined errors before writing the next assignment. After doing four assignments, there was a significant improvement in student writing on the fifth assignment. Recent studies by Ashwell (2000), Fathman and Whalley (1990), Ferris and Roberts (2001), and Lee (1997; 2004) have all found that groups receiving corrective feedback significantly outperformed groups who were receiving no feedback.

Another point of interest would be the lexical and structural complexity of learners' written production before and after peer error correction. One of Truscott's (2004; 2007) alternative explanations for accuracy gains found in earlier studies is avoidance. He claims that the corrected students in Chandler's (2003) study, for example, might not have gained accuracy because they benefited from corrective feedback, but because they simplified their writing. Truscott argues that it is the immediate goal of corrective feedback to make learners aware of the errors they committed, and that this awareness creates a motivation for students to avoid the corrected constructions (Truscott, 2007). Further research is necessary to test the avoidance hypothesis.

Moreover, as suggested in the literature (e.g. Ferris, 2004; Hyland & Hyland, 2006), it might be the case that indirect corrective feedback is not advantageous to lower proficiency second language learners, since they lack the linguistic competence to self-correct their errors. It would therefore be interesting to investigate the influence of language proficiency on the uptake of the different feedback forms. We will address these three issues in a follow-up study (N=280), in which we will furthermore incorporate a postponed post-test to investigate whether or not the effect of error correction will still prevail three weeks after the moment of treatment.

The results of this study are in line with Chandler (2003), Ferris (1999) and Bitchener (2008) on the idea that enhancing the learners an awareness of the errors they make or providing them with the correct form directly enhances linguistically correct written output; and the results are in contrast with Anh (2012) in that using indirect feedback in EFL writing classes could be a fruitful and effective method to reduce grammatical errors of students, and Kepner (1991) that corrective feedback by the teacher is not effective for developing accuracy in L2 students' writing.

In general, the findings of this study show that the process-based approach in teaching writing evokes learners to write effectively. Moreover, learners safe to write effectively and share their writing with the teacher and other peers at the same time while considering all these comments to upgrade their writing. The scholars understand the effectiveness of a process-oriented approach is empirical and teaching writing in a process-based approach to EFL learners is more effective than product-based approach. Moreover, there is a significant difference between the effect of process-based and product-based approach in teaching writing on EFL learners writing ability. The product-oriented approach to the teaching of writing emphasizes mechanical aspects of writing, such as focusing on grammatical and syntactical structures and imitating models. This approach fails to recognize that learners write for an audience and purpose and that ideas are created and formulated during the process of writing. Process-oriented approaches concern the process of how ideas are developed and formulated in writing. The findings of this study showed that Process-based approach has more impact on grammar and word choice of the learners in writing. Furthermore, the results are in line with some more studies like the studies by Bitchener (2008) and Chandler (2003) on the idea that when the learners are aware of their mistakes, it improves their writing test performance. On the other hand, according to Gocsik (2005) that in the product-based approach, language teachers only assign a topic to the learners and score the

essays. The recent paper's findings also confirmed the study by Trupe (2001), who stated that effective intervention results in better papers. Students required to spend more time on a paper will think more about their topic and better understand it. Furthermore, students need to practice their writing. On the other hand, the results contradict the study by Anh (2012). Anh (2012) found that using indirect feedback in EFL writing classes can reduce students' grammatical errors. Another study that showed no significant effect of corrective feedback was the study by Kepner (1991).

In addition to the overall importance of written error correction to learners writing development, SLA scholars and researchers have been focused on specific issues, such as the effectiveness of various corrective feedback approaches and the correctability of different error types. A related first conclusion that arises from the available empirical data is that learners can benefit from both focused (i.e. CF targeting a specific type of errors only) and unfocused CF (i.e. CF targeting all errors, irrespective of the error type). One of the theoretical applications of the findings of this study is that learners seem to have enough attentional resources available to be able to attend to a broad range of linguistic features within one text. As mentioned above, it might be the hidden feature of writing that prevents learners from becoming cognitively overloaded when presented with unfocused or comprehensive corrections (e.g. Sheen, 2010a). A second observation is that no error type has proven to be dead-end and that Truscott's (2001; 2007) hypothesis that grammatical errors are unexposed to corrective feedback could thus be rejected. Finally, empirical evidence so far seems to suggest that learners benefit more from direct corrective feedback than from indirect corrective feedback, primarily when corrective feedback focuses on errors within the grammatical domain. One possible explanation might be that only direct CF presents learners with the kind of explicit information that is needed for cognitive learning processes, such as noticing and hypothesis testing (e.g. Bitchener & Knoch, 2010b).

## **Conclusion**

The results obtained from this study revealed that a process-oriented approach to writing effectively develops writing skill. Today developing professional writers is one of the essential purposes of language teaching. So it is logical to look for effective ways to improve the knowledge of English writing. The more significant part of the instructors accepted that if an educator shows a composed syntactic mistake on an understudy's paper and gives the right structure in some manner, the language student will understand the blunder and will not rehash it in future compositions. As a result, the ability to write accurately will be improved. Also, Ashwell (2000) mentions that teachers correct the students' writing errors because they believe that error correction will help them improve the accuracy of their writing. The current research is relevant to writing pedagogy, considering that such pedagogy improves students' written grammatical accuracy. Moreover, its purpose is to examine the role of corrective feedback in L2 acquisition in writing. Writing is a complex activity, and writing teachers view corrective feedback more broadly than second language acquisition researchers. The results of this research,

which aims to test the comparative effect of two types of corrective feedback by using two approaches to the instruction of writing to EFL learners, may benefit writing teachers. The result of this study may help teachers to achieve a better notion of composition writing. It may also provide empirical evidence for choosing the appropriate approach to teaching the instruction of writing. Furthermore, it is hoped that the present study helps the writing teachers devise writing tasks, resulting in their students' achieving the desired goals and purposes of writing that they wish to. Although teaching written corrective feedback is a tedious task, it is considered a valid and practical strategy. Teachers' proficiency in teaching writing and direct and indirect corrective feedback practice plays an essential role in their educational field. Therefore, researchers need to facilitate the quality of direct and indirect corrective feedback tasks in language teaching classrooms. Further research is needed to increase the quality of writing instruction in L2 learning classrooms and to provide practical suggestions for further research in this field.

## References

- Akinwamide, T. K. (2012). The influence of process approach on English as second language Students' Performances in Essay Writing. *English Language Teaching*, 5 (3), 16-29.
- Alharrasi, S., N., M. (2019) the effectiveness of direct and indirect written corrective feedback in improving the grammatical accuracy of Omani EFL learners. Unpublished PhD Dissertation. The University of Stirling.
- AlizadehSalteh, M., Sadeghi, K. (2012). Teachers' Corrective Feedback in L2 Writing Revisited: Concerns Against and Suggestions for its Employment. *World Applied Sciences Journal*, 17(3), 375-383. Retrieved from: [http://www.idiosci.org/wasj/wasj\\_17\(3\)12/16.pdf](http://www.idiosci.org/wasj/wasj_17(3)12/16.pdf)
- Ancker, W. (2000). Errors and corrective feedback: updated theory and classroom practice. *English Teaching forum*, 38(4), 20-24
- Anh, P., L. (2010). The impact of indirect corrective feedback on learners' grammatical errors in EFL writing classes. *Towards a Better School Journal*, 21(2), 125-140.
- Anh, L., p. (2008). The Impact of Indirect Feedback on Learners' Grammatical Errors in EFL Writing Classes. Retrieved from: <http://sj.ctu.edu.vn/index.php/qt2008>
- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9(3), 227-258. Retrieved from <http://books.google.com/books?id=eIKCi8>
- Bengisu, K., & Seyit, A., (2016). The Effect of Process-Based Writing Focused on Metacognitive Skills-Oriented to Fourth Grade Students' Narrative Writing Skill. *Education and Science*, 41 (187), 137-164.
- Beuningen, C., G., & De Jong, N., H., & Kuiken, F., (2005). The effect of direct and indirect corrective feedback on L2 learners' written accuracy. Retrieved from <http://dare.uva.nl/document/168926>
- Biria, R., & Khaki, M., (2016). Effects of Self- and Peer-Editing on Iranian TEFL Postgraduate Students' L2 Writing. *Journal of Applied Linguistics and Language Research*, 3(1), 155-166
- Bitchener, J. & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Sage*, 12(3), 409-431. Doi: 10.1177/1362168808089924
- Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing*, 17, 102-118.
- Bulut, D., & Erel, S. (2007). Error treatment in L2 writing: a comparative study of direct and indirect coded feedback in Turkish EFL context. *Sosyal Bilimler Enstitüsü Dergisi Sayı*. Retrieved from [http://sbe.erciyes.edu.tr/dergi/sayi\\_22/24-%20\(397-415.%20syf.\)pdf](http://sbe.erciyes.edu.tr/dergi/sayi_22/24-%20(397-415.%20syf.)pdf)

- Burton, J., K., Chairperson, Lockee, B., B., Potter, K., R., Evans M., A., & Culver, S., M. (2011). Impacts of Different Types of Teacher Corrective Feedback in Reducing Grammatical Errors on ESL/EFL Students' Writing. Retrieved from: [http://scholar.lib.vt.edu/theses/.../etd/Purnawarman\\_p\\_Dissertation\\_2011.pdf](http://scholar.lib.vt.edu/theses/.../etd/Purnawarman_p_Dissertation_2011.pdf)
- Chalak, A., Heidari Tabrizi, H., Hassani, J., (2020). Probing into the Effect of Synchronous and Asynchronous Computermediated Peer Feedback Practices on IELTS Learners'/Peers' Provided Comments. *International Journal of Future Generation Communication and Networking*, 13(4), 1234–1245
- 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, 267-269.
- Chaudron, C. (1988). Second Language Classrooms: Research on teaching and learning. Retrieved from net library: [http://books.google.com/books/about/second\\_language\\_classrooms.html?id=zipoGU1sFeYC](http://books.google.com/books/about/second_language_classrooms.html?id=zipoGU1sFeYC)
- Cotton, K. (2002). Teaching composition: research on effective practice. Retrieved from: [http://www.Hawaii.edulmauienglish/departmen.../teaching\\_composition.pdf](http://www.Hawaii.edulmauienglish/departmen.../teaching_composition.pdf)
- GolamiPasand, P., & BazarmajHaghi, E. (2013). Process-product approach to writing: the effect of model essays on EFL learners' writing accuracy. *International Journal of Applied Linguistics & English Literature*, 2(1), 75-80. Doi:10.7575/ijalel
- Gomez, R., Parker, R., Aleicio, R., L., & Gomez, L. (1996). Process versus product writing with limited English proficient students. *The Bilingual Research Journal*, 20(2), 209-233. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/15235882.1996.10668628>
- Karim, K., & Nassaji, H. (2020). The revision and transfer effects of direct and indirect comprehensive corrective feedback on ESL students' writing. *Language Teaching Research*, 24(4), 519-539.
- Kaplan, R., B. (1982). An Integrative Essay. In R. B. Kaplan (Ed). Annual review of applied linguistics.
- Lam, R. (2015). Understanding EFL Students' Development of Self-Regulated Learning in a Process-Oriented Writing Course. *TESOL Journal*, 6(3), 527-553
- Matsuda, P. K. (2003). Second language writing in the twentieth century: A situated historical perspective. In Kroll (Ed.) Exploring the dynamics of second language writing. Cambridge: Cambridge University Press.
- Nemati, M., Alavi, S. M., & Mohebbi, H. (2019). Assessing the effect of focused direct and focused indirect written corrective feedback on explicit and implicit knowledge of language learners. *Language Testing in Asia*, 9(1), 7.
- Nematzadeh, F. & Siahpoosh, H. (2017) the effect of teacher direct and indirect feedback on Iranian intermediate EFL learners' written performance, *Journal of Applied Linguistics and Language Learning*, 3 (5), 110-116.
- Pasand, P.G. & Haghi, E.B. (2013). Process-Product Approach to Writing: The Effect of Model Essays on EFL Learners' Writing Accuracy. *International Journal of Applied Linguistics & English Literature*, 2(1): 75- 79.
- Reinders, H., & Mohebbi, H. (2018). Written corrective feedback: The road ahead. *Language Teaching Research Quarterly*, 6, 1–6.
- Rouhi, A., Dibah, M., & Mohebbi, H. (2020). Assessing the effect of giving and receiving written corrective feedback on improving L2 writing accuracy: does giving and receiving feedback have fair mutual benefit? *Asian-Pacific Journal of Second and Foreign Language Education*, 5(1), 1-13.
- Russell, J., & Spada, N. (2006). Synthesizing Research on Language Learning and Teaching. Retrieved from net library: <http://www.books.google.com>
- Saeidi, M., & Sahebkhair, F. (2011). The effect of model essays on accuracy and complexity of EFL learners' writing performance. *Middle- East Journal of Scientific Research*, 10(1), 130- 137.
- Safari, S., & Bagheri, B., (2017). A Comparative Study of Strategy Instrument through Process vs. Product Writing on IELTS Writing Performance of Iranian EFL Learners. *Journal of English Language Studies*, 5(3), 18-33.

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