The Effect of Project-Based Learning on Iranian Intermediate EFL Learners' Paragraph Writing Skills

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Abstract

Paragraph writing skill is considered to be one of the main challenges EFL learners come across. Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge Project - based learning (PBL) is simply defined as an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop (Moss & Van Duzer, 1998) emphasizing learning through student-centered, interdisciplinary, and integrated activities in real world situations (Solomon, 2003). The purpose of this study was to investigate the possible effect of PBL on paragraph writing skills of Iranian EFL Learners. The participants in the current study were 36 Iranian male EFL learners at Armangarayan language institute. The participants were at the intermediate level in compliance with Oxford Placement Test (OPT), and selected according to a simple random sampling: the Experimental group (EG) and Comparison group (CG) with 18students in each group. A writing pre -test was also administered to measure their writing skills. Then, after 10 weeks of PBL and instruction, writing post-test was administered. The scores were then analyzed using a scoring module developed by Soleimani et al. (2008).The results were submitted to t-test revealing that the students who were educated by PBL outperformed the students who were educated by the instruction based on student textbooks. The findings lend credence to the positive effects of PBL in enhancing students' writing performance.
Keywords: PBL, Writing skill, EFL learners, Comparison paragraph, Contrast paragraph

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INTRODUCTION

In order to write a good paragraph, students need to understand the four essential elements of paragraph writing and how each element contributes to the whole. Writing is communicating to others on paper or on a computer screen. Writing is nearly a talent, but it's mainly a skill, and like a skill, it develops with practice. The aim of writing is to grant some information, express thought, feeling, opinions, and experiences by writing it down, and so on to convey a proper means (Meyer, 2005). Students' acquisition of the writing skill puts much emphasis in the educational system. However, Grabe and Kaplan (1996) state that writing process received fairly little notice in research on foreign language training. Yet it is a precious communicative skill to deliver a person's thoughts and feelings. Many studies have emphasized the positive effectiveness of PBL (PBL) within groups for different skills, especially reading comprehension and writing. PBL emphasizes learning activities that are long-term, interdisciplinary and student-centered. Unlike traditional, teacher-led classroom activities, students often must organize their own work and manage their own time in a project-based class. Project-based instruction differs from traditional inquiry by its emphasis on students' collaborative or individual artifact construction to represent what is being learned. PBL relies on learning groups.

PBL is a pedagogical method centered on the learner. Learners pose a question and are guided through research under the instructors' supervision (Bell, 2010). Instead of using a strict lesson plan that directs a learner down a special way of learning results or purposes, PBL affords basic investigation of a topic worth learning more about (Harris & Katz, 2001). In addition, learners normally have more autonomy over what they learn, sustaining interest and motivating learners to take more responsibility for their learning (Tassinari, 1996). So, using PBL in class is probable after preparing the information that is required for the project. The classroom activities should be student - centered, cooperative, and interactive (Moursund, 1999).

STATEMENT OF THE PROBLEM

Improving EFL learners" writing skill is of much concern to language teachers. There is a consensus of opinion that writing skill can play a very contributing role in EFL/ESL learners" language development. To date, language teachers encounter the problem of how to enhance and promote language learners" writing skill. Finding an efficient way or approach which facilitates learning and helps them write better seems to be quite necessary. There is no doubt that PBL activities can be crucial in promoting writing. PBL seems to match this English teaching and learning need.

In light of the difficulties in the learning and teaching of paragraph writing in ESL classrooms, it is thus important to examine approaches to teaching and learning the skill. Collaborative writing, which has been found to have encouraging influences on learners" ESL writing (Wigglesworth & Storch, 2012) may be a workable approach in the teaching of writing skills. However, to date, few studies have been conducted on using collaborative writing approaches such as PBL in paragraph writing, specifically in the context of the Iranian ESL classroom.

Recent research has explored using the collaborative teaching approach to implement inquiry PBL, but the effects of such teaching approach on writing skills have yet to be explored. This research attempts to fill that gap by examining both actual and perceived changes in writing skills among students who established their school projects through inquiry PBL. And since PBL has been proved effective engaging learners in the process of learning that appropriately leads to their better performance, this study attempts to explore the potential effect of project-based language learning on Iranian EFL learners" comparison and contrast writing skills.

SIGNIFICANCE OF THE STUDY

In the 21st century workplace and in college, success requires more than basic knowledge and skills. In a project, students learn how to take initiative and responsibility, build their confidence, solve problems, work in teams, communicate ideas, and manage themselves more effectively. PBL helps address standards. This study examines a rarely-dealt with methodology in teaching writings skills in Iranian context. Project-based methodology has not been well-appreciated by majority of teachers. The present research contributes to the EFL pedagogy as far as it familiarizes writing practitioners with tenets of project-based paradigm in teaching.

Writing is necessary when learners further their study. The most common complaint of students is usually their quickly forgetting of the things they have learnt, in spite of consuming so much time and energy. So this has always been the concern of the language specialists to deal with it. Thus, this research is of much importance because it attempts to fill that gap by examining both actual and perceived changes in writing skills among students who carry out their class projects through inquiry PBL. Therefore, due to the important role of writing in our learning and the significance of developing paragraph writing skills, it is helpful to determine if PBL approach can improve writing performance of Iranians.

LITERATURE REVIEW

Project-based learning (PBL) is a student-centered pedagogy that involves a dynamic classroom approach in which it is believed that students acquire a deeper knowledge through active exploration of real-world challenges and problems. Proponents of project-based learning cite numerous benefits to the implementation of its strategies in the classroom – including a greater depth of understanding of concepts, broader knowledge base, improved communication and interpersonal/social skills, enhanced leadership skills, increased creativity, and improved writing skills. Another definition of project-based learning includes a type of instruction, where students work together to solve real-world problems in their schools and communities. Successful problem-solving often requires students to draw on lessons from several disciplines and apply them in a very practical way. The promise of seeing a very real impact becomes the motivation for learning PBL is not a new approach in education. Beckett (2006) pointed out that PBL can be trailed back to the mid-1800s, and was first formed by David Snedden who taught science in American agriculture classes. Later, in the early 1900s, PBL was more developed by William Heard

Kilpatrick, John Dewey's student, and concentrated on learners" needs to have a fruitful activity (Muniandy, 2000; Beckett, 2006). In other words, learners in PBL had the opportunity to create knowledge by providing their projects based on their interests and individual differences. They made connections between their new knowledge and their existing knowledge and were able to apply them to similar settings. They learnt in a significant context while generating the end product (Wrigley, 1998).

Definitions of PBL

As PBL has been performed in diverse disciplines in the classroom, there are a lot of definitions of PBL (Welsh, 2006). In disciplines other than second and foreign language, the Buck Institute for Education (BIE), an American research and development organization, defined PBL as "an organized teaching method that engages learners in learning knowledge and skills through an extended inquiry process established around complicated, authentic questions and attentively designed products and tasks" (Markham et al., 2003). Solomon (2003) elucidated that PBL is a process of learning that learners are responsible for in their own pedagogy. Students work collaboratively to solve problems that are "authentic, curriculum-based, and often interdisciplinary" (p. 10). Learners learn how to design their own learning process and decide what and where information can be gathered. They analyze and synthesize the information then use and deliver their new knowledge at the end. Throughout the process of learning, teachers play the role as managers and advisors. Thomas Markham (2011) describes project-based learning (PBL) thus: "PBL integrates knowing and doing. Students learn knowledge and elements of the core curriculum, but also apply what they know to solve authentic problems and produce results that matter. PBL students take advantage of digital tools to produce high quality, collaborative products.

Moss and Van Duzer (1998) define PBL as "an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop" (p.1). Fried-Booth (2002) has developed a definition of PBL as "student-centered and driven by the need to establish an end-product" (p. 6). Project work is driven by the intrinsic needs of students who develop their own tasks individually or in small groups. This approach creates links between real-world language and language in textbooks. PBL allows learners to work together with hands-on experience in an authentic and meaningful context (Fried-Booth, 2002) and prepares language learners with a problem to solve or a product to create. Learners either work alone or in groups with their own responsibility and the challenge to solve authentic problems and decide their own approaches for achieving their goals (Hutchinson, 1993).

Eventually, students deliver their newly acquired knowledge and a product which indicates their learning. They are assessed throughout the process by peers and teachers. The teacher's role throughout is as a facilitator and advisor. Moreover, PBL develops effective research and study skills, such as the use of reference resources and modern technology, for example, computers, the internet and its powerful search engines, all of which are fruitful for lifelong learning (McGrath, 2002-2003; Markham et al., 2003).

From the above definitions and explanations of PBL in SL and FL studies, the definition of PBL in this study is summarized as an in-depth learning, concentrating on real-world problems and challenges that engage students who work as a team through meaningful activities resulting in an end product.

It looks clear-cut that PBL is a possible means for enabling students to improve their language, content and communicative skills. They can use and incorporate language and factual knowledge in their real lives while performing and creating the project. This is contrary to traditional classrooms, where teachers transfer knowledge from textbooks to students. Therefore, it is critical to investigate PBL implemented in an Iranian context, and to examine whether Iranian students are able to develop their English proficiency, learning skills and self-confidence through the use of PBL in their learning procedures.

Key Features of PBL

As cited in Simpson (2011) the characteristics of PBL are consistent among educators who studied and applied this teaching method. Features of PBL include: (a) complex explorations over a period of time; (b) a stude nt-centered learning activity whereby students plan, complete and present the task; (c) challenging questions, problems or topics of student interest which become the center of the project and the learning process; (d) the de-emphasis of teacher- directed activities; (e) frequent feedback from peers and facilitators, and an opportunity to share resources, ideas and expertise through the whole process in the classroom; (f) hands-on activities and the use of authentic resources and technologies; (g) a collaborative learning environment rather than a competitive one; (h) the use of a variety of skills such as social skills and management skills; (i) the use of effort in connecting ideas and acquiring new skills during different stages of projects; (j) the production of meaningful artifacts that can be shared with peers, teachers, and experts in a public presentation; and (k) assessment in both the process of working from the first stage to the last stage and the finished project.

PBL in Iranian Context

Globalization has massively influenced changes in education. A shift away from traditional teaching methods in which teachers and textbooks are the center of knowledge has been changed to one where active learners creating knowledge with the guidance of the teacher. PBL is considered helpful and innovative teaching pedagogy in the 20th century (Wong et al., 2006).

To the researcher knowledge, there have been a few studies in Iranian context. According to Shafaei et al. (2007) in recent years, it has been widely acknowledged that classes designed by utilizing PBL (PBL) are effective in enhancing the problem-solving ability of students. In PBL-based classes, students worked in groups and tried to apply their knowledge to solve the problems by themselves; therefore, such classes were effective in improving students" vocabulary knowledge and communication.

According to Bagherzadeh et al. (2014) Pot-Luck, as an innovative technique of PBL, has an important impact on Iranian EFL learners" autonomy in learning; moreover, it helps

students to enjoy and develop a positive attitude towards learning. As an implication of this study, Pot-Luck, the creative idea of the researcher, is introduced as an innovative technique of PBL, which proved to be noticeably useful in developing a positive attitude in learners towards learning, and improving autonomy in learning.

Empirical Studies on PBL & Writing

According to the Center of Excellence in Leadership of Learning (CELL) University of Indianapolis (2009) the summary of research on PBL indicated that overall, the research on PBL shows positive results related to student learning in the areas of content knowledge, collaborative skills, engagement and motivation, and critical thinking and problem-solving skills. The studies propose that PBL, when totally realized, can improve student learning. However, the research also underscores how complicated it is to conduct PBL well.

Compared to traditional classes, students in PBL classes outperform on assessments of content knowledge (Boaler, 1997; Penuel & Means, 2000). Research also showed that PBL had a positive impact on specific groups of students. For example, students with average to low verbal ability and students with little previous content knowledge learned more in PBL classes than in traditional classes (Mergendoller et al., 2006; Mioduser & Betzer, 2008). Additionally, students were able to display specific content area skills after participating in PBL (Mioduser & Betzer, 2008). In brief, students taught in PBL classes appeared with useful, real-world content knowledge that they could apply to a variety of tasks (Boaler, 1997).

Linda Hughes and Michael Lund authors of "Union and Reunion: Collaborative Authorship considers collaborative writing "a union that is greater than the . . . parts that composed it" Howard (2003) Collaborative writing opportunities provide situations where students give and receive support, refine communication skills, and improve unanimity. These teamwork attributes strengthen students writing through the collaborating process. Carl Nagin, researcher and author of Because Writing Matters, holds that professional improvement in writing in the traditional sense is not as flourishing as teachers developing thorough teachers" collaborative learning environment (CLE).

This study was an attempt to investigate the effect of project-based language learning on EFL learners' writing skill. In effect, the study sets itself the objective of investigating the following questions:

1. Does project-based language learning have any impact on Iranian EFL learners" comparison paragraph writing skills?
2. Does project-based language learning have any impact on Iranian EFL learners" contrast paragraph writing skills?

According to the problems mentioned and purposes of the study the following hypotheses were the foci in the current study:

Hypothesis 1: Project-based language learning has no statistically significant impact on Iranian EFL learners 'comparison paragraph writing skills.

Hypothesis 2: Project-based language learning has no statistically significant impact on Iranian EFL learners' contrast paragraph writing skills.

METHOD

Research Design

To investigate the research hypotheses, the current study adopted the quasi-experimental design in terms of using one experimental group and one comparison group. These groups were chosen randomly from intermediate levels from a language institute. The experimental group was taught using PBL designed by the researcher and the comparison group was taught using the traditional method, over the same period of time. Both the experiment and the comparison groups were pre-tested and post-tested in their writing skills, exactly the same tests. The both groups were taught by the same trained EFL teacher. All participants were totally informed of the procedures to be followed throughout the study prior to the tasks.

Participants

Thirty six male intermediate EFL students, between 16 and 23 years old with a mean age of 19 years, participated in this study. The participants were students at Armangarayan Language Institute in Kish. They were selected non-randomly and categorized at the same level, in terms of language proficiency, since they were able to pass the test with a score higher than 40-60 out of 100. All of the participants were native speakers of Persian and they had studied English as a foreign language in high school and some of them had passed English courses at university and all of them had passed at least eight terms learning English in the language institutes. The students were selected based on simple random sampling technique.

Materials and Instruments

The materials and instruments utilized in this study included an OPT, a pre-test, a post-test, and the book entitled Paragraph Writing by Riazi et al. (2002).

Oxford Placement Test

The OPT is a placement test in the form of multiple-choice test which consists of 100 items on grammar. This test was applied in order to determine the homogeneity of the groups regarding their language proficiency levels.

Pre-Test

The participants in both groups were given 45 minutes to write on the same topic as pre-test. To meet the requirements of the study, the topic was selected by the researcher to serve as a prompt for the participants to elicit their ability in writing English comparison

and contrast paragraphs: "Compare and contrast two professional athletes." No limitation was declared regarding the length of their paragraphs, but they were told to name at least three differences and three similarities. To score the participants' written output before the study, a comparison scoring module (see Appendix A) and a contrast scoring module (see Appendix B) developed by Soleimani et al. (2008) were employed.

Post-Test

After the completion of the 16 teaching sessions (which will be described later), students were asked to write on a topic which was different from the pre-test topic to measure the participants' writing performance achievement. They were required to write on the topic "Compare and contrast two places you have visited" to compare the performance of the participants of each group who received different teaching instructions. To produce their second output, they were asked to mention at least three differences and three similarities to fulfill the requirements of length of their output. To score the participants' written output at the end of the study, a comparison scoring module (see Appendix A) and a contrast scoring module (see Appendix B) developed by Soleimani et al. (2008) were employed.

The time allocated to the post-test was 45 minutes, but nearly all the participants finished their task in less time than the allocated one. In order to ensure validity and reliability, the pre-test and post-test were set by a panel of experts who had at least ten years of teaching experiences in actual paragraph writing and essay writing courses in universities. The pre-test and post-test were pilot studied on the L2 learners (n = 13) who were similar to the learners of the main study. The results of Cronbach's alpha analysis showed that both tests were reliable with r values of 0.84 and 0.86 respectively.

Procedure

At the first step of this study, the learners were homogenized based on the results extracted from OPT in order to make sure that the results of the study were not due to the initial differences between the participants. The OPT was for the assessment of the participants" language proficiency level which was given to 60 EFL learners. After the OPT was administered, 36 out of 60 participants were chosen since all of them were able to pass the test with a score higher than 40-60 out of 100 ,and according to the OPT results the learners were categorized at the same level(Intermediate). There were the same instructor and the same book for two groups, the time for pre and post-tests was the same and lasted for 45 minutes. When the homogeneity was assured, the participants according to simple random sampling were divided into two groups: An experimental group and a comparison group. There were 18 students in each group.

After homogenizing the students, a pre-test was administered to determine the students" writing ability prior to the treatment. This test would reveal that any changes in the writing ability of the participants would be because of the treatments they received. The treatments continued for about ten weeks (20 sessions) comprising of one introductory session, three sessions of test administration (OPT, pre-test, post-test) and sixteen sessions

to covered instructional units of a book entitled "Paragraph Writing", (Riazi et al., 2002). All sessions took place in the students' classrooms about 90-minute period.

After implementing the treatments, a post-test was used in order to detect the writing ability of the participants. It is worth mentioning that after the post-test was administered, the students in the experimental group were required to fill the opinion questionnaire for their attitudes towards PBL.

Experimental Group

PBL was applied for the experimental group which emphasized group working. In the experimental group, like all of the instructional classes, the teachers taught the instructional materials. At first, the teacher discussed practical reasons for comparing and contrasting with the whole class on a topic or a unit of the selected book entitled "Paragraph Writing" by selecting subjects that matter to students. For instance, one might be to compare two models of cars and then write a letter to a benefactor who might buy them one. Another would be a store manager writing to a buyer about two products. The teacher also discussed reasons for learning to write about similarities and differences, for example, academic topics such as comparing two organisms or two wars may also be useful. Then the students were divided into groups of three and those who were interested in working in the same subtopic could form groups together and developed questions for investigation. Students planned together, in concrete terms, what they wanted to investigate and develop their research questions related to the subtopics they had chosen.

The students helped each other to improve their writing; they also could ask questions about capitalization, punctuation, cohesion, coherence and cue words such as similar to, like, both...and, and also for similarities and however, but, while for differences in comparison and contrast. So, it was helpful to provide model sentences with cue words like „spring weather in Yasouj is similar to spring weather in Shiraz" and „however, winter is much colder in Yasouj" which the learners could use until they became comfortable with them. Then they had to decide how to tackle the research questions and think of some ways to collect those relevant materials and information. Then they had to divide the work among individual members. Each of them had their own work, they had to work closely together and help the other group mates whenever possible.

Sometimes, it was the responsibility of teachers to teach them different social skills to facilitate their cooperative work. He uttered that students in cooperative groups receive peer encouragement and personalized support from their more competent partners. They might perceive that their contributions were expected and valued for the success of the group. Each group had to presents its summary task and also they had to plan how to present their findings to the whole class. The teacher assessed the students by observing them in the process of working on the projects as well as assessing the final project report as the product. Furthermore, teacher also asked the students to undergo self- assessment and peer-assessment.

Comparison Group

A traditional instruction was used for the Comparison Group which emphasized individual working. The students in comparison group received ordinary classroom instruction in each session which was teacher -led method, vice- versa to the experimental group which was student-centered class. In the comparison group, a deductive approach to paragraph writing was followed. The teacher wrote some topics on the board and by the agreement of all students selected one topic. In this method, students were generally concerned with improving their own grade, and goals were individualistic rather than group-wide. The learners had to apply what they had learned. They had to write individually, without getting help from others. The teacher as an observer helped them to have better performance, and finally he corrected their writing papers and in addition to giving scores to each of them, in order to prevent making similar mistakes in the future, he illustrated the learners' errors.

Data Analysis

To examine the research hypotheses, the data were collected using the participants' written outputs during the experimentation. To score the participants' written output throughout the study, a comparison scoring module and a contrast scoring module were used.

For the purpose of this study, since we focused on the acquisition of structures of comparison and contrast paragraphs, contrast related items were defined as follows: 1) Topic sentence involving topic existence and topic effectiveness; 2) Topic development involving clarity of expressions of ideas and overall effectiveness of the whole paragraph; and 3) Contrast-related structures and items involving the number of error-free T-units, unique contrast lexemes, punctuation, coordinate conjunctions, predicate structures, and sentence connectors and comparison related items were defined as follows1) Topic sentence involving topic existence and topic effectiveness; 2) Topic development involving clarity of expressions of ideas and overall effectiveness of the whole paragraph; and 3) comparison-related structures and items involving the number of adjective and preposition, attached sentences, punctuation, coordinate conjunctions, predicate structures, and sentence connectors. In the present study, the use of the above mentioned structures and items by subjects in their outputs were indicative of their learning the structures.

To score each participant's production, the frequency of use of each of the contrast-related items and comparison- related items were computed for each participant's output. One point was assigned for each item used by the subjects.

The data from these tests were processed statistically by the use of SPSS to show the pre-test and post-test scores of the 36 students. SPSS computes a t-test from means and standard deviations. The t-test is a statistical procedure that allows the researcher to determine whether the differences in means between pre-test and post-test scores are significant or not (Burns, 2000). The assumption is made that the population data from

which the samples are drawn are normally distributed and the samples are randomly selected (Fink, 2006). The t-test must meet the assumption in order for the test to be accurate. In this study, all data sets were normally distributed and the samples were randomly selected. The t-test was employed to assess whether the mean scores of pre-test and post-test were statistically different from each other. Descriptive statistics were used to describe the data. To verify the homogeneity of the intact classes randomly selected for the purpose of the research, an OPT was used.

RESULTS

The general statistical analysis of the research results manifests a comprehensive picture of the groups and their related type of task under study. Because the application of normality tests on the data showed a normal distribution of the data, we used the mean and standard deviation as measures of central tendency and dispersion. The mean for both groups under study (Experimental group [EG] and Comparison group [CG]) are displayed in Table 1.

Table 1. Descriptive Statistics of the Groups under Study

	Group	N	M	SD	SEM
Comparison Pretest Score	Comparison	18	5.22	1.34	.31
	Experimental	18	5.11	1.71	.40
Comparison Posttest Score	Comparison	18	6.34	1.36	.32
	Experimental	18	8.44	1.46	.34
Contrast Pretest Score	Comparison	18	5.34	.99	.23
	Experimental	18	5.55	1.33	.31
Contrast Posttest Score	Comparison	18	6.51	1.03	.24
	Experimental	18	8.88	1.40	.33

Table 1 shows that there are observed differences between the means of comparison and contrast paragraph writing skills of both groups according to the teaching procedure. The researcher used *t-test* to find the significance of these differences. The results are presented in the table 2.

Table 2 shows that there is no statistically significant difference between the two means of the students" scores on the pre –test attributed to the comparison and contrast paragraph writing skills of both Experimental and Comparison groups (α = .82 and α = .59 respectively, p>.05), and for comparison pre-test score it also shows t= .21, df=34, MD=.11 and SED=.51, and for contrast pre-test score t= 5.30, df=34, MD= -2.08 and SED=.39. The table also shows that there is a statistically significant difference between the mean scores of both groups of students on the pre- test and post-tests attributed to their comparison and contrast paragraph writing skills. The table also shows that there is a statistically significant difference between the post-test scores of the Experimental and Comparison groups (α = .00, p< .05) and also for comparison post-test score t= 4.43, df=34, MD= -2.09 and SED=.47 and for contrast post- test score t= 5.77, df=34, MD= -2.37 and SED=.41. The Experimental group students outperformed the Comparison group (α = .00, p< .05).

Table 2. Overall Results of Two Groups under Study

		Levene's Test		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	Lower	Upper
Comparison Pretest Score	Equal variances assumed	1.17	.28	.21	34	.82	.11	.51	-9.31	1.15
	Equal variances not assumed			.21	3.21	.82	.11	.51	-9.33	1.15
Comparison Posttest Score	Equal variances assumed	.47	.49	4.43	34	.00	-2.09	.47	-3.05	-1.13
	Equal variances not assumed			4.43	3.38	.00	-2.09	.47	-3.05	-1.13
Contrast Pretest Score	Equal variances assumed	1.39	.24	5.30	34	.59	-2.08	.39	-1.00	.58
	Equal variances not assumed			5.30	3.13	.59	-2.08	.39	-1.00	.59
Contrast Posttest Score	Equal variances assumed	.75	.38	5.77	34	.00	-2.37	.41	-3.21	-1.53
	Equal variances not assumed			-	3.11	.00	-2.37	.41	-3.21	-1.53

Hypothesis 1

Since hypothesis 1 predicated that Project-based language learning has no statistically significant impact on Iranian EFL learners" comparison paragraph writing skills, the following table shows the statistic results of the effects of PBL on learners" comparison paragraph skills.

Table 3. Descriptive Statistics of EG Comparison Paragraph Writing

	Paired Samples Statistics			
	M	N	SD	SEM
Pair 1 ComPreTestS	5.11	18	1.71	.40
ComPosTestS	8.44	18	1.46	.34

In order to statistically be more reasonable a paired sample *t-test* was run between the comparison Pre-Test and Post-Test scores of the participants in Experimental group. According to the statistics displayed in table 4.11 it can be seen that the mean differences of Pre-Test and Post-Test for Experimental group (the mean for Pre-Test is 5.11 and for Post-Test 8.44) .The results are shown in Table 4.

Table 4. Results of the Paired Samples t-test between the Scores of Comparison Pre-Test and Post-Test of EG

	M	SD	SEM	Lower	Upper	t	df	Sig. (2- tailed)
ComPreTestS ComPosTestS	-3.33	.84	.198	-3.75	-2.91	-16.83	17	.000

Table 4 shows that there is a significant mean difference between the Pre-Test and Post-Test scores of EG (P < .05), and also it shows M = -3.33, SD=.84 ,t=-16.83, and df=17.

Hypothesis 2

According to hypothesis 2, Project-based language learning has no statistically significant impact on Iranian EFL learners" contrast paragraph writing skills. In order to accept or reject this supposition, the results are displayed in table 5.

Table 5. Descriptive Statistics of EG Contrast Paragraph Writing

		Paired Samples Statistics			
		M	N	SD	SEM
Pair 1	ContPreTestS	5.55	18	1.33	.31
	ContPosTestS	8.88	18	1.40	.33

According to the statistics depicted in table 5 it can be seen that the mean difference of Pre-Test and Post-Test for EG(the mean for Pre-Test is 5.55 and for Post-Test 8.88). The results are shown in table 5.

Table 5. Results of the Paired Samples T-Test between the Scores of Contrast Pre-Test and Post-Test of EG

	M	SD	Lower	Upper	t	df	Sig. (2- tailed)
ContPreTestS ContPosTestS	-3.33	1.57	-3.75	-2.91	-8.99	17	.000

Table 5 shows that there is a significant mean difference between the Pre-Test and Post-Test scores of EG (P < .05). It shows M = -3.33, SD=1.57, t=-8.99, and df=17.

DISCUSSION AND CONCLUSION

The purpose of this study was to investigate the effects of PBL on Iranian EFL learners" comparison and contrast paragraph writing skills. For this reason, an experimental group (EG) and a comparison group (CG) were formed for the study. PBL was applied to the EG, and instruction-based procedure on student textbooks was applied to the CG in the study. As presented in the pre-test findings of comparison and contrast paragraph writing, there was no significant difference between EG and CG in terms of their comparison and contrast

paragraph writing scores. The findings of post-test at the end of the ten-week implementation, however, indicated that the EG performed better than the CG.

Question 1: Does project-based language learning have any impact on Iranian EFL learners' comparison Paragraph writing skill?

The results of *t- test* indicated statistically significant difference between the Pre-Test and Post-Test scores of the EG. They indicated that PBL activities were effective in improving EFL writing skill of intermediate level students of English. This seems to be in agreement with the findings of Cirak (2006) who reported similar results regarding the positive impacts of PBL, as she investigated the effects of PBL in an elementary English lesson. She organized her second grade classroom in an elementary school and the teaching materials with the principles of PBL. At the end of treatment of the study, the data revealed that the students in the experimental group outperformed than the students in the control group where traditional instruction methods were used.

The theoretical relevance of PBL in enhancing students" paragraph writing ability is based on the assumption that students in PBL may feel important because they perform roles that are essential to the completion of group tasks. Furthermore, they possessed information and resources that were indispensable for their teams. Likewise, interaction among team members might lead to increased achievement through elaboration and organization of the material prepared by the teacher. This appears to be consistent with the finding of cognitive elaboration perspective that project-based learners must engage in some sort of cognitive restructuring or elaboration to keep information in memory and incorporate it into the existing cognitive structures (Johnson *et al.*, 1998).

Question 2: Does project-based language learning have any impact on Iranian EFL learners' contrast paragraph writing skill?

The results obtained show that there was   a significant mean difference between the Pre-Test and Post-Test scores of the EG (P < .05).The results can be explained by the fact that PBL helped students to feel more responsible over their learning and feel autonomous towards solving their problems as well in their groups.

As Özdemir (2006) has stated, a PBL lesson provides students with the opportunity to learn in an authentic, challenging, multidisciplinary environment, to learn how to design, perform, and evaluate a project that requires sustained effort over a significant period of time, to learn to work with minimal external guidance, both individually and in groups, to gain in self-reliance and personal accountability. Moreover, Eryilmaz (2004) has articulated, via peer instruction, such as in PBL, students can develop their academic achievements and attitudes since interaction between group members in a social context is essential for learning as proposed in social constructive theory and context are important to understand what occurs in society and to construct knowledge. Meanwhile, it is suggested that teachers should group the students together whenever and wherever possible (Scott & Ytreberg, 1990). Students enter into an amicable competition with other groups during project works and pay effort so as to be successful. As a result of their achievements, they feel the happiness and excitement of achieving something. At the same

time, students feel the pleasure of producing something and displaying something different, which in turn makes them feel valuable, skillful and knowledgeable. In that way, it can be said that their self-confidence and feeling of competence for next project tasks is improved.

This study elucidates that PBL might enhance students" paragraph writing performance. PBL activities are supported by a multiplicity of theories from a variety of academic disciplines–including constructivist theory, social constructivist theory, communicative approach, multiple intelligences theory as well as social interdependence theory. PBL is also supported by a large body of empirical research across different time periods, subjects, and geographical locations and has consistently found a variety of positive outcomes–including accelerated academic achievement, increased self-esteem, and motivation.

In PBL, the students are given opportunity to write and to revive and rewrite what they have written. Peer criticism aids them to have the high level of writing performances, since they have the opportunity of evaluating each other work separately (i.e. the students have the opportunity of evaluating their own works). The students working with partners ask each other for help and improve their attitude towards writing.

In this study, before PBL was incorporated in the class, the students obtained low scores but after the implementation of PBL for sixteen weeks, the students scored significantly better in their writing. So, it seems that the implementation of PBL in writing has been proven to produce positive effects in students' learning of writing. Thus, this study lends credence to the belief that PBL has positive effects on the students' writing performance. Therefore, teachers are suggested to consider this learning approach as a viable alternative for teaching writings. So, it can be helpful to EFL teachers either involved in PBL practice or wanting to implement PBL into their classrooms to maximize the benefits of PBL in the classrooms.

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APPENDIX

Appendix A. Scoring Module for Comparison Paragraphs

Surname Male □　　female □	Output 1 □ Output 2 □	Total score:

Topic Sentence	Topic Existence & Effectiveness 2 1 0
Topic Development	Clarity of Expression of Ideas 2 1 0 Overall Effectiveness of the Whole Paragraph 2 1 0
Comparison-based Structures and items	Number of Adjective/Preposition Number of Attached Statements Number of Punctuation Number of Correlative Conjunctions Number of Predicate Structures Number of Sentence Connectors

Appendix B. Scoring Module for Contrast Paragraphs

Surname Male □　　female □	Output 1 □ Output 2 □	Total score:

Topic Sentence	**Topic Existence & Effectiveness 2 1 0**
Topic Development	Clarity of Expression of Ideas 2 1 0 Overall Effectiveness of the Whole Paragraph 2 1 0
Contrast-based Structures and items	Number of Error-free T-units Number of Unique Contrast Lexemes Number of Punctuation Number of Correlative Conjunctions Number of Predicate Structures Number of Sentence Connectors Number of Adjective/Prepositions