Developing EFL Learners' Referential and Expressive Types of Writing Implementing Project-Based Procedure: Achievements and Perceptions

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Abstract

This mixed-method study is an attempt to investigate the effects of the Project-based expressive and referential types of writing instruction on the Iranian English as a foreign language (EFL) learners' writing skill, and to explore the views of the learners towards implementation of project-based instruction (PBI). The convenience sampling procedure was used to select the participants of this study. The present study was conducted at Islamic Azad University, the South and Central Tehran branches. The initial population of the study was 60 EFL students (male and female) enrolling in B.A. English language translation program who took the advanced writing course. After administering Oxford placement test (OPT) as an English proficiency test, 50 participants were selected as the participants of the study based on the OPT results. The participants were randomly assigned to two experimental groups, namely experimental group A and experimental group B. The experimental A group received the instruction based on PBI in the referential writing form, and the experimental B group received the treatment according to PBI in expressive writing type. IELTS writing task 2 was administered as the pretest and posttest of the study. At the end of the study, the semi-structured interview was administered, and 20 EFL students from two experimental groups were randomly interviewed to explore their views towards PBI implementation. The quantitative results showed that project-based expressive and referential types of writing instruction had significant effects on the development of writing skill among EFL learners. And also the results indicated that there was statistically significant difference between the effect of project-based referential and expressive types of instruction on writing skill among EFL learners. The experimental B group outperformed the experimental A in improving writing skill. The qualitative results revealed that the participants adopted significantly positive attitude towards the implementation of PBI in the writing course. The pedagogical implications of the study are discussed at the end of the paper.

Keywords: Expressive, Project-based instruction, Referential, Writing skill

1. Introduction

Based on Crystal (2003), English as a foreign language (EFL) is now most widely implemented language in more than 100 countries, and it is the main foreign language to be taught in schools in most of these countries. In teaching language skills, writing with a long history has been recognized as the single most effective medium for conveying thoughts and feelings. Writing skill, a highly demanding cognitive skill, is closely related to academic success (Bakhshi, Weisi, & Yousofi, 2019, 2020), and best practices in the teaching of writing are of importance to many educators because

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writing is a true indicator of concept "understanding" (Wolfe, 2001). Regarding it as a communicative skill, Jenkins, Johnson, and Hileman (2004) put emphasis on writing development and considered it as an important element in students' education and a crucial element of high-stakes exams, which demands a good command of writing proficiency. Chastain (1988) signified writing concerning its connection to language ability and instruction. She argued that "writing with its unique features contributes to overall language learning", also "writing is the distinctive ability of educated people" (p. 244). In EFL contexts, writing plays an integral role in language acquisition process (Ismail, 2011), and it is considered one of the main instruments to test EFL learners' achievement. Notwithstanding, writing is regarded the most demanding and formidable skill, specifically in EFL settings in which English is not required or applied in daily communications (Salma, 2015). Therefore, the quality of teaching writing methods and procedures in the classroom setting is very critical in EFL contexts.

Previous research studies indicate that conventional teaching approaches sometimes neglect to sustainably present specific dimensions of the foreign language or develop different skills (e.g., Bas, 2008). As a result, to meet the new needs of EFL learners, the new methods of teaching should be tested and implemented by EFL instructors. Project-based instruction (PBI) is a pedagogical method that focuses on context-based instruction by providing students with issues to address or products to generate (Moss & Van Duzer, 1998 as cited in Sadeghi et al., 2016). Simpson (2011) noted that PBI can be a teaching approach that is more effective than traditional methods. PBI is an approach based on meaningful projects (Lamar & Mergendoller, 2010). The term "meaningful" is essential since projects have to come from a real passion of students and an actual willingness for research. Projects provide learners with a medium to authentically learn language items. PBI builds a setting in which students can implement language to achieve project goals using different methods and techniques. Learners not only apply linguistic abilities, but also enhance sociocultural proficiency through accomplishing projects (Helm & Katz, 2010). The goal of PBI is learning via learner-oriented and integrated practices in real world contexts (Solomon, 2003).

Students are supervised via exploration and discovery applying the teacher's supports (Bell, 2010). In spite of using a tough syllabus that may not have the desired outcomes, PBI provides a fundamental exploration of a topic through meaningful activities (Harris & Katz, 2001). Furthermore, PBI has the potentialities to develop autonomy and interest over students learning, and to encourage them to be more responsible for their learning (Tassinari, 1996). In PBI, the classroom practices must be learner-oriented, collaborative, and communicative (Moursund, 1999). Students engage in discovery practices to fulfill projects during project work, and to do so, learners share their knowledge implementing a foreign language (Stoller, 2006). PBI is a constructivist approach that enables students to construct on past information to address complicated issues and tasks. It provides learners with more possibilities to engage on a profound and more comprehensible stage with the subject matter and the curriculum (Simpson, 2011). PBI develops cooperation between teachers and students as well as rapport through PBI is more than traditional methods of teaching (Thomas, 2000). The significance of collaboration for brainstorming and addressing problems is a fundamental aspect of PBI (Guven, 2014). Therefore, PBI contains the most effective techniques, which are necessary to develop EFL learners' abilities, such as autonomy, reflection, critical thinking, and discovery and meaningful learning in a collaborative and communicative method.

Language is utilized as an interaction tool to exchange knowledge, thoughts, emotions, or opinions, and it also contains different functions. The language used in written forms can function variously based on the different forms of writing. Hebert (2011) defines six language functions, including referential, directive, expressive, phatic or social, poetic, and metalinguistic. Referential and expressive can be regarded as two important functions in writing skill. As Halliday and Hasan assert (1991, p. 15), "expressive function is the expressive being language that oriented toward the self. It means that individual express their feeling by language". The referential function is depicting a context, object or mental state. The referential function's descriptive statements could involve both definite descriptions and deictic words (Asdar, 2017). These two functions were selected to be explored in this study.

The effective inclusion of PBI into EFL/ESL settings has been demonstrated by many language educators' anecdotal reports for more than twenty years (e.g., Allen, 2004; Lee, 2002; Levine, 2004). As a result, the primary rationale behind conducting the present study is investigating PBI as an alternative approach to traditional EFL teaching writing methods, and exploring its effectiveness in Iranian EFL context. The secondary objective is studying two common and critical language functions in English language writing classes, namely referential and expressive. As far as the researchers studied the related literature, there was no research to explore the impacts of the Project-based expressive and referential types of instruction on the Iranian EFL students' writing skill. Therefore, the present research study aimed to fill this gap.

2. Literature Review

2.1 Project-based Instruction (PBI)

Based on the Buck Institute for Education (BIE) (2012), PBI is a necessity for fulfilling 21st Century instructional objectives. PBI can change the current education, and learners could experience an extended process of project presentation. They involve in the planning, handling, gathering data, and accomplishing projects. Historically, PBI originated from experiential education and John Dewey's philosophy, proposing that since learning is a social-based act, instructional procedures could build on learners' previous knowledge and include sociocultural items. In addition, as individuals engage in a progressively more technological and universal community, instructors find out that they should prepare learners not only to reflect on novel information, but they also should involve them in activities that prepare learners for living in this universal society (Bagherzadeh, Motallebzadeh, & Ashraf, 2014). In Bell's (2010) term, PBI is a creative approach to learning that teaches different strategies that are necessary for success in the 21st century. According to Klein et al. (2009), PBI is an educational strategy of strengthening students to acquire content knowledge on their own and show their new understandings via different presentation methods.

2.2 Empirical Studies on PBI

Different studies were carried out to specify the efficiency of PBI in language learning and teaching contexts. Simpson (2011) undertook a mixed-method study with Thai learners. He found that using PBI increased the ability of learners to listen and also speak. The results of this study also showed significant achievements for the students regarding reading proficiency and vocabulary learning. In a similar vein, Shafaei and Rahim (2015) undertook a research implementing PBI to investigate the language development need for vocabulary. The results indicated that the PBI group significantly outperformed the recall and retention group. The results of delayed posttest also revealed that test scores for both groups fell; howsoever, the PBI group still outperformed the control one. They argued that conventional methods are less effective in teaching vocabulary than PBI one. Along similar lines, Sadeghi, Biniaz, and Soleimani (2016) investigated the effects of PBI on comparison and contrast paragraph writing skills of Iranian EFL students. The findings showed that the learners who received PBI outperformed the learners who were instructed through textbooks. The results support the significant impacts of PBI in developing the Iranian EFL students' writing performance.

The perception of PBI by learners and instructors can be a crucial factor in the application and development of PBI projects. Farouck (2016) used PBI in a study to find out how EFL learners acquire a foreign language, what language abilities EFL learners may learn, and what impacts PBI may have on EFL learners' willingness to communicate (WTC). Farouck (2016) noted that the students' WTC increased because PBI is collaborative and communicative in nature. Many learners maintained that PBI developed their trust levels, reduced stress, and increased their individual abilities, and all of them developed their WTC. In that study, students' perceptions regarding the use of PBI in language learning were mainly positive. Alnog the same lines, Habók and Nagy (2016) carried out a research to specify the views of PBI by teachers. 109 instructors completed a questionnaire regarding the implementation of PBI and their perceptions towards PBI role in the classroom setting. The results showed that the instructors tend to apply procedures, like PBI since they are interactive in essence. They also explored that the participants perceived PBI as incentive and carrier of value. This is significant when regarding the role of the instructor as a catalyst in PBI,

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not a ruler as is the case in most EFL language contexts. Generally, in these studies, the learners and teachers adopted positive perceptions towards PBI as a methodology for language learning. In a similar vein, Rochmahwati (2015) conducted a qualitative research study implementing PBI in a TEFL course. The findings showed that the learners adopted significantly positive views towards PBI Furthermore, the findings showed that there were significant perceptible benefits to PBI. Enhanced class participation and learning by doing were two of the advantages. This backs up the claim that students like PBI.

All in all, the previous studies showed the efficiency of PBI in developing learners' language skills, and their findings also indicated that learners adopted positive views towards its implementation in EFL/ESL classrooms. Therefore, in line with the above-mentioned studies, this study is an attempt to investigate the effects of the Project-based expressive and referential types of instruction on the Iranian EFL students' writing skill, and also to probe the participants' perceptions towards its application in the writing class. As a consequence, the following research questions are addressed in the current research,

Research Question One: Does the project-based referential type of writing instruction have any significant effect on the development of Iranian EFL students' writing skill?

Research Question Two: Does the project-based expressive type of writing instruction have any significant effect on the development of Iranian EFL students' writing skill?

Research Question Three: Is there any statistically significant difference between the effect of the project-based referential and expressive types of writing instruction on Iranian EFL learners' writing skill?

Research Question Four: What are the conceptions and views of the Iranian EFL students towards the implementation of PBI in the writing course?

To address the research questions, the following research hypotheses are formulated,

Hypothesis One: The project-based referential type of writing instruction has a significant effect on the development of Iranian EFL students' writing skill.

Hypothesis Two: The project-based expressive type of writing instruction has a significant effect on the development of Iranian EFL students' writing skill.

Hypothesis Three: There is a statistically significant difference between the effect of the project-based referential and expressive types of writing instruction on Iranian EFL students' writing skill.

3. Method

3.1 Design

This study employed a mixed-methods explanatory sequential design, which began with quantitative phase, and then a qualitative strand was undertaken to explain and complement the quantitative findings (Creswell, 2015). The quantitative part of the study includes the pretest and posttest, and the purpose was to measure the effects of the instructional method on Iranian EFL learners' writing skill. The qualitative part consists of the semi-structured interviews with the participants of the study to complement the quantitative results.

3.2 Participants

This study was conducted at Islamic Azad University, South and Central Tehran branches. The convenience (availability) sampling procedure was applied to select the participants. The convenience sampling is a type of sampling in which the participants who are easily accessible and available are chosen to take part in the study (Dornyei, 2007; Ary et al., 2019). The initial population of the study were 60 EFL learners (male and female), enrolling in B.A. English language translation program of study who participated in the advance writing course. Oxford placement test (OPT) as a proficiency test was administered to homogenize the participants regarding their language proficiency. However, randomization was practically impossible due to the university

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registration norms. Thus, intact classes were used as the research sample. Two intact classes were selected to participate in this study. The selected participants, based on the OPT scores, were non-randomly divided into two experimental groups, namely experimental group A and experimental group B. The age of the participants was between 19-21 years old. The first language of the participants was Persian.

3.3 Instruments

To homogenize the participants, OPT was used which is a standardized Cambridge exam. Therefore, OPT was implemented as the language proficiency test, and it has of 60 items in the form of multiple choice questions in which the learners were supposed to select the true response among the others. It took 90 minutes.

The IELTS writing task 2 (General) was used as the pretest and posttest. The participants were asked to write a 250-word essay and respond to a point of view. The participants completed the task in 40 minutes. The rationale behind using one test, IELTS writing task 2 (General), for both the pretest and posttest was improving the reliability of the results (Ary et al., 2019).

The pretest and posttest followed IELTS writing rubric. The tasks were evaluated and rated by two expert raters. The raters employed an analytic rubric to evaluate participants, responses on four different levels: (1) Task Achievement, (2) Coherence and Cohesion, (3) Lexical Resource, and (4) Grammatical Range and Accuracy. The scores were given out of 9. The obtained results were analyzed to measure inter-rater reliability of the test scores. Three experts in the field proved the content validity of the test.

To triangulate the data, the in-depth semi-structured interview was held with the students. From the sample of the study, 20 EFL students, including 10 male and 10 female ones were randomly selected from two experimental groups for the sake of interviw regarding their views towards the effetiveness of PBI. The questions of the interview were made by the researchers, and there were ten open-ended questions. Three experts in the field proved the content validity of the interview.

3.4 Pilot Study

Before the main study was undertaken, reliability of the instruments had been measured. To do so, a pilot study was conducted. Two weeks before undetaking the study, the instruments were administered to 20 EFL students, including 7 male and 13 female ones, who were similar to the main participants with regard to age and language ability. Cronbach's alpha was calculated for the instruments, and the reliability of OPT and IELTS writing module task 2 were .89 and .81, respectively.

3.5 Quantitative Data Collection Procedure

First, the OPT was administered to 60 EFL learners to test their English language proficiency. The homogeneity of the learners was ensured by computing the mean and the standard deviation of scores. Among all participants, only the scores with the range of one standard deviation above or below the mean were selected as the participants. As a result, 50 EFL learners were chosen for based on OPT results. Two intact classes were selected to participate in this study. Then they were non-randomly divided into two experimental groups, namely the experimental group A and the experimental group B. The experimental group A received the instruction based on PBI in the referential writing form, and the experimental group B received the treatment according to PBI in expressive writing type. IELTS writing task 2 was administered as the pretest. Then, the participants received 10 sessions as the treatment, and the allotted time for each was 90 minutes. Two experimental groups were exposed to the same course book of advanced writing that entitled *Writers at Work (The paragraph)*.

The implementation of PBI was based on the framework introduced by Stoller (2013), and the principles of project management proposed by Svobodová, Lacko, and Cingl (2010). According

to Svobodová et al. (2010), project work is divided into four main stages as preparation stage, realization stage, presentation stage, and evaluation stage as illustrated in Fig. 1.

Figure1: PBI Phases Adopted from Svobodová Et Al. (2010)

The teacher started her explanation about essay writing and the topic to activate and map of existing students' prior knowledge and personal experiences along with arousing interest around the topic, which helped set up a scenario of personal interest. It was the preparation stage that the participants were required to accomplish a performance project for the assigned topic. The next phase covered the realization stage. To run the phase, the study followed Stoller's (2013) framework to work in a PBI style for launching a project work; planning and realizing concrete activities along with project fulfillment. The realization phase consists of:

1. Information gathering cycle, and
2. Information processing cycle.

At this point, the teacher determined the language demands of the information gathering process and structure instruction activities to prepare students for each of the information-gathering tasks for understanding the content material. Reading and web-search were used to gather information about the topic.
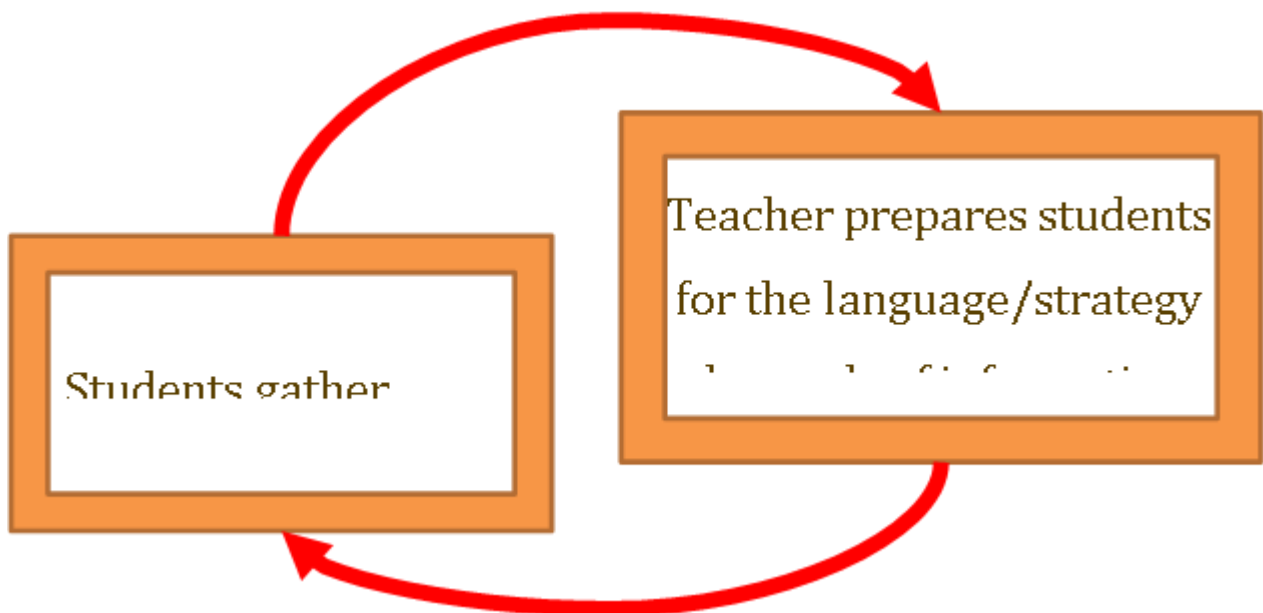

Fig. 2: Information Gathering Cycle (Stoller, 2013)

Then the teacher had the opportunity to teach them how to process this gathered information. In the second stage, she prepared the tasks, and the students practiced how to categorize, make comparison, identify, analyze, organize, and compile the useful information for completion of the project.
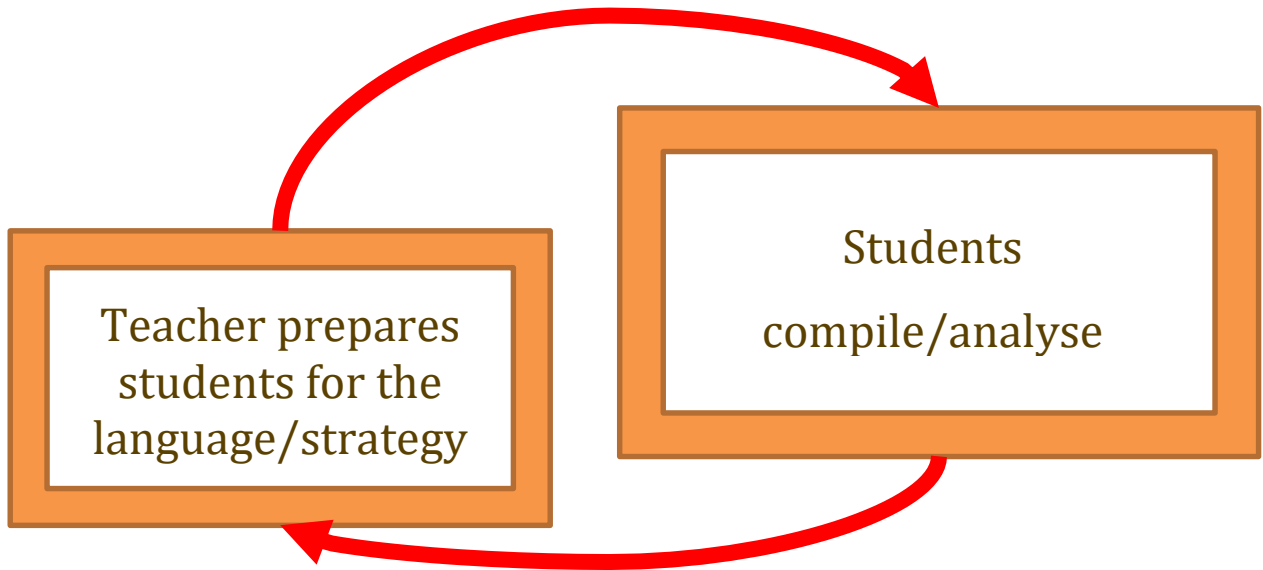
Fig. 3: Information Compilation and Analysis Cycle (Stoller, 2013)

During the presentation phase, the students presented their final project's outcomes in the form of written text. Then the written outputs were evaluated based on the pedagogical goals in each group.
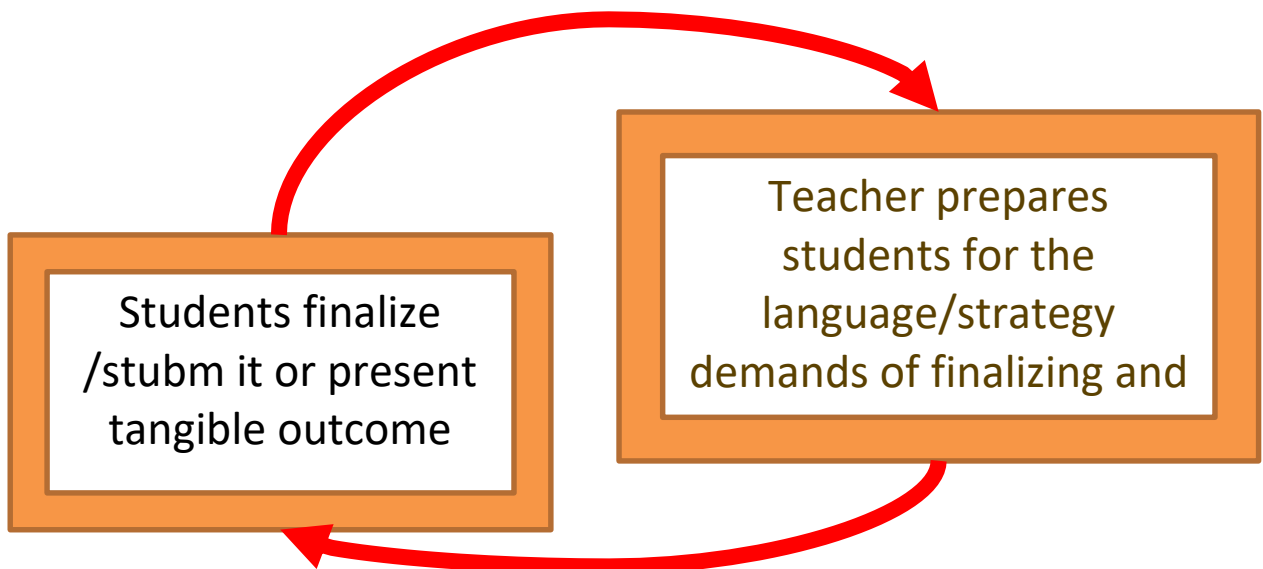
Fig. 4. Information Reporting Cycle (Stoller, 2013)

For referential purposes, the participants of the experimental group A were brainstorming ideas on the topic. Then they were asked to search different possibilities on the topic and work on it to tailor the project based on students' capability on describing something or someone. The teacher provided the learners with different description strategies. At the last stage, they finalized the project in the form of describing the topic. While the participants of the experimental group B were required to express their own ideas and feelings on the topic. They should write about their perceptions and ideas concerning the topic. The performance projects were in the form of lecturing or presenting on poster. However, the writing assignments followed essay format.

Each session the students delivered or presented their writings, and the teacher evaluated their assignments to measure their achievements. The teacher monitored students' progress on the tasks and projects to determine how good they engage in the tasks and projects. She was responsible to guide the class during the performance, to help the students if they found difficulties, and to ensure

that they follow not only essay format but also the principles and components needed for both referential and expressive written texts. At the end of the treatment, the posttest of the study was administered to measure the effects of the treatments on writing skills of the participants. The collected data was analyzed using the 24th version of the SPSS software. The analyses were carried out at a significance level of p= .05.

3.6 Qualitative Data Collection Procedure

The interview sessions were held at Islamic Azad University, the South and Central Tehran branches, English language departments. The first researcher herself administered the interview sessions. The individual in-depth semi-structured interviews were conducted with 20 EFL students, including 10 male and 10 female that were selected from two experimental groups. The interview included 10 researcher-made questions. Five participants were participated in the pilot phase to improve the questions of the semi-structured interview. Then, the main interview sessions were held with 20 EFL participants. Before undertaking the individual semi-structured interview, the participants were informed about the aim and the time of the interview sessions. All the interviews were recorded and then transcribed by the permission of the interviewees. The interviews were held during four sessions, and every session took about one hour. Five participants were interviewed each session. In order to analyze the qualitative data, thematic analysis was applied to identify the related themes and categories.

4. Results

4.1 Testing the First Research Hypothesis

The first research hypothesis assumed that project-based referential type of instruction has significant effect on the development of EFL learners' writing skill. In order to test the hypothesis, a paired-sample t-test was run, since the distribution of the data for both the pretest and the posttest was normal and running a parametric test was allowed. Tables 1 and 2 represent the results of the inferential statistics for testing H_1. The magnitude of the difference (effect size) was also calculated using the following formula:

- Eta squared = $t^2 / t^2 + (N - 1)$

The guidelines proposed by Cohen (1988) were used for interpreting this value as follows:

- .01 = small effect, .06 = moderate effect, .14 = large effect

Table 1: Descriptive Statistics of the Experimental A Group on the Pretest and Posttest

	Mean	Std. Deviation	Std. Error Mean
Pretest	19.26	2.53	.39
Posttest	27.85	3.29	.65

As could be seen in Table 1, the experimental A group's mean score and standard deviation on the pretest are 19.26 and 2.53, respectively with .39 standard error of mean. Furthermore, the group's mean score and standard deviation on posttest are 27.85 and 3.29 with a standard error mean of .65. It is predicted that the difference would be significant as it is high. However, the paired-samples t-test proves the prediction.

Table 2: Results of the Paired-Samples T-test on the Experimental A Group's Scores on Pretest and Posttest

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
				Lower	Upper			
Pretest – Posttest	8.59	4.54	.81	5.91	9.59	8.68	24	.000

- Eta squared = $8.58^2 / 8.68^2 + (25 - 1) = 0.75$

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A paired-samples t-test was conducted to evaluate the effect of using project-based referential type of writing instruction on students' scores on the writing test. There was a statistically significant increase in the scores from pretest ($M = 19.26$, $SD = 2.53$) to posttest ($M = 27.85$, $SD = 3.29$), t (24) $= 6.68$, $p < .05$ (two-tailed). The mean increase in the writing test scores was 7.59 with a 95% confidence interval ranging from 5.91 to 9.59. The eta-squared statistic (.75) indicated a large effect size. This confirms the hypothesis that using project-based referential type of writing instruction has significant effect on the development of EFL learners' writing skill.

4.2 Testing the Second Research Hypothesis

The second research hypothesis assumed that using project-based expressive type of writing instruction has significant effect on the development of EFL learners' writing skill. In order to test the hypothesis, a paired-samples t-test was run, since the distribution of the data for both the pretest and the posttest were normal and running a parametric test was allowed. Tables 3 and 4 represent the results of the inferential statistics for testing H_2.

Table 3: Descriptive Statistics of the Experimental B Group on the Pretest and Posttest

	Mean	Std. Deviation	Std. Error Mean
Pretest	19.25	3.45	.68
Posttest	34.85	3.16	.59

As could be seen in Table 3, the experimental B group's mean score and standard deviation on the pretest are 19.25 and 3.45, respectively with .68 standard error mean. Furthermore, the group's mean score and standard deviation on the posttest are 34.85 and 3.16 with a standard error of mean of .59. It is predicted that the difference would be significant as it is high. However, the paired-samples t-test proves the prediction.

Table 4: Results of the Paired-Samples T-test on the Experimental B Group's Scores on Pretest and Posttest

	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95% Interval Difference Lower	Confidence of the Upper	t	df	Sig. (2-tailed)
Pretest – Posttest	15.60	1.08	.25	15.05	15.95	74.21	24	.000

- Eta squared $= 74.21^2 / 74.21^2 + (25 - 1) = 0.99$

A paired-samples t-test was conducted to evaluate the effect of using project-based expressive type of writing instruction on students' scores on the writing test. There was a statistically significant increase in the scores from pretest ($M = 19.25$, $SD = 3.45$) to posttest ($M = 34.85$, $SD = 3.16$), t (24) $= 74.21$, $p < . 05$ (two-tailed). The mean increase in the writing test scores was 15.60 with a 95% confidence interval ranging from 15.05 to 15.95. The eta-squared statistic (.99) indicated a very large effect size. This confirms the hypothesis that using project-based expressive type of writing instruction has significant effect on the development of EFL learners' writing skill.

4.3 Testing the Third Research Hypothesis

The third research hypothesis assumed that there is a statistically significant difference between the effect of project-based referential and expressive types of writing instruction on Iranian EFL learners' writing skill. In order to test the hypothesis, an independent-samples t-test was run, since the distribution of the data for both the pretest and the posttest were normal and running a parametric test was allowed. Tables 5 and 6 represent the results of the inferential statistics for testing H_3. The magnitude of the difference (effect size) was also calculated using the following formula:

- Eta squared $= t2 / t2 + (N1 + N2 - 2)$

Table 5: Results of the Levene's Test for Equality of Variances on the Pretest

F	Sig.
5.25	.031

Table 5 reveals that the assumption of equality of variances is violated, since the Leven's test value is significant (p = .031); however, in order to compare the groups, the second line of the t-test table, *Equal variances not assumed*, could be used to interpret the results.

An independent-samples t-test was conducted to compare the pretest scores for the experimental A and experimental B groups. There was no significant difference in scores in the pretest of the experimental group A ($M = 19.26$, $SD = 2.53$) and the pretest of experimental group B ($M = 19.25$, $SD = 3.45$; $t(42.41) = .23$, $p = .816$, two-tailed). The magnitude of the differences in the means (mean difference =.20, 95% *CI*: –1.52 to 1.92) was very small (eta squared = .001). Accordingly, the participants' writing skill before the instruction was not significantly different, and thus, running another independent-samples t-test could show the effect of the instruction on EFL learners' writing skill.

Table 6: Independent Samples Test to Compare the Pretest Scores

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	.23	48	.816	.20	.85	-1.51	1.91
Equal variances not assumed	.23	42.41	.816	.20	.85	-1.52	1.92

- Eta squared $= .23^2 / .23^2 + (25 + 25 - 2) = .001$

Table 7: Results of the Levene's Test for Equality of Variances on the Posttest

F	Sig.
.019	.859

Table 7 reveals that the assumption of equality of variances is not violated, since the Leven's test value is non-significant (p = .859); thus, in order to compare the groups, the first line of the t-test table, *Equal variances assumed*, could be used to interpret the results.

Table 8: Independent Samples Test to Compare the Posttest Scores

	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	-7.88	48	.000	-7.52	.95	-9.43	-5.60
Equal variances not assumed	-7.88	47.59	.000	-7.52	.95	-9.43	-5.60

- Eta squared $= -7.88^2 / -7.88^2 + (25 + 25 - 2) = .56$

An independent-samples t-test was conducted to compare the posttest scores for the experimental A and experimental B groups. There was a significant difference in scores for the experimental A group ($M = 27.85$, $SD = 3.29$) and the the experimental B group ($M = 34.85$, $SD = 3.16$; $t(48) = -7.88$, $p = .000$, two-tailed). The magnitude of the differences in the means (mean difference =.20, 95% *CI*: –1.52 to 1.92) was very large (eta squared = .56). Accordingly, the hypothesis is confirmed, so that there is a statistically significant difference between the effect of project-based referential and expressive types of instruction on Iranian EFL learners' writing skill. The experimental B group outperformed the experimental A group in developing writing skill.

4.6 Qualitative Results

The data collected in the second phase of the research through the audio-recorded, semi-structured interviews provided insight into the perceptions and views of the participants regarding the effectiveness of PBI during the treatment sessions. All the interviews were audio-recorded and then transcribed. Next, thematic analysis was applied to identify the main themes. The following themes were emerged upon the completion of the thematic analysis,

1. Learning by Doing

Most of the interviewees believed that project-based learning is very effective and helps them improve their writing skill because they can share their information in groups, and most of the them noted that learning by doing is the main characteristic of PBI. Zahra in this regard pointed out,

In this method, each project was the result of a series of class activities done by us as the learners, and these activities were arranged into a process. I believe that learning by doing could foster our understanding and also our writing skill. The students maintained that the instructors provided the learners with real-life problems and then guide them to solve the problems by presenting a hands-on activity to learn the solution. Learning by doing was the result of the learners' interaction in groups, which led to their adaptation with the environment; as a result, the rate of their learning was increased. Reza noted, "one of the main advantages of this method was our interaction in groups that to a considerable extent, it helped us learn much more better."

2. Four Skills Integration

Some of the interviewees believed that a project integrated the four language skills, and requires the implementation of different activities. Sara in this respect said, "While fulfilling a project, we had chances to recycle our language and skills in a semi-natural situation, and we could practice the four skills, simultaneously". The participants argued that the main profit of using PBI in EFL classroom is developing language skills. Ali believed that, This method could help us boost our receptive skills along with the productive ones, especially reading skill since our instructor asked us to read the related sources to the topic, and in this way, we inevitably became wide-readers. Therefore, implementing PBI in the EFL classes could lead to integration of language skills in an interactive context.

3. Meaningful Learning

Since learners involved in purposeful interactions to accomplish authentic tasks, they had the opportunity to implement language in an artificial natural setting and took part in meaningful activities that demand real-life language use. Most of the interviewees believed that PBI activities developed their critical thinking and problem solving skills, which are significant in meaningful learning, and fostered learning how to learn. Nazanin in this regard noted,

The PBI activities could develop meaningful learning in the classroom context since we could apply our new knowledge in the class activites, but this did not happen in other classes because the instructors did not apply group-based activities, and we were not engaged in a meaningful learning context. It can be concluded that interaction of the learners plays a critical role to reach meaningful learning. Consequently, meaningful learning could result in critical thinking and problem solving skills due to the learners' engagement in group-based authentic activities. Authentic activities were one of the significant points that three participants mentioned in their interviews that is one of the main characteristics of PBI.

4. Boosting Metacognitive Skills

Some of the participants maintained that during the class, they could use their prior knowledge to plan a strategy for handling a learning task, take the necessary steps to solve the problems, reflect on the activity, and evaluate the outcomes that result in boosting their metacognitive skills. Mohammad one the interviewees pointed out,

One of the main benefits of this method is that we should use our prior knowledge to approach a learning activity; consequently, we should reflect on the activity or problem to accomplish it. In my opinion, this method could boost our control over the accomplishment of the activities by choosing the appropriate strategies.

One of the factors that was highlighted by the participants was learning autonomy. As the reuslt of boosting metacognitive skills, the learners could achieve a sense of autonomy in the process of fulfilling the activities. Nahid in this respect argued, "At the end of the course, I felt the sense of autonomy in which I can do the task by myself and without the help of the teacher". The participants believed that PBI helps them improve their self-assessment skills that is one of the signs of autonomous learners.

All in all, the participants adopted significantly positive attitude towards the implementation of PBI in the writing course. Maryam enthusiastically expressed her feelings towards the class, "I really love and admire the writing course that we had this semester, you really did change a boring class to a can-not-wait-to-come kind of class". They were very enthusiastic in doing the project. They held that PBI incorporates collaboration, negotiation, and other interpersonal skills, which identified by the participants as significant factors for successful learning.

5. Discussion

The quantitative results showed that project-based expressive and referential types of writing instruction had significant effects on the development of writing skill among EFL learners. And also the results indicated that there was statistically significant difference between the effect of project-based referential and expressive types of instruction on writing skill among EFL learners. The experimental group B outperformed the experimental group A in improving writing skill. The qualitative results revealed that the participants adopted significantly positive attitude towards the implementation of PBI in the writing course. Therefore, the quantitative and qualitative results complemented each other regarding the efficiency of PBI in the Iranian EFL context.

Similar to the results of the current study, Turnbull (1999a, 1999b) found the PBI's efficacy in four French language classrooms in high school. The results indicated that students in project-based classes resulted in higher posttest scores than students in non-project-based classes. The results of the posttest showed that PBI had the significant effects on the EFL learners' writing performance. Therefore, the results of the present study confirmed the findings of Turnbull (1999a, 1999b). But there are major differences between her studies and the present study, including the context of the study that is ESL, the target language that is French, and also the focus of her studies that is French general language proficiency. Another noteworthy point is that Turnbull (1999a) asserted it was not possible to conclude with certainty that PBI was the single reason for superior test performance of PBI students. Learner engagement in curriculum decisions, a dual form-meaning focus, and instructor's implementations of French are discussed as probable puzzling factors.

The findings of the present study are in line with Simpson (2011) who carried out a mixed-method doctoral research with Thai university students. Simpson uncovered that using PBI enhanced the ability of learners to listen and speak. The findings also indicated significant gains for student participants in PBI classes. The results of his study revealed that the activities were interactive and meaningful to the participants, and helped maintain and enhance the motivation of the learner, which lend support to the qualitative findings of the present study in which the learners believed that the meaningful communication in groups could help them develop their language proficiency. And also they maintained that PBI could increase their motivation to take part in the class discussions. These results proved the essential role of meaningful communication, as one of the main theoretical backgrounds of PBI, in developing learners' language abilities. Collaborative learning develops learners' interaction, motivation, and engagement in the subject matter, which could result in efficient outcomes (Moraga & Rahn, 2009).

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The findings of the present study are in harmony with those of Shafaei and Rahim (2015) who conducted a study using PBI to address the language development need for vocabulary. The results indicated that the experimental group students outperformed than the recall and retention control group. When the delayed posttest was taken, test scores for both groups fell; however, the experimental group still outperformed than the control group. The researcher suggests that traditional methods are less effective in teaching vocabulary than PBI. The findings of their study essentially indicated that PBL is more efficient than the conventional method in the Iranian EFL context since the method provided the learners in the experimental group with a possibility to explore topics, use experiences to learn, and implement their knowledge, abilities, and views towards real life practices. The participants of the present study also asserted that using different sources of information could help them explore the topic of the lesson, which lends support to the discovery learning as one of the main theoretical backgrounds of PBI.

The findings also are in line with the results of Sadeghi, Biniaz, and Soleimani's (2016) study as they investigated the possible impact of PBI on comparison and contrast paragraph writing skills of Iranian EFL Learners. The results of their study showed that the learners who were received PBI outperformed the learners who were instructed through student textbooks. The findings support the positive impacts of PBI in developing Iranian EFL students' writing performance. Interaction of the PBI students in groups may result in developing achievement via elaboration and organization of the teacher-made material. This is consistent with the result of cognitive elaboration view that PBI learners engage in some sort of cognitive rearrangement or elaboration to preserve information in memory to include it in the existing cognitive structures (Johnson *et al.*, 1998) that leads to meaningful learning. The findings of the present study also showed that PBI resulted in knowledge integration and meaningful learning, which lend credence to meaningful learning as one of the main PBI theoretical assumptions. Along a similar line, their findings revealed that PBI enhanced the motivation of the learners to take part in the subsequent tasks, in which support the findings of the present study.

The qualitative results lend support to the results of Rochmahwati's (2015) study who implemented PBI in a level one TEFL course designed to train teachers in EFL methodologies in a descriptive qualitative study with 25 students and one teacher. The researcher found that the students had significantly positive attitudes towards PBI from interview and observational data. The results of the present are in line with her findings that showed the implementation of PBI fosters the students' critical thinking in TEFL class, which lend credence to problem solving and critical thinking development as the major theoretical background of PBI.

This study did not investigate the challenges of PBI. However, some studies (e.g., Brooks, 2016; Thomas, 2000; Harris, 2014) find the PBI challenging to be implemented in the classroom setting. The challenges include struggling the students to keep focused during project tasks, student readiness, curriculum and project balance, time availability, and implementation time.

6. Conclusion and Pedagogical Implications

This mixed-method study is an attempt to investigate the effects of the Project-based expressive and referential types of writing instruction on the Iranian English as a foreign language (EFL) learners' writing skill, and the views of the learners towards implementation of project-based instruction (PBI) are also explored. The results of the present study lend support to the theoretical backgrounds of PBI. Since learners engage in purposeful interaction to accomplish authentic tasks, they have the opportunity to implement language in a semi-natural setting (Haines, 1989) and take part in meaningful activities that require practical language use (Duc Thuan, 2018). As the learners communicate with each other to attain the desired outcome in groups, they improve their confidence and independence (Fried-Booth, 2002). Farouck (2016) argued that PBI could help to enhance learners' evaluation skills for presentation and reduce the anxiety resulting from communication. The findings showed that the students could gain self-assessment skill during the treatment sessions, and as a result, they could attain autonomy in their learning process. The learners also noted that they did not feel anxiety in the communication process in which these findings support the

theoretical backgrounds of PBI. Another significant finding of qualitative part is developing students' metacognitive skills, that is, they could monitor their learning to find their shortcomings and strengths in the process of learning. This finding also is in line with the theoretical backgrounds of PBI concerning the improvement of metacognition (Tassinari, 1996). As it was discussed in discussion section, the findings of the present study confirmed the results of the previous related empirical research (e.g., Simpson, 2011; Sadeghi et al., 2016; Shafaei & Rahim, 2015; Turnbull, 1999a, 1999b).

The findings of the current study could hold different pedagogical implications in various domains of EFL settings, such as language teaching methodology, syllabus design, material development, and language assessment. EFL learners can benefit the findings of this study by understanding the effect of using special instructional methods on their writing achievements. The findings of the present study revealed that PBI could develop students' metacognitive skills to monitor their learning process (Fragoulis, 2009), and also it increased students' motivation towards the accomplishment of class activities and tasks. It is also very useful to develop general language proficiency of the learners by integration four skills, and its collaborative and communicative nature makes the learners to share opinions and thoughts to one another to develop their self-confidence and motivation (Stoller, 2002). Second, implementing PBI the EFL instructors can provide learners with an environment in which they could better practice and learn English, and improve their and critical thinking and problem solving skills via the use of meaningful activities (Lee, 2004). Syllabus designers and material developers are the next group that can take advantage of the results. The findings would help this group to incorporate effective authentic and meaningful activities into their teaching skills syllabus. Regarding the findings of the present study, material developers are able to design communicative and project-based writing materials, which could raise the awareness of EFL students to significant language features, such as grammatical structures and lexical items to increase the accuracy and fluency of learners' writing skill.

Like other research studies, this study suffered from some limitations. The first limitation was the existence of intervening variables, including age, gender, and language skills that can affect the results due to the sampling type that is the use of intact classes. To reduce these effects, the researchers tried their best to control these variables by ignoring the role of gender and age in the study, and conducting the study on homogenized intermediate-level EFL learners. Therefore, the results of this study should be treated with caution because there was no random selection of participants. Future studies could replicate this study by applying random selection of participants. The second limitation was related to the small sample size. The researchers could not incorporate more than 50 participants due to the time and expense constraints and the issue of accessibility. The findings may be more generalizable with a larger number of participants. Therefore, similar studies could be undertaken by implementing a larger sample size to develop the external validity of the results. Another limitation of the present study was its quantitative design that was the quasi-experimental pretest and posttest, in which control group and randomization were not included due to the participants' accessibility. As a result, future studies could be conducted by employing an experimental pretest and posttest design since it contains control group and randomization as essential items (Salkind, 2010).

Regarding the delimations of the study, the participants were delimited to intermediate male and female university students, so that other groups of students were not considered. Future research could replicate this study by implementing students of different universities and language institutes with different language proficiency, such as upper-intermediate or advanced levels. Another delimitation of study was investigating the PBI referential and expressive types of writing instruction, and other types of writing instruction were not explored. As a consequence, further research could be done to study other PBI types of writing instruction. Regarding the qualitative phase, the data collection was delimited to the semi-structured interview, and other methods of qualitative data collection were not conducted. Thus, future studies could incorporate other methods, such as observation.

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