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Improving Grammar and Writing Skills of Iranian EFL Learners Through Portfolio Assessment

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Abstract

This study was conducted to investigate the effect of portfolio as a kind of alternative assessment on grammar knowledge and writing skill of Iranian EFL learners at the intermediate level. Based on convenience sampling, 32 adult Iranian IELTS students attended in an intensive preparation course of English in two consecutive terms twice a week for 90 minutes over 5 weeks. It is necessary to mention that basic elements of an acceptable writing were presented in both control and experimental groups to make students aware of the fundamental requirements of writing. The results through ANCOVA revealed that all the null hypotheses of the study, except one, were rejected and significant differences were found between the average performance of the two portfolio and the non-portfolio groups in grammar, IELTS and PET and finally PET writing. However, no difference was found between the average performance of the two portfolio and the non-portfolio groups in IELTS. It was hence concluded that the use of portfolio can significantly improve grammar knowledge, general proficiency and to a lesser extent the writing skill of Iranian EFL learners at the intermediate level. Moreover, parallel to portfolio application, students achieved authenticity, sense of responsibility and ownership. Self-assessment and peer-assessment, which were experienced by highly motivated learners, lead to a student-centered classroom in a process-oriented approach.

Key words: Alternative assessment; Grammatical knowledge; Portfolio; Writing skill

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INTRODUCTION

Researchers in English language Teaching try to provide new practical ways to help foreign language learners to overcome the interactional barriers of real-life contexts. Through speaking, learners negotiate with others and get immediate feedback but "it is via writing that a person can communicate a variety of messages to a close or distant, known or unknown reader or readers" (Olshtain, 2001, p.207). Writing is an intricate process for learning, thinking, and communication enhancement (Dunsmuir & Clifford, 2003). Since fluency in writing is considered as a goal in second language learning and grammar knowledge is the building block of this skill, second language teaching includes structured approaches for grammar teaching (Andringa, 2005).

Learners experience failures because of ineffective grammar teaching. Many English students do not have sufficient grammar knowledge which is completely obvious in their examination papers. Moreover, they are not involved with essay writings. Teachers usually underline their errors and give a holistic mark and there is no chance to analyze their errors purposefully to be aware of their weak points via cooperation with classmates. The problem may be that dealing with grammar alongside writing is considered a time consuming activity and students do not get enough instructions on grammar points. Since writing courses and grammar- based assignments keep students away from classes, creative grammar instruction and useful writing techniques are of great importance to attract students.

In addition, it is assumed that portfolio has been evaluated as a pedagogical tool to enhance writing

abilities. Students will benefit from writing portfolios to get involved more deeply with the process of learning and even teaching of grammatical points. Camp (1990) claimed that portfolios can present beneficial information such as students' beliefs toward their performance, their goals and interests, level of understanding and their awareness. However, teaching grammar via portfolio has not been studied specifically; in so doing, the present study sought to investigate the impact of using portfolios as a formative assessment tool on the grammar knowledge, writing skill, and eventually general proficiency of a number of Iranian EFL learners. Therefore, two questions were raised at the onset of the study:

RQ_1: To what extent does the use of portfolio affect *the grammatical knowledge* of Iranian EFL learners at the intermediate level?

RQ_2: To what extent does the use of portfolio affect *the writing skill* of Iranian EFL learners at the intermediate level?

1. LITERATURE REVIEW

In this section, researchers tend to give a definition for alternative assessment and its purpose. On the second step, portfolio application and its benefits are considered. In addition, writing, grammar knowledge and related studies are taken into consideration.

1.1 Alternative Assessment (AS)

As it is crystal clear, assessment has an indisputable role in teaching and learning of second or foreign language which has major impacts on learners' future lives. According to Born (2003), summative assessment is a traditional approach of assessing final results in contrast to formative assessment which assesses the learners' performance over a specified time by providing feedback through different tools to specify learners' deficiencies and strengths.

After decades, researchers and educators have figured out that focusing on the learning processes seems more constructive than product- oriented approach and alternative assessment which is based on constructivist principles is of vital importance. In this approach which is also called as authentic, comprehensive, or performance assessment, students' progress is monitored and precise information is provided through different assessment tools such as open-ended questions, computer simulations, self-peer assessment and especially portfolios to illustrate their endeavors and achievements in language learning process (Dietel, Herman, & Knuth, 1991). Students' active participation in group activities and teamwork projects, reflective thinking skills enhancement, and self and peer correction are major characteristics of Alternative Assessment (Oren, Ormanci, & Everkeli, 2014).

1.2 Portfolio

By the early 1990s, portfolio application had become popular in educational settings. Firstly, it was defined as a systematic collection of learned material. Other definitions of portfolio include "a collection of student work, an opportunity for student selection of items for inclusion in the portfolio, active student engagement in the assessment process by demonstrating through evidence what he or she knows and can do, student self-assessment on progress and accomplishments, reflection on the process and the value of the learning itself" (Klenowski, 2010, p.1). Students collect artifacts and products which show their achievement during the process of language learning in order to reflect upon them. Portfolio application makes learners responsible about their self- directed learning process.

Portfolio assessment has two major parts. The first one is the product-oriented approach which focuses on a separate written text from a behaviorist orientation and the second part is process-oriented writing that considers learners' performance from the post-modern view of language (Romova & Andrew, 2011). In portfolio assessment students can interact with their teacher as well as their peers to function formatively and develop their learning process. Some educators think that portfolio is just a collection of papers, but there is management and logic behind portfolio application in English classes. As Delett, Barnhardt, and Kevorkian (2001) explained, there are seven steps in making portfolio: defining the assessment purpose, determining outcomes, matching classroom tasks to outcomes, determining criteria, establishing organization, observing the portfolio, and evaluating the process.

1.3 Writing Skills

Around mid-1960s, students' essays were rated as final products rather than analyzing strategies and process of writing. In the late 1960s, think aloud was introduced by Janet Emig as a technique for collecting information about students' writing process. After a while, the conception of process-based approach influence on the teaching of second language writing skill.

In this new era, the process approach or a cyclical approach is a dominant way in teaching writing by the prominence of leaner-centered classroom rather than a teacher-based one. Learners never write a perfect writing task without going step by step through different stages of drafting and receiving feedback from their peers or teachers.

Over the process of teaching writing, portfolio as a "pedagogical-cum-evaluation" instrument in the classroom (Klenowski, 2002) represent students' efforts, progress, and accomplishment in the writing process (Genesee & Upshur, 1996). In line with Lam (2016) and Burksaitiene and Tereseviciene (2008), portfolio enhanced motivation as it was clear in portfolio class in contrast with non-portfolio group in the present study. The control group learners were sometimes tired and got bored with the essays but the students of portfolio group were more motivated than the control one.

1.4 Grammar

Grammar is one of the significant and vital components of language teaching, and "no one doubts the prominence of grammar as an organizational framework within which communication operates" (Brown, 2001, p. 362). Nowadays, form-focused instruction within the communicative framework by the use of consciousness-raising, input-enhancement, and grammar-focusing techniques is an acceptable approach in grammar teaching classes which leads to communicative goals.

Empirical studies show that learners' grammatical competence is not so efficient in writing module. Some researchers like Trusscut (1996) are against grammar correction and believe that it takes a lot of time and energy in writing courses. Although others believe that grammar correction plays an important role in learners' enhancement in writing skill and it is positively correlated with their general writing achievement. Thomas and Austin (2005) argued that omitting grammar teaching has a negative effect on students' performance and grammar is a necessary part of writing ability. That is why the purpose of this study has been to examine whether teaching grammar through portfolio can improve grammatical knowledge as well as writing skill of learners more effectively than the conventional methods used in language schools in the EFL setting of Iran.

1.5 Related Studies

These days portfolio is one of the practical tools for assessment and many researchers have carried out investigation on portfolio assessment. Studies indicate that portfolios make significant contributions to English language writing. Orak and Oz (2018) found the students' beliefs about using portfolio as an assessment instrument in language learning process via conducting two action research cycles (interviews , field notes, and self-monitoring) at a state university in Turkey. The results of their study indicated a positive change in the students' attitudes towards writing skills. Efendi, Usman, and Muslem (2017) investigated the implementation of portfolio assessment on students' writing skills enhancement and the results showed that implementation of portfolio assessment improved the writing skills and the responses of the students.

Prastikawati, Sophia, and Sodiq (2016) investigated the impact of portfolio assessment on English learners' writing ability and they found out its impact on students' writing ability in terms of focus, elaboration, organization, conventions, and vocabulary. They concluded that portfolio assessment had important impacts on students' writing ability. Goctu (2016) scrutinized students' views on portfolio assessment of EFL writing. The respondents' answers showed several reasons why students were more fulfilled and efficient with portfolio assessment than with traditional testing. Bruner (2014) explained the advantages of using portfolio assessment in second or foreign language classrooms as a result of its process-oriented, authentic, integrated, interactive, and learner-centered characteristics which had impact on learner's motivation, autonomy, and writing performance. As a conclusion to his work, he accepted the e-portfolio and its benefits in spite of some problems.

One of the empirical studies conducted in Iran by Sajedi (2014) was about the effect of self-assessment on 30 Iranian EFL students' portfolio production. According to the self-assessment guide, the experimental group acted better and the differences were statistically significant. Romova and Andrew (2011) considered the use of portfolios for developing academic writing and focus on value of multi-drafting process-oriented approaches in New Zealand. They concluded that a multi-draft portfolio is an efficient assessment tool because of providing feedback and enhancing learners' understanding of writing as a recursive process. In addition, Hirschel (2011) carried out a qualitative study in Japan and explained that grammar logs enhanced learners' awareness of their own accuracy by using error codes and grammar logs in the writing classroom. The corrective feedback helped students to understand common mistakes, diagnose and eliminate writing mistakes.

2. METHODOLOGY

2.1 Research Design and Variables

In this study, the researchers tried to assess the process of writing through applying portfolio in a quantitative research. With a quasi-experimental design using intact groups of participants, the study focused on two dependent variables of grammar knowledge and writing skill while the method of teaching grammar in writing (with two conditions of using and not using portfolio) was the independent variable.

2.2 Participants

Based on convenience sampling, 32 adult Iranian English learners took part in this study. They had taken part in an intensive IELTS preparation course of English in a language institute. The participants totally comprised 16 men and 16 women aged between 20 and 30. They were in four groups of eight studying in two consecutive terms that a pair of control and experimental group in each term was provided. They met twice a week for 90 minutes over 5 weeks.

2.3 Instrumentation

This study entailed the use of a number of data gathering tools.

• IELTS was used to give researchers a general picture of learners' proficiency level.

• Based on the IELTS results PET was administered to further specify the coordination of each group at the pre-intermediate level.

• Grammar as first dependent variable was assessed through multiple choice test and translated sentences. It consisted of 46 items testing grammatical points such as tense, agreement, used to, conditionals, relative clauses, conjunctions, wish, and reported speech.

• Writing skill as our second dependent variable was assessed through the writing section of IELTS and PET before and after the intervention.

2.3.1 Reliability and Validity of Grammar Pretest and Posttest

In order to examine the reliability of the grammar achievement test given as pretest and posttest, agreement and kappa coefficients were to be calculated and pinpointed in Table 1.

Table 1
Reliability for Grammar Test

		N	KR-20	z	Agreement coefficient	Kappa coefficient
Grammar-Pre	Experimental Group	16	.75	1.03	.88	.49
	Control Group	16	.70	1.4	.91	.39
	Total Sample	32	.73	.88	.85	.68
Grammar-Post	Experimental Group	16	.87	1.08	.95	.60
	Control Group	16	.74	.84	.83	.49
	Total Sample	32	.81	.86	.89	.56

The Kappa coefficients all exceed 0.30, and the researchers were safe to proceed with the main analysis.

In addition, measuring content validity of instruments is vital to ensure the instrument is covered the content which is supposed to measure or not. Therefore, the validity of the test was measured through expert opinion on content.

2.4 Procedure

2.4.1 Pretest

With prior arrangements, all the participants first sat for IELTS and then PET in two consecutive weeks before the beginning of the new term. Then they sat for the grammar pretest in the first session of the term. The purpose was to make sure that the samples selected based on convenience sampling were all at the same level and belonged to the same population in terms of language proficiency, grammar, and writing skill.

2.4.2 Treatment

It is necessary to emphasize that the process of instruction was strictly controlled and monitored by the researchers and kept generally identical in both rounds of the experiment. During the intervention, both groups received the same instructions for writing mechanics and the framework of the writing such as introduction, body paragraphs, concessions, and conclusion to make students aware of fundamental requirements of writing. To put students into similar situations, the same writing genre, namely argumentative essay, was concentrated on in both groups and the topics did not have any difference.

In *the control (non-portfolio) group***,** there were 9 female and 7 male candidates who wrote 14 essays including class activity and home activity without using portfolio. Essays of the non-portfolio group were corrected and graded in the traditional summative way and usually provided the following session. In this group, the teacher, as one of the researchers, simply underlined the errors, gave an alternative if possible, and came up with a grade at the end.

As the students did not have much experience in essay writing, the first step was to encourage them to present their ideas. After a blackboard composition, they started to write the essay. The outlines written on the board as brainstorming were expanded and each paragraph was written cooperatively. Occasionally, students were blurting out random sentences and their teacher corrected and added them to their essays.

At the beginning of the treatment, the class was more teacher-centered, but, gradually, as the treatment moved forward, learners got involved more with the process. Generally, the teacher never asked the learners to take responsibility of peer correction. Whenever the learners encountered problems related to limited vocabularies, better equivalents were put on the board. At the beginning of each session, some writers read aloud their essays as a technique mentioned by Frodesen (2001) in the class due for correction purposes.

In *the experimental (portfolio) group***,** after introducing the total framework of writing skill similar to the instruction given in the control group, students were helped to use certain grammatical structures in their several compositions. The prominent part of this assistance was focused on creating portfolio keeping the improving drafts of their writings in the editing process they underwent with the supervision of the teacher.

In addition, using peer assessment, the learners also revised, reflected on, and redrafted the essays in response to peer feedback they received either in class or on their home assignments corrected by their peers in few of the sessions. Similar to control group, the experimental group had 16 members, 9 males and 7 females. Each session, the learners were taught a new structure some of which were completely unfamiliar to them such as, conditionals, wish, and relative clauses. After five sessions, the teacher examined all essays and extracted the most frequent grammar mistakes that became the major focus of the instruction in the following sessions.

The grammar points were some tenses like different verb tenses, agreement, used to, conditionals, relative clauses, conjunctions, wish, and reported speech. Every grammatical point was explained on the board through different examples. They were also asked to highlight the new structures on their product to make it easier to trace their improvement in the portfolio they were developing.

Another part of this portfolio was a grammar log that the students in the experimental groups were supposed to fill every session by indicating their errors, nature of them, the correction and frequency of such errors.

In the last two sessions, they did not write anything, but corrected their classmates' essays based on teachers' comments as a pair work. They all welcomed peer correction and mostly believed that they learned a lot through each other's mistakes. Learners found self-correction as an appropriate technique to enhance their knowledge. It is believed that redrafting based on one's own revision is more demanding than redrafting according to teachers and peers' feedbacks and comments.

2.4.3 Posttest

Similar to the assessment done before the intervention, the participants were evaluated using IELTS, PET, and an achievement grammar test which was a parallel to the grammar pretest. They were administered in two separate sessions within a week. First IELTS and on the second session PET and grammar were scheduled. The grammar posttest was designed based on the presented grammatical structures over the process of teaching in the class which was parallelized with the pretest.

3. RESULTS AND DISCUSSION

Using SPSS software (Version 22), equality of mean scores of the control and experimental groups and normality were examined through three independent t-tests and Kolmogorov-Smirnov and Shapiro-Wilk tests respectively to represent that the participants of control and experimental group belonged to same population. After the intervention, one-way analysis of covariance (ANCOVA) was employed to investigate the effect of portfolio application as an independent variable on grammar knowledge and writing skill of Iranian EFL learners at the intermediate level as two dependent variables.

To address research questions, at the initial stage, three major hypotheses were formulated:

$H_0$1: There is no significant difference between the average performance of the two portfolio and the non-portfolio groups in grammar knowledge.

$H_0$2: There is no significant difference between the average performance of the two portfolio and the non-portfolio groups in writing skill.

$H_0$3: There is no significant difference between the average performance of the two portfolio and the non-portfolio groups in general proficiency.

As the writing level of the students was first assessed through IELTS and then PET was used for finer tuning, the second hypothesis was then broken down into two sub-hypotheses:

$H_0$2A: There is no significant difference between average performance of the two portfolio and the non-portfolio groups in IELTS writing.

$H_0$2B: There is no significant difference between average performance of the two portfolio and the non-portfolio groups in PET writing.

Furthermore, the third hypothesis was proposed on general proficiency. As two tests of IELTS and PET were conducted, two sub-hypotheses were hence put forth to facilitate the investigation:

$H_0$3A: There is no significant difference between average performance of the two portfolio and the non-portfolio groups in IELTS.

$H_0$3B: There is no significant difference between average performance of the two portfolio and the non-portfolio groups in PET.

3.1 Equating Groups on Pretest Scores

The analysis conducted on the pretests took place in four stages.

Stage 1: the first step was to obtain the descriptive statistics of the pretests. Table 2 shows the results:

Table 2
Descriptive Statistics of Pretests

	N	Min	Max	Mean	Variance	Std. deviation	Skewness	
							Statistic	Std. error
Ex IELTS	16	4.5	6.0	5.094	.274	.5234	.375	.564
C IELTS	16	4.5	6.0	5.000	.233	.4830	.507	.564
Ex PET	16	66	88	77.44	40.796	6.387	-.186	.564
C PET	16	63	88	75.19	57.096	7.556	-.142	.564
Ex Grammar	16	52	84	69.31	109.296	10.454	-.124	.564
C Grammar	16	55	90	71.63	91.850	9.584	-.030	.564
Ex Writing PET	16	10	21	16.00	13.467	3.670	-.213	.564
C Writing PET	16	8	20	14.81	16.563	4.070	-.279	.564
Ex Writing IELTS	16	3.00	5.50	4.0625	.596	.77190	.633	.564
C Writing IELTS	16	2.50	5.50	4.1563	.957	.97841	-.014	.564

To be continued

Continued

As can be inferred from the Skewness ratio (statistic/ Std. error), all the groups were within the range of ±1.96.

It was gathered that the assumption of normality was observed in the distribution of all sets of scores.

***Stage 2*:** The normality was also checked using Kolmogorov-Smirnov and Shapiro-Wilk tests. Table 3 summarizes the results:

Table 3
Normality of Pretest Scores

	Kolmogorov-smirnova			Shapiro-wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Control IELTS	.225	16	.030	.853	16	.015
Experimental IELTS	.196	16	.101	.872	16	.029
Control PET	.145	16	.200*	.955	16	.569
Experimental PET	.098	16	.200*	.978	16	.949
Control grammar	.132	16	.200*	.975	16	.916
Ex. Grammar	.159	16	.200*	.937	16	.311

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Compatible with Table 3, the level of significance (p-value) in Kolmogorov-Smirnov and Shapiro-Wilk tests for all groups are more than .01. Therefore, the researchers ensured that all scores in all groups were normally distributed.

***Stage 3*:** The variances were checked after normality.

Table 4
Levene's Test of Homogeneity for Pretest Scores

Pretest	Levene's test	Df1	Df2	Sig
IELTS	.298	1	30	.589
PET	.775	1	30	.386
Grammar	.382	1	30	.541

Table 4 shows that significance levels in all three pretests (IELTS, PET, Grammar) in both experimental and control groups were more than .05(p>.05). It was concluded that all convenient samples belong to the same population in terms of general proficiency, writing skill and grammar knowledge and hence it is eligible to undergo intervention.

***Stage 4*:** Prior to the use of ANCOVA, the equality of the groups had to be checked at the onset of the study using three independent t-tests to compare them in terms of their IELTS, PET, and grammar means. Table 5 below summarizes the results:

Table 5
Independent Samples T-Test for Pretests

	F	Levene's test for equality of variances		T-test for equality of means		
		Sig.	t	Df	Sig. (2-tailed)	
Pre IELTS	Equal Variances Assumed	.298	.589	.527	30	.602
	Equal Variances Not Assumed			.527	29.809	.602
Pre pet	Equal Variances Assumed	.775	.386	.910	30	.370
	Equal Variances Not Assumed			.910	29.191	.370
Pre grammar	Equal Variances Assumed	.610	.441	-.652	30	.519
	Equal Variances Not Assumed			-.652	29.776	.519

Based on Table 5, levels of significance in all three pretests (IELTS, PET, Grammar) in both experimental and control groups were larger than .05(p>.05). Thus, there is no significant difference between control group and experimental group before treatment. Before considering null hypotheses, representing descriptive statistics of posttests is necessary.

Table 6
Descriptive Statistics of Posttests

Group	N	Minimum	Maximum	Mean	Variance	Std. deviation	Skewness	
							Statistic	Std. error
Ex IELTS	16	5.5	7.5	6.313	396	.6292	.595	.564
C IELTS	16	5.0	7.5	5.844	.491	.7004	.640	.564
Ex PET	16	79	96	89.19	23.496	4.847	-.456	.564
C PET	16	60	95	77.38	83.183	9.120	-.099	.564
Ex Grammar	16	80	100	90.88	36.250	6.021	.104	.564

Group	N	Minimum	Maximum	Mean	Variance	Std. deviation	Skewness	
							Statistic	Std. error
C grammar	16	50	92	70.00	165.867	12.879	-.116	.564
Ex writing PET	16	13	24	19.31	13.296	3.646	-.419	.564
C writing PET	16	14	25	20.19	16.029	4.004	-.392	.564
Ex writing IELTS	16	4.00	6.50	5.1875	.496	.70415	.046	.564
C writing IELTS	16	4.00	6.50	5.3438	..657	.81074	-.063	.564

As can be inferred from the skewness ratio, all the groups were within the range of ±1.96. It was gathered that the assumption of normality was observed in the distribution of all sets of scores.

3.2 Data Analysis of the First Null Hypothesis (grammar)

The analysis of covariance was run to investigate the first null hypothesis of the study. Analysis of covariance (ANCOVA) has five assumptions: (1) calculating the covariate before the intervention, (2) normality of the data, (3) homogeneity of regression slopes, (4) linear relationship between the covariate and the dependent variable and finally (5) homogeneity of variances.

Table 7
Tests of Between-Subjects Effects in Grammar

Source	Sum of squares	Df	Mean square	F	Sig.
Corrected model	6097.015	3	2032.338	135.213	.000
Group	900.474	1	900.474	9.909	.002
Pre grammar	2310.273	1	2310.273	153.704	.000
Group * pre grammar	459.750	1	459.750	5.587	.065

Compatible with Table 7, F (1, 28) = 5.587, p= .065, p> .05 and the regression slope was homogenized.

Table 8
ANOVA of Grammar Dependent Variable (first null hypothesis)

	Sum of squares	Df	Mean square	F	Sig.
Between groups	4559.875	20	227.994	1.281	.344
Linearity	1526.752	1	1526.752	8.577	.014
Deviation from linearity	3033.123	19	159.638	.897	.598
Within groups	1958.000	11	178.000		

As it is seen in Table 8, the results of ANOVA test of linearity F(11.1) = 8.577, p = .014< .05 at %95 indicated that the statistical null hypothesis that the relationship between covariate (grammar pretest) and dependent variable (grammar posttest) was not linear, had to be rejected. Thus, there was a linear relationship between the pretest and posttest of grammar knowledge.

Table 9
Levene's Test of Equality of Error Variances in Grammar (first null hypothesis)

F	Df1	Df2	Sig.
2.295	1	30	.140

As Table 9 illustrates, p = .140 means that the variances were homogeneous and variability in two groups was almost the same.

Table 10
K- S Test for Normality in Grammar (first null hypothesis)

Group	Sig (two-tailed)	Z
Pretest	.750	.676
Posttest	.278	.993

Table 10 indicates that in both grammar pretest and posttest p value was .750 and .278, respectively. In other words, the data were distributed normally around the mean.

Table 11
Mean Table of Grammar (first null hypothesis)

Group	Number	Population mean	Adjusted mean
Control	16	70.00	69.024
Experimental	16	90.88	91.851
Total	32		

Taking Table 11 into account, population grammar mean and adjusted mean of control group (M = 70.00 & M = 69.024) were smaller than the population mean and adjusted mean of experimental group (M= 90.88, M= 91.851). The means of groups were different and experimental group had a larger mean than the control one on the posttest of grammar knowledge and the effect of entry knowledge as a covariate was eliminated. The results of ANCOVA on grammar are presented in Table 12.

Table 12
ANCOVA of Grammar Dependent Variable

Source	Sum of squares	df	Mean square	F	Sig	Partial eta squared
Intercept	261.347	1	261.347	8.607	.006	.229
Pretest	2151.347	1	2151.140	70.841	.000	.710
Group	4110.514	1	4110.514	135.366	.000	.824
Error	880.610	29	30.366			
Total	213564.000	32				

A one-way analysis of covariance (ANCOVA) is a way of controlling linear effects of a variable called covariate that the researchers do not want to study in the research. Based on Table 12 , the significance F-value associated with the covariate in this study, i.e. pretest of grammar, F (1, 29) = 70.841, $p < .05$ and F (1, 29) = 135.366, $p < .05$, indicated that it was correctly selected as a covariate. In other words, there was a significant difference between control group and experimental group on the grammar posttest.

3.3 Data Analysis of the Second Null Hypothesis (writing)

Writing skill of the two groups was tested first using IELTS and then for more precision using PET. The second hypothesis was hence turned into two.

3.3.1 Data Analysis for IELTS Writing (second null hypothesis A)

Table 13
Tests of Between-Subjects Effects (second null hypothesis A)

Source	Sum of squares	Df	Mean square	F	Sig.
Corrected Model	14.424	3	4.808	43.872	.000
Group	.001	1	.001	.006	.941
Pre PET writing	13.329	1	13.329	121.625	.000
group * pre writing IELTS	.005	1	.005	.048	.828

According to Table 13, F (1, 28) = .048, $p=.828$. It means the regression line was homogenized.

Table 14
ANOVA of IELTS Writing Dependent Variable (second null hypothesis A)

	Sum of squares	Df	Mean square	F	Sig.
Between groups	14.705	6	2.451	21.980	.000
Linearity	14.363	1	14.363	128.820	.000
Deviation from linearity	.341	5	.068	.612	.692
Within groups	2.788	25	.112		

Based on Table 14, the assumption of linearity between groups in IELTS Writing dependent variable was proven ($p < .05$).

Table 15
Levene's Test of Equality of Error Variances in IELTS Writing (second null hypothesis A)

F	Df1	Df2	Sig
2.081	1	30	.072

In Table 15, $p>.05$ indicates that two sets of scores enjoyed equal variances.

Table 16
K- S Test for Normality in IELTS Writing (second null hypothesis A)

Group	Sig (two-tailed)	Z
Pretest	.349	.933
Posttest	.20	1.073

As Table16 reveals, the scores of IELTS writing pretest and posttest were distributed normally based on K-S test.

Table 17
Mean Table of IELTS Writing (second null hypothesis A)

Group	Number	Mean	Adjusted mean
Control	16	5.187	5.224
Experimental	16	5.343	5.307
Total	32		

Table 17 indicates that means of the control group (M=5.187 and M= 5.224) were smaller than means of experimental group (M = 5.224 & M = 5.307). Removing the effect of entry knowledge as a covariate in both groups made significant results.

Table 18
ANCOVA of IELTS Writing Dependent Variable (second null hypothesis A)

Source	Sum of squares	Df	Mean square	F	Sig	Partial eta squared
Intercept	5.584	1	5.584	52.681	.000	.645
Pretest	14.223	1	14.223	134.190	.000	.822
Group	.055	1	.055	518	.477	.018
Error	3.074	29	.106			
Total	904.750	32				

As it is shown in Table 18, no significant difference was found between the means of the two groups obtained from IELTS exam before and after the intervention [F (1, 29) = 518, *p= .477, p*> .05], partial eta squared of 0.018. However, there was a relatively strong relationship between the pre and post-intervention scores on the IELTS writing test, as indicated by a partial eta squared value of 0.65.

3.3.2 Data Analysis for PET Writing (second null hypothesis B)

Table 19
Tests of Between-Subjects Effects in PET Writing (second null hypothesis B)

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	337.469a	3	112.490	29.021	.000
Group	5.602	1	5.602	1.445	.239
PrePETwriting	330.806	1	330.806	85.345	.000
group * pre writing pet	1.313	1	1.313	.339	.565

According to Table 19, F (1, 28) = .339, p = .565. In other words, regression line was homogenized.

Table 20
ANOVA of PET Writing Dependent Variable (second null hypothesis B)

	Sum of squares	Df	Mean square	F	Sig.
Between groups	354.867	13	27.297	5.392	.001
Linearity	308.234	1	308.234	60.880	.000
Deviation from linearity	46.632	12	3.886	.768	.675
Within groups	91.133	18	5.063		

According to Table 20, the relationship between covariate (pretest of PET writing) and dependent variable (posttest of PET writing) was linear [F (18, 1) = 60.880, p < .05]

Table 21
Levene's Test of Equality of Error Variances in PET Writing (second null hypothesis B)

F	Df1	Df2	Sig.
1.518	1	30	.227

Table 21 reveals that the assumption of homogeneity of variances was guaranteed, p> .05.

Table 22
K-S Test for Normality of PET Writing (second null hypothesis B)

Group	Sig (two-tailed)	Z
Pretest	.422	.88
Posttest	.237	1.033

According to Table 22, the normality of pretest and posttest PET writing scores were confirmed.

Table 23
Mean Table of PET Writing (second null hypothesis B)

Group	Number	Mean	Adjusted mean
Control	16	19.31	18.804
Experimental	16	19.31	20.696
Total	32		

Compatible with Table 23, through comparing the means of control and experimental groups and adjusted means of the groups, control group mean (M= 19.31 & M= 18.804) was smaller than experimental group mean (M= 19.31 & M= 20.696). It was revealed that subtracting a covariate was influential.

Table 24
ANCOVA of PET Writing Dependent Variable (second null hypothesis B)

Source	Sum of squares	Df	Mean square	F	Sig	Partial Eta squared
Intercept	77.158	1	77.158	20.371	.000	.413
Pretest	330.031	1	330.031	87.132	.000	.750
Group	27.922	1	27.922	7.372	.011	.203
Error	109.844	29	3.788			
Total	12928.000	32				

As illustrated in Table 24, ANCOVA of PET writing with F (1, 29) = 7.372, p = .011 <.05, partial eta squared = .20 showed a significant difference between the control and experimental groups. The significance F-value associated with the covariate in this study, that is, PET writing pretest indicated that it was correctly selected as a covariate.

3.4 Data Analysis of the Third Null Hypothesis (general proficiency)

3.4.1 Data Analysis for IELTS (third null hypothesis A)
Table 25 summarizes the results of homogeneity test.

Table 25
Tests of Between-Subjects Effects of IELTS (third null hypothesis A)

Source	Sum of squares	Df	Mean square	F	Sig.
Corrected model	12.665	3	4.222	49.454	.000
Group	.279	1	.279	3.272	.081
Pre IELTS	10.878	1	10.878	127.432	.000
Group * pre IELTS	.188	1	.188	2.202	.149

As presented in Table 25, F (1, 28) = 2.202, p = .149, p> .05, it can be seen that the regression line of IELTS scores was homogenized.

Table 26
ANOVA of IELTS Dependent Variable (third null hypothesis A)

	Sum of squares	Df	Mean square	F	Sig
Between groups	12.027	3	4.009	37.073	.000
Linearity	11.464	1	11.464	106.010	.000
Deviation from linearity	.563	2	.282	2.604	.092
Within Groups	3.028	28	.108		

Table 26 shows the linearity of pretest and posttest scores with F (1, 28) = 106.010 and p = .000. In other words, the relationship between covariate (IELTS pretest) and dependent variable (IELTS posttest) was linear.

Table 27
Levene's Test of Equality of Error Variances in IELTS (third null hypothesis)

F	Df1	Df2	Sig
.600	1	30	.445

Table 27 with p = .445 indicates that the assumption of homogeneity of variances is assumed and variability of IELTS scores in the control and experimental groups was the same.

Table 28
K- S Test for Normality of IELTS Scores (third null hypothesis A)

Group	Sig (two-tailed)	Z
Pretest	.126	1.176
Posttest	.316	.960

Based on K-S test in Table 28, it was concluded that the scores of IELTS pretest and posttest were normally distributed as p >.05.

Table 29
Mean Table of IELTS (third null hypothesis A)

Group	Number	Mean	Adjusted mean
Control	16	5.844	5.899
Experimental	16	6.313	6.357
Total	32		

According to Table 29, the means of control groups (M = 5.844, M = 5.899) were smaller than the means of experimental group after posttest (M = 6.313 & M = 6.357). It meant that the effect of covariate is eliminated.

Table 30
ANCOVA of IELTS Dependent Variable (third null hypothesis A)

Source	Sum of squares	df	Mean square	F	Sig	Partial eta squared
Pretest	10.719	1	10.719	120.573	.000	.806
Group	1.013	1	1.013	11.395	.002	.282
Error	2.578	29	.089			

As Table 30 presents, F (1, 29) = 120.573, p= .000 < .05, it could be seen that there was a significant difference between control group and experimental group. The significance F-value associated with the covariate in this study, i.e. IELTS pretest indicated that it was correctly selected as a covariate.

3.4.2 Data Analysis for PET (third null hypothesis B)

Table 31
Tests of Between-Subject Effects in PET (third null hypothesis B)

Source	Sum of squares	Df	Mean square	F	Sig.
Corrected Model	2546.273	3	848.758	139.635	.000
Group	142.619	1	142.619	23.463	.000
Pre PET	1187.928	1	1187.928	195.434	.000
Group * Pre PET	92.202	1	92.202	5.169	.067

As represented in 31, F (1, 28) = 5.169, p > .05 and regression slope was homogenized.

Table 32
ANOVA of PET Dependent Variable (third null hypothesis B)

	Sum of squares	df	Mean square	F	Sig.
Between groups	2170.635	16	135.665	3.728	.007
Linearity	1726.850	1	1726.850	47.455	.000
Deviation from linearity	443.785	15	29.586	.813	.653
Within groups	545.833	15	36.389		

In accordance with Table 32, the results of ANOVA test of linearity F(15.1) = 47.455, p = .000 at %95 indicated that the relationship between covariate (PET pretest) and dependent variable (PET posttest) was in fact linear.

Table 33
Levene's Test of Equality of Error Variances (third null hypothesis B)

F	Df1	Df2	Sig.
.051	1	30	.824

As Table 33 shows, equality of variances was confirmed [p = .824, p> .05].

Table 34
K- S Test for Normality (third null hypothesis B)

Group	Sig (two-tailed)	Z
Pretest	.682	.717
Posttest	.601	.766

Table 34 as a result of p> .05 proved that PET scores in pretest and posttest were normally distributed.

Table 35
Mean Table PET Dependent Variable (third null hypothesis B)

Group	Number	Mean	Adjusted mean
Control	16	77.38	78.449
Experimental	16	89.19	88.114
Total	32		

Based on the population mean and adjusted mean of control and experimental groups, the means of control group were smaller than the means of experimental group. It was concluded from Table 35 that the effect of covariate was eliminated.

Table 36
ANCOVA of PET Dependent Variable (third null hypothesis B)

Source	Sum of squares	df	Mean square	F	Sig	Partial eta squared
Pre PET	1337.790	1	1337.790	147.852	.000	.836
Group	727.221	1	727.221	80.372	.000	.735
Error	262.397	29	9.048			

As presented in Table 36, there was a significant difference between control group and experimental group on PET dependent variable as a result of F (1, 29) = 147.852, p =.000 and F (1, 29) = 80.372, p= .000.

3.5 Discussions

The idea of portfolio application was to determine the instructional values that portfolio was supposed to have along with the measurement function it performed. The learners in the experimental groups were taught how to create a portfolio and monitor the process of learning, themselves. Helping partners write in the class and giving feedback on their writings gave the teacher and hence the researchers the references to diagnose their grammatical problems and a tool to choose new teachable grammar features. The experimental groups got also familiar with a grammar log which was a table containing some grammatical information about learners strong and weak points. Based on the participants' self-assessment, the teacher could make further modifications to help learners overcome their weaknesses.

The experimental group claimed that wisely monitoring the process of learning through portfolio pushed them ahead although it was time consuming. They could diagnose the weak points and stop repeating common mistakes by considering several drafts and keeping them as a portfolio. As Huot (2002) stated, formative assessment correlated with writing enhancement through analyzing several drafts and providing feedback.

As Hamp-Lyons & Condon (2000) said, pre-writing, peers and teachers' feedback, and revision were essential steps in process-oriented approaches by focusing on micro and macro facets of textual development. In the present study, students paid attention to the procedure of learning rather than their product. They understood that they had time to revise their text creatively and had a chance to compensate their mistakes in a positive way while they received feedback of their teacher and classmates. Over the process of learning, students were involved with the process itself and they really understood the importance of attending the path of learning like a journey rather than focusing on the target.

Peer correction was a great achievement of portfolio application in the writing class which enhances students' meta-cognitive skills on the basis of their comments that is not easy to achieve in self-correction. It does not mean that self- assessment and correction is not the achievement of portfolio assessment. In contrast, there were a lot of learners in this study who reviewed their writing repeatedly under their teacher's supervision and corrected their drafts and learned through their mistakes.

The other important result of portfolio application was about learners' autonomy. Portfolio group learners were responsible for their job and they were creator of their own products. They tried to decrease the number of grammatical and structural mistakes through applying a grammar log and rewriting several drafts in their portfolios. The learners found that self-correction and redrafting based on their own correction could be more challenging than redrafting according to teachers and peers' feedbacks and comments. They managed to notice and correct their mistakes themselves by redrafting at home to become an independent learner after the cooperative process took place in classes.

4. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

To sum up, all the mentioned null hypotheses of the study, except one, were rejected and significant differences were found between grammar, IELTS and PET and finally PET writing mean scores of the portfolio and non-portfolio groups. However, no difference was found between IELTS writing means of the two groups before and after the intervention. It was hence concluded that the use of portfolio can significantly improve grammar knowledge and to a lesser extent the writing skill of Iranian EFL learners at the intermediate level.

This research has several implications. First and foremost, learners can be the owner of their work and write creatively. They will be responsible for their tasks. Students need high self-confidence and positive rapport in the class and portfolio as a pedagogical and assessment instrument prepares appropriate situations for them; so they can make profit of the portfolio.

Not only students are happy for their interaction, but also the teachers are pleased with the cooperation as a result of portfolio. Every teacher welcomes the positive atmosphere of the class based on the learners' activities. In addition, teachers are able to diagnose the possible problems on the path and try to eliminate them in their next lesson plans. Portfolio is the same as a boat in a stormy sea. If the boat is strong enough, it doesn't matter to what extent there are ups and downs. If the boat has a skilled sailor with a purposeful plan, all passengers can arrive safe and sound. Moreover, stakeholders, administrators and other authorities as third angle of

educational system are recommended to create portfolio culture to enhance self-efficacy beliefs, authenticity, and to encourage learners for internal motivation.

Portfolio assessment can be applied for other skills and sub skills such as reading, speaking, vocabulary and even pronunciation for all levels. Therefore, syllabus designers can make profit of portfolio in their curriculums to provide eminent and notable improvement in English classes.

Suggestions for Further Research

Several suggestions are provided for further research:

- In this study, no questionnaires or interviews were used to gather qualitative data at the end of the teaching procedure. It would be helpful if there was a qualitative research based on triangulation concept through distributing questionnaires among learners, teachers, and parents in order to elicit some information about their attitude toward grammar portfolio.
- The present study was about paper-based portfolio which caused some problems and a lot of papers were thrown out. A web-based portfolio could be a wonderful idea for juveniles interested in computer and virtual world.
- In the present study, girls were more interested in making their portfolios. It would be good if the effect of gender was investigated.
- The participants of this study were intermediate learners. It sounds great if there was a chance to do the same research with the advanced students at the university.

REFERENCES

Andringa, S. (2005). *Form-focused instruction and the development of second language proficiency.* Retrieved from University of Groningen/UMCG research database.

Born, A. D. (2003). Web-based student assessment. In A. Aggarwal (Ed.), *Web-based education: learning from experience* (pp. 165-188). Hershey, PA: Information Science Publishing.

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy.* NY: Addison Wesley Longman.

Burksaitiene, N., & Tereseviciene, M. (2008). Integrating Alternative Learning and Assessment in a Course of English for Law Students. *Assessment and Evaluation in Higher Education*, *33*(2), 155–166.

Bruner, C. (2014).The Potential Formative Benefits of Portfolio Assessment in Second and Foreign Language Writing Contexts: A review of the literature. *Studies in Educational Evaluation*, *43*, 139-149. Retrieved from: http://dx.doi.org/10.1016/j.stueduc.2014.03.002

Camp, R. (1990). Thinking Together about Portfolios. *Quarterly of the Center for the Study of Writing and National Writing Project*, *12*(2), 8-14.

Delett, J. S., Barnhardt, S., & Kevorkian, J. A. (2001). A Framework for Portfolio Assessment in the Foreign Language Classroom. *Foreign Language Annals*, *34*(6), 559–568.

Dietel, R. J., Herman, J. L., & Knuth, R. A. (1991). What Does Research Say about Assessment? Retrieved from: http://www.ncrel.org/sdrs/areas/ stw_esys/4assess.htm.

Dunsmuir, S., & Clifford, V. (2003). Children's Writing and the Use of ICT. Educational Psychology in Practice, 19(3), 171–187.

Efendi, Z., Usman, B., & Muslem, A.(2017). Implementation of Portfolio Assessment in Teaching English Writing. *English Education journal (EEJ), 8*(2)*,* 187-198.

Frodesen, J. (2001). Grammar in Writing. In M. Celce-Murcia (Ed.), *Teaching English as a Second or Foreign Language* (pp. 238-248). USA: Heinle & Heinle.

Genesee, F., & Upshur, J. A. (1996). *Classroom-based Evaluation in Second Language Education.* New York: Cambridge University Press.

Goctu, R. (2016). Action Research of Portfolio Assessment in Writing in English as a Foreign Language While Teaching Preparatory School Students in Georgia. *Journal of Education in Black Sea Region 2*(1), 107- 115.

Hamp-Lyons, L. (2006). Feedback in Portfolio-based Writing Courses. In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing: Contexts and Issues* (pp. 140-161). Cambridge: Cambridge University Press. doi: https://doi.org/10.1017/CBO9781139524742.010

Hirschel (2011), A Qualitative Study in Grammar Logs. *International Journal of Pedagogies and Learning, 6*(2), 126–139.

Huot, B. (2002). *(Re)Articulating Writing Assessment: Assessment for Teaching and Learning.* Utah: Utah State University Press.

Klenowski, V. (2002). *Developing Portfolios for Learning and Assessment. Processes and Principles*. London: Routledge Falmer.

Klenowski, V. (2010). Portfolio Assessment. In P. Peterson, E. Baker, & B. McGaw (Eds.). *International Encyclopedia of Education* (3rd ed., pp. 236–242). Oxford: Elsevier.

Lam, R. (2016). Taking Stock of Portfolio Assessment Scholarship: From Research to Practice. *Assessing Writing,* 1-14. doi: 10.1016/j.asw.2016.08.003 .

Olshtain, E. (2001). Functional Tasks for Mastering the Mechanics of Writing and Going just Beyond. In M. Celce-Murcia (Ed.), *Teaching English as a Second or Foreign Language* (pp. 207-217). Boston: Heinle & Heinle.

Orak, S., & Oz, G.(2018). An Action Research Project Writing Portfolio as an Assessment Tool in ELT at a State University in Turkey. *Proceedings of 2nd International Symposium on Silk Road Academic Studies, Turkey,* 682-685.

Ören, F. S., Ormanci, Ü., & Evrekli, E. (2014), The Alternative Assessment-evaluation Approaches Preferred by Pre-service Teachers and Their Self-efficacy towards these Approaches, *Educational Sciences: Theory & Practice,11*(3), 1690-1698. Retrieved from: www. Developing self-awareness about writing processes: The Perry model and the remedial writer: proquest.com.

Prastikawati,E., Sophia, B.,& Sodiq, J,(2016). Portfolio Assessment's Impact on Writing Ability of English Foreign Language (Efl) Learners**.** *IOSR Journal of Research & Method in Education (IOSR-JRME), 6*(2), 11-18. Retrieved from: www.iosrjournals.org.

Romova, Z., & Andrew, M. (2011). Teaching and Assessing Academic Writing via the Portfolio: Benefits for Learners of English as an Additional Language. *Assessing Writing*, *16,* 111-122. doi:10.1016/j.asw.2011.02.005.

Sajedi, R. (2014), Self- assessment and Portfolio Production of Iranian EFL Learners, Procedia - *Social and Behavioral Sciences, 98*, 1641-1649. doi: 10.1016/j.sbspro.2014.03.588.

Thomas, K. M & Austin, M. (2005), Fun with Fundamentals: Games and Electronic Activities to Reinforce Grammar in the College Writing Classroom. *Teaching English in the Two-Year College, 33*(1), 62-69.

Truscott, J. (1996). The Case against Grammar Correction in L2 Writing Classes. *Language Learning, 46,* 327-369.