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PROJECT-BASED LEARNING: PROMOTING EFL LEARNERS' WRITING SKILLS

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Abstract
The present study sought to investigate the effect of project-based learning on EFL learners' writing skill. To reach this goal, from the population of 70 EFL learners taking EFL courses at a language institute in Iran, two homogenous groups, consisting of 28 males, were selected based on the random sampling method. While the control group with 14 learners was taught through traditional method, the experimental group consisting of 14 learners received instruction using project-based learning designed by Maftoon, Birjandi, and Ahmadi (2013). A pre-test was administered to both groups prior to the treatment. Then, after the treatment, which was lasted for ten sessions and held during two months, the learners in both group were required to write on the new topic in which it was regarded as the writing post-test. The analysis of the obtained data revealed that project-based learning had significant effect on the learners' writing ability. Moreover, the findings showed that project-based learning approach does aid learners to enhance and promote their writing ability in a collaborative environment.

Keywords: authentic learning, ELF learners, English language learning, project-based learning, writing skill

Introduction
In the foreign language learning, project-based learning (PjBL) is defined as "a student-centered approach to learning in which students collaborate on sequential authentic tasks and develop a final project" (Mills, 2009, p. 607). In this method, learners ask a question and are guided to do research under supervision of the instructor (Bell, 2010). Project-based learning allows learners to learn in an integrated way in which enables them take responsibility for their own learning in a collaborative environment (Bilgin, Karakuyu, & Ay, 2015). Moreover, PjBL as a learner-centered approach, helps learners to facilitate their own knowledge building and transform learning into authentic and comprehensive experience (Tamim & Grant, 2013). This method engages unwilling learners and provides a situation to improve learners' motivation (Bilgin et al., 2015). In addition, according to Artini, Ratminingsih, and Padmadewi (2018), PjBL enables learners learn through solving problems, investigating, making decisions, and working strategically in EFL classes.

The result of PjBL is a better understanding of a subject, deeper learning and a greater motivation for learning (Bell, 2010). Further, as Khalili Sabet and Ravand

(2017) suggested, the basic idea of PjBL is that as learners obtain new knowledge through solving problems, their interest is caught up by real-life problems and triggered by serious thinking. Altogether, PjBL offers numerous benefits to learners such as provides learners with opportunities to develop their confidence, increases learners' self-esteem, enhances learners' autonomy, increases learners' cooperative skills, enhances learners' motivations, develops problem-solving, and improves language skills (Fragoulis & Tsiplakides, 2009). According to Mills (2009), an effective PjBL have several key features include "a process and product orientation, student ownership, the development of language skills, a commitment to both language and content learning, and group and independent work" (p. 609).

McCarthy (2010) came to conclusion that implementing PjBL method enables learners become aware of their learning ability. More importantly, PjBL activities improve learners' language skills, promote their attitudes towards learning in EFL classes (Artini et al., 2018) and develop their motivation to use EFL with a strong focus on writing skill (Kovalyova, Soboleva, & Kerimkulov, 2016). Writing, as one of the skills that can be mastered in EFL classes, is a cognitive skill that involves learning, understanding, applying and synthesizing new knowledge (Praba, Artini, & Ramendra, 2018) and can deliver learners' thoughts and feelings (Sadeghi, Biniaz, & Soleimani, 2016). Therefore, PjBL that not only develops learners' critical thinking for learning, but also helps them to acquire new knowledge, can be essential in promoting writing. Due to the important role of writing in language learning, this study attempted to show the effect of PjBL on EFL learners' writing skill.

In relation to language skills, Fragoulis and Tsiplakides (2009) found that PjBL has increased willingness of EFL learners to participate in activities designed for language learning. More specifically, results from their study showed PjBL improve all four language skills. Besides, Poonpon's (2011) study on 47 undergraduate students revealed that PjBL improves the learners' English skills in a language classroom. Moreover, Ramírez (2014) investigated the effect of PjBL on students' written production in an EFL class among 24 students. She found that PjBL is effective method in which learners' writing abilities have enhanced and EFL learners could improve the precision of their writing skills. In another study, Ratminingsih (2015) came to conclusion that PjBL enables EFL learners to resolve their difficulties in writing through interaction and discussion. Furthermore, Affandi and Sukyadi (2016) have investigated the effects of PjBL on students' writing achievement among 78 EFL learners and they concluded that the learners' writing achievement have improved.

Kovalyova et al. (2016) found that PjBL enables engineering students to improve significantly their written skill within the English language course. In addition, Sadeghi et al. (2016) explored on the impact of PjBL on comparison and contrast paragraph writing skills among 36 male EFL learners. The findings reported that implementation of PjBL in writing has positive effects on learners' writing skill. Simply put, they found that PjBL enhanced EFL learners' writing performance. In 2017, Astawa, Artini, and Nitiasih conducted a study to examine the effect of PjBL on students' productive skills in English among 28 students. The results revealed a significant effect of PjBL on students' productive skills in

English. Indeed, they found that implementation of PjBL activities in EFL classes, enhance students' ability to write in English.

Collier (2017) in her thesis entitled "*Using a Project-Based Language Learning Approach in the High School Spanish Classroom: Perceived Challenges and Benefits*" explored on how project-based language learning affected writing performance. The results showed that project-based language learning approach was unaffected on students' writing performance. Moreover, similar to Astawa et al. (2017), Artini et al. (2018) have investigated the impact of PjBL on learners' English productive skills. They collected data through classroom observation, interview, and a questionnaire. The results of the study revealed that PjBL had an impact on learners' positive attitudes toward foreign language learning; also, the findings indicated that PjBL activities improved EFL learners' communication skills, particularly in writing. Finally, Praba' et al. (2018) conducted a study to investigate the effect of PjBL on EFL learners' writing skill. They used interview, observation, and writing test for data collection. The findings showed that PjBL has significant effect on EFL learners' writing skill. In addition, they came to conclusion that PjBL significantly promote writing skill in EFL context. In light of the review of related literature, the present study addresses the following research question and hypothesis:

RQ: Does project-based learning have a significant effect on EFL learners' writing skill?

H0: Project-based learning does not have a significant effect on EFL learners' writing skill.

Method

Design

To find the answer of research question in the current study, the researchers used the pre-test/post-test quasi-experimental design with an experimental group and a control group. The both groups were randomly selected from a language institute in Iran. The first group, experimental group, were given instructions using PjBL designed by Maftoon, Birjandi, and Ahmadi (2013) and control group were given instructions using traditional method. The learners in both groups were given a pre-test and a post-test. Moreover, both experimental and control group were instructed by the same teacher.

Participants

Twenty-eight intermediate EFL learners participated in the present study. The participants were male native speakers of Persian and their age ranged from 14 to 16 years old. They also were selected based on random sampling.

Instruments

***Oxford Placement Test*.** In order to determine the homogeneity of the participants, an Oxford Placement Test (OPT) was administered to 70 EFL learners. Twenty-eight EFL learners whose scores on the OPT ranged between one standard deviation above the mean and one standard deviation below the mean were selected and divided into two groups of experimental and control each consisting of 14 EFL learners.

Pre-test. All 28 learners were given 30 minutes to write on the same topic as their performance in the writing pre-test.

Post-Test. In order to measure the writing performance of the participants, learners in both group were required to write on the new topic.

Procedure

The treatment for both group lasted for ten sessions held during two months. First of all, to measure learners' language proficiency level and also their homogeneity, an OPT was administered to 70 EFL learners. Then, based on OPT results, 28 out of 70 learners were chosen since all of them were able to pass the test, and 28 learners were categorized at the intermediate level. Afterwards, the 28 learners were divided into two groups of experimental and control each consisting of 14 learners. Next, as mentioned earlier, learners in experimental group were given instructions using PjBL designed by Maftoon et al. (2013) and learners in control group were given instructions using traditional method. Maftoon et al. (2013) operationalized PjBL through seven steps in which used in the present study as follow:

1) According to Maftoon et al. (2013), the teacher must collaborate with learners to find a theme interesting to all. In this study, teacher required learners in experimental group to write their interesting topics on a piece of paper in pairs and asked them to form seven groups of two. 2) Maftoon et al. (2013) proposed the paving of grounds for a shared decision on the aim of the course "as regards both content and language and to determine the steps to be taken by the students to reach the final" (p. 1633). In the present study, teacher asked learners some questions to think about the purpose of the writing task and how the goal was to be attained. They were also asked to discuss the questions in pairs. 3) Based on Maftoon et al. (2013) suggestion, the teacher must consider all dimensions of the learners' learning needs when collecting information to carry out the project task. In the current study, the teacher provided key resource books for learners to know more about writing on different genres.

4) The fourth step, according to Maftoon et al. (2013), was assisting learners "to gather information inside and outside the classroom, individually, in pairs, or in groups" (p. 1633). In this study, the teacher enabled learners to use the resource books in pairs inside the classroom and encouraged them to use the Internet outside the classroom while planning the content and form of their papers. 5) Maftoon et al. (2013) was allowing learners to work in groups or individually. Therefore, in the present study, based on the teachers' guidelines the learners were asked to collaboratively write a paper in pairs inside the classroom. 6) Next step as suggested by Maftoon et al. (2013) includes motivating and assisting learners to reflect upon the task. In the current study, the learners were asked to discuss the accuracy of their papers that they wrote in pairs. 7) Finally, according to Maftoon et al. (2013), the teacher should "decided on a framework to evaluate the students and decide their final marks" (p. 1633). To do so, in this study, the teacher asked learners in pairs to discuss and agree on the criteria on which papers should assessed by the teacher and encourage them to rate their own papers and give their papers a final mark. After ten sessions, the learners in both group were required to write on the new topic in which it was regarded as the writing post-test.

Findings and Discussion

This study aimed to investigate the effect of project-based on EFL learners' writing skill. Specifically, in order to find the answer of research question, a series of descriptive and inferential statistics were carried out. Table 1 shows the descriptive statistics of the pretest and posttest scores for both experimental and control groups.

Table 1. Descriptive Statistics of the Participants' Pre-test and Post-test Scores for Experimental Group and Control Group

	N	Minimum	Maximum	Mean	SD	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Control Group (Pre-test)	14	13.00	19.00	15.9286	1.85904	.121	.597
Control Group (Post-test)	14	13.00	18.00	15.7143	1.68379	.074	.597
Experimental Group (Pre-test)	14	13.00	19.00	15.7857	2.00686	.009	.597
Experimental Group (Post-test)	14	15.00	20.00	17.9286	1.54244	-.156	.597
Valid N (listwise)	14						

Based on the above table, there is no statistically significant difference between the two means of the participants' scores on pre-test and post-test in control group. Conversely, the mean scores of the participants in experimental group at pre-test stage was 15.7857 which changed to 17.9286 in the post-test. Evidently, there is observed difference between the pre-test and post-test. Furthermore, the two times value of standard error of Skewness for pre-test in both control and experimental group are more than the Skewness value (1.194>.121; 1.194>.009) and the two times value of standard error of Skewness for post-test in both groups are more than the Skewness value (1.194>.074; 1.194>-.156) that indicate a normal distribution of the data.

Testing the Null Hypothesis

The null hypothesis of the current study reads "Project-based learning does not have a significant effect on EFL learners' writing skill". In order to test the null hypothesis, a paired samples t-test were employed to compare the difference between the pretest and posttest scores of the participants in the both groups. The results are presented in the Table 2.

Table 2. Paired Samples t-test for the Pre-test and the Post-test Scores of Participants in both Experimental and Control Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Control Pre-test Control Post-test	.21429	1.05090	.28087	-.39249	.82106	.763	13	.459
Pair 2	Experimental Pre-test Experimental Post-test	-2.14286	1.51186	.40406	-3.01578	-1.26994	-5.303	13	.000

As demonstrated in Table 2, the Sig. value of the control group is greater than the *p* value (.459>.05) and it means that there is no significant difference between the pre-test and post-test scores in the control group whereas, the Sig. value of the experimental group is less than the *p* value (.000<.05) that is there is significant difference between the pre-test and post-test scores in the experimental group.

Regarding the research question (Does project-based learning have a significant effect on EFL learners' writing skill?), statistically, the results of paired samples t-test showed a significant effect of project-based learning on EFL learners' writing skill. Consequently, the null hypothesis which presumed that project-based learning does not have a significant effect on EFL learners' writing skill, was rejected. Concerning the related literature, the findings are typically supported by the results of many previous studies such as Ramírez (2014), Affandi and Sukyadi (2016), Kovalyova et al. (2016), Sadeghi et al. (2016), Astawa et al. (2017), Artini et al. (2018), and Prabaʾ et al. (2018). However, Collier (2017) came to the conclusion that project-based language learning had no significant effect on students' writing performance that is the results of the present study are not in the line with Collier's (2017) study.

Conclusion

Fragoulis and Tsiplakides (2009) in their study concluded that project-based learning increased willingness of EFL learners to participate in language learning tasks; similarly, according to the obtained results of the current study and learners' performance, not only willingness of the learners increased but also unwilling learners motivated to participate in activities. In the same vein of previous study (Ratminingsih, 2015) project-based learning helped learners in the experimental group helped learners to resolve collaboratively their problems in writing through discussion.

The present study was in fact an attempt to explore the effect of project-based learning on EFL learners' writing skill. After the implementation of project-based learning, the learners obtained higher scores than before. The results showed project-based learning had significant effect on the learners' writing ability. Moreover, the findings from the experimental group revealed that it could be argued that project-based learning approach does aid learners to enhance and promote their

writing ability in a collaborative environment. In sum, based on the results, this study assists the EFL teachers to implement project-based learning in EFL/ESL classes to increase learners' writing ability. In addition, not only may textbooks developers and EFL instructors benefit from the results of such a study, it also may obvious that project-based learning approach can be employed other context. Last but not least, the instructor's creativity to use project-based learning might cover some of the shortcomings in learning writing.

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