The Effects of Portfolio Assessment on Writing of EFL Students

Behzad Nezakatgoo
PhD Candidate, Allameh Tabatabie University, Tehran, Iran
E-mail: Behzadnezakatgoo@gmail.com

Received: October 27, 2010   Accepted: November 10, 2010   doi:10.5539/elt.v4n2p231

Abstract
The primary focus of this study was to determine the effect of portfolio assessment on final examination scores of EFL students' writing skill. To determine the impact of portfolio-based writing assessment 40 university students who enrolled in composition course were initially selected and divided randomly into two experimental and control groups. A quasi-experimental research design was adopted in this study. In order to appraise the homogeneity of the experimental and control groups Comprehensive English Language Test (CELT) was employed at the beginning of the study. The pre-test was applied to both the experimental group and control group. Later in the study, a post-test of dependent variables was implemented for both groups. Data analysis was carried out by SPSS 16 statistical computer program. The statistical techniques being applied were the Levene statistic of One-Way ANOVA and the Paired-sample T-test. The results of the study revealed that students whose work was evaluated by a portfolio system (portfolio-based assessment) had improved in their writing and gained higher scores in final examination when compared to those students whose work was evaluated by the more traditional evaluation system (non-portfolio-based assessment). The findings of the present study highlighted the fact that portfolio assessment could be used as a complementary alternative along with traditional assessment to shed new light on the process of writing.

Keywords: Portfolio, Portfolio assessment, Writing skill, Portfolio-based instruction

Introduction
Within the communicative framework of language teaching, the skill of writing enjoys special status. There is no doubt that writing is the most difficult skill for EFL learners to master. With so many conflicting theories concerning writing, the teaching of writing has undergone a great change in the past quarter century. The paradigm shift in writing theory from a focus on writing products to that of writing processes has also resulted in the popularity of portfolios among the educators as an alternative approach both in EFL and in ESL contexts as an instructional tool for preparation of students for examinations. Due to the fact that the skills involved in writing are highly complex; students have to pay much attention to higher level skills (macro level skills) such as planning, organization as well as lower level skills (micro level skills) such as spelling, punctuation, word choice, and so on. The process of generating ideas, drafting, redrafting and editing are vital elements of writing and these important dimensions are not sufficiently assessed in a one-shot attempt of traditional testing.

As it is reported in the literature writing skill is more challenging for students in EFL context. Johns (1991) claims that it is more difficult to assess ESL students' writing abilities than native speakers' in timed writing assessment. Song and August (2002) point out that having a set time during a writing test, EFL students can not focus on the skills needed for L2 writing and on culturally related issues in the process of writing at the same time. Hamp-Lyons & Condon (2000) argue that "portfolios provide a broader measure of what students can do, and because they replace the timed writing context, which has long been claimed to be particularly discriminatory against non-native writers" (p. 61). Thus, using portfolio assessment was found to be more suitable than the timed writing assessment. According to Douglas (2000), portfolio assessment is particularly applicable to foreign-language assessment. Standardized tests, note O’Malley and Chamot (1990), provide foreign-language teachers with an incomplete picture of student needs and learning.

Johnson (1996) defines portfolios as a cumulative collection of work students have done. In other words portfolios show a student's work from beginning of the term to the end. They give both teacher and students a chance to evaluate how much the students’ writing has progressed. In the writing classroom how and when teachers grade can make an enormous difference in the students’ development. In general, students benefit the most when they receive feedback while they are still working on a paper rather than after the paper has been graded. Perfect writing can be possible only when students with feedbacks which are gained from teacher and/or peers have control of writing.
system, mechanics of writing (punctuation, capitalization, abbreviation, numbering, and spelling) and grammar to solve the problem in writing effective compositions.

The literature on the importance of portfolio assessment is rich (Hamp-Lyons & Condon, 2000; Defina, 1992; Yancey, 1999; Harris & Sandra, 2001). However, most of the research reported in the literature is of qualitative inquiry and making a case for adaption of portfolio assessment has not been much augmented by quantitative research.

Focusing on writing as a process and using portfolio as a method of assessment of writing give the students the confidence to continue to write and continue to develop their skills and overcome their problems in writing. In order to appraise its usefulness for this purpose this study will document, analyze, compare and contrast students' performances in the portfolios, the in-course pre-tests and the final examination with those of control group. The results will then be examined in order to reach conclusions regarding how effective writing portfolio is as an instruction method for students who take final examinations. The study, therefore, seeks to answer the following questions:

1). Is portfolio assessment an effective way of preparation for writing text under examination conditions?

2). Would the differences in instructional method (non-portfolio vs. portfolio-based instruction) be reflected in students' final examination scores?

**Review of Related Literature**

**1. Portfolio Assessment**

Yang (2003) defined portfolio as a compilation of students’ work, which documents their effort, progress and achievement in their learning, and their reflection on the materials negotiated for the portfolio. Crosby (1997) indicates that the primary purpose of portfolios in EFL context is to increase the level of students’ motivation and to give them a sense autonomous learning. The portfolio as a self-reflection assessment has appeal because it changes the way writing has been graded traditionally and institutes a grading system whereby the teacher shares control and works collaboratively with students (Berlin 1994). Portfolio assessment is used as an evaluation tool for reviewing the status of student progress and development. The components of the portfolio are decided by the teachers, the students, or through an agreement between teachers and students.

Portfolio-based writing assessment has attracted a considerable amount of interest in colleges and universities because they link teaching, learning, and assessment within the discipline and across disciplines in the college curriculum. Hamp-Lyons & Condon (2000) argue that the “greatest theoretical and practical strength of a portfolio, used as an assessment instrument, is the way it reveals and informs teaching and learning” (p.4). Lee (2001) points out that portfolio assessment prioritized student-centered over conventional concept of teaching. Although portfolio assessment of writing promised potential benefits for writing skill development in ESL and EFL context, the traditional psychometric opponents criticize its principles and practice. They voiced their frustration over the issues of design decision, logistics and interpretation. They also challenged the portfolio assessment's time-consuming nature, and the issues of reliability and validity (Brown & Hudson 1998).

Hamp-Lyons & Condon (2000) believe that in portfolio assessment both reliability and validity are necessary and must be addressed. Williams (1998, 2000) argues that without standards for implementation and outcomes, portfolio assessment will become unfair because "it increases the subjectivity teachers bring to evaluation"(2000, p.136). This unreliability will threaten portfolio assessment benefits because portfolio assessment was supposed to, "developed with the goal of making the evaluation of classroom writing more objective, more fair, and more realistic" (2000, p.147). Reliability needs to be based on performance instead of idiosyncratic scores that have no preset criteria (O’Malley and Pierce, 1996). One of the main problems of reliability in L2 portfolio assessment is inter-rater reliability, consistency of scores because teacher are not used to this new concept of assessment. The psychometric view of reliability is too narrow to take into account the "less standard forms of assessment" such as the portfolio. Portfolio assessment requires that readers be trained to agree and to score papers based on a common rubric that describes numerical points. Rubrics should include development and organization, fluency of idea (problem) description, and mechanics (O’Malley and Pierce, 1996). If readers agree, there is a reliable rate of agreement. If readers do not agree, there is low interrater reliability. Without a sufficiently high rate of reliability, scores cannot be considered valid. Portfolios can be used to support or even determine a grade when a well defined scoring guide or rubric is developed by both the teacher and the learner (Defina 1992, P.37).

O’Malley and Chamot (1990) indicated that a key element of portfolios is student self-assessment; without self-assessment and reflection on the part of the student, a portfolio is not a portfolio. According to these researchers, the self-assessment called for by portfolios can have several outcomes for the student: students take responsibility for knowing where they are with regard to learning goals; students broaden their view of what is being learned; and
students begin to see language learning as a process. This study is also addresses the use of portfolios in writing assessment for self-assessment in an EFL context.

2. Portfolio-based Instruction

The implementation of a portfolio assessment system in many classrooms today is of great interest to teachers and researchers at every level of education. Murphy (1999) states that they are implemented in classrooms in order to accomplish various goals. These goals range from providing students with a sense of ownership, motivation, accomplishment to assessing curriculum needs for demonstrating competency. Because of the number of goals associated with the implementation of portfolios, Murphy categorized them into three groups: "teaching tools, professional development, and assessment purposes" (p. 4).

The Portfolio approach is used for both evaluation and instruction. Once the goals, assignments and the criteria of the portfolio are set by the teacher and the student, the daily classroom portfolio-based instruction starts. In the curriculum, portfolio-based instruction is basically conducted through individualized tutorials. The teacher and the student work together to find materials within the student's interests to complete their assignments.

Literature in the portfolio research (Vizyak, 1996) suggests that the role of the ESL teacher in a portfolio approach involves planning both mini-lessons and individualized tutorials or conferences with individual students based on the teacher's understanding of the students needs. The teacher uses information in student portfolios to diagnose student needs and to guide instruction. Portfolios give the teacher a solid foundation on which to base instruction. Student portfolios provide the teacher with a record of student strengths and areas for improvement.

Method

This study is intended to determine the effect of writing and assessing portfolios on final examination scores of EFL students’ writing. The design for this study is Quasi-experimental in nature, since the classroom groups are already in place and had to be intact. In order to have a strong quasi-experimental design, internal threats to validity were controlled by use of pretesting. To be confident that there were no significant difference among the subjects of the Experimental Group (EG) and Control Group (CG) regarding the variables under investigation, both groups were pre-tested at the beginning of the experiment.

Subjects

The sample for this study was drawn from the students who were enrolled in second-semester freshman English composition course at E.C.O. College of Insurance. Initial enrollment in this course totaled 68 students. Out of 68 examinees, the researcher finally nominated 40 participants and randomly divided them into two experimental and control groups. All students have completed at least one previous three-credit composition course; approximately all of these students have also completed an additional Intermediate General English course. None of the students have prior experience with portfolios. Both groups involved in this study were taught by the same teacher in order to provide uniformity of instruction. Therefore, the researcher and the instructor were the same.

Data Collection Procedures

During the second week of the term, students who agreed to take part in the study indicated so by signing consent forms. After completing the consent forms, all students were administered Comprehensive English Language Test (CELT), and Trinity’s ISE (Integrated Skills in English) Writing Test. The instructional methods, textbooks, and assignments in both the experimental and the control groups were identical, and all groups were taught by the same instructor. Students in portfolio-based group were advised of format of portfolio based instructional procedures (See appendix A). The study extended over a timeframe of 16 weeks. Scores obtained on the scale of 1-6 comprised students' course grades. In compliance with the class syllabus, the instructor taught students how to shape their college writings. Instruction followed the writing-as-process approach as far as possible. All students completed six assigned essays, and a post-test timed writing during the 16-week semester.

As is common in a writing class with a traditional (non-portfolio) method of evaluation in place, the control group turned in each essay as it was due, and the instructor marked and commented on each essay and then assigned it a grade. In the experimental group, portfolio evaluation was established. Students turned in their essays and writings on the due date, but no grade was recorded at that time. They submitted one draft each session they met the teacher, selected from among three writing tasks namely Essay writing, letter writing and creative writing provided at the beginning of the procedure. They received respective feedbacks (evaluation scales) by the next session that the class met (See appendix B). Students were credited for any revisions made. At certain points during the term, the instructor directed revision by focusing students' attention on certain strategies, such as sentence combining, strengthening weak verbs, writing effective introductions, titles, mechanics of writing (punctuation, capitalization, abbreviation, spelling, grammar, and use of numbers). Written feedbacks were emailed to students within two days;
consequently, students in portfolio-based group had enough time to reflect on their writings and polish them before
the next session met. (See appendix C for some sample email feedbacks). Students could continue to work on
previously written papers until the end of the term. At the end of the term, students presented a portfolio of work to
the instructor for evaluation and the term grade. The portfolio consisted of two polished papers (final drafts) along
with three first, second and third drafts for each paper respectively written during the term, and a meta-analytical
cover letter. Students selected the two papers which represented the best of their work of the term. Students were
encouraged to extensively revise these papers in the meantime. All prewriting, drafts, and evidences of revision for
each of the two papers were included in the portfolio. The purpose of the cover letter was to allow students to reflect
upon their writing processes in general, and to justify the inclusion of the papers which they had selected as
representative of their best work. (See Appendix C for a copy of the instructions for compiling portfolios which
were given to students).

In order to eliminate instructor bias resulting from factors other than the work submitted (e.g., attendance,
participation, student disposition toward the class or teacher) (Baker, 1993); an independent scorer were invited to
evaluate final assessment of portfolios.

Analysis of Data and Interpretations

In analyzing the data for this study, the SPSS statistical computer program was used. All data were processed using
SPSS Version 16. As the first step in the data analysis the sample was homogenized. A preliminary examination for
homogeneity of the experimental and control groups was conducted with 68 candidates bearing almost the same
background of English proficiency. The test scores obtained from the performance of subjects on the Comprehensive
English Language Test (CELT). To have a more homogeneous group of candidates for the main phase of the study,
high scorers and low scorers were eliminated from the main framework of the study. Almost +1 and -1 standard
deviation from the mean score is the valid and reliable way of selecting homogenous sample population, hence, out
of 68 examinees, the researcher finally nominated 40 participants and randomly divided them into two experimental
and control groups. See table 1 for descriptive statistics and graph 1 for elimination process.

The researcher conducted a One Way ANOVA including the Levene Test to approve of the homogeneity of both
experimental and control groups in terms of their proficiency based on their scores on Comprehensive English
Language Test (CELT). Table 2 reveals the results of the Levene statistical test on Comprehensive English Language
Test (CELT). The Levene statistic was 3.022 with the significance of 0.000. The value of 3.022 is the indicative of
a group of candidates with almost the same homogeneity of variances performing the Test of CELTA. See table 2 for
test of homogeneity of variances derived by SPSS software

In order to make doubly sure of the homogeneity of both experimental and control groups, the ANOVA table is
presented here. See table 3 for ANOVA.

The result of the performances of the two sample groups on the CELT in terms of the frequency of scores, and the
means are illustrated in the following means plot and bar graph. The totally flat line in the graph below indicates that
the participants in this study are homogeneous. See graph 2 and graph 3 for means plot.

The table of ANOVA signifies that the mean difference between experimental and control group is not significant at
all. On the other hand, means plot is totally flat line and there is a sharp and straight line of mean scores, and the bar
graph exhibits there exists no significant difference between the means of both groups. Hence, the researcher can
conclude that the participants of two groups are homogeneous.

As for the phase of the statistical procedures, the researcher devised the Paired-samples t-test, because the trait to be
tested was of the same nature for both groups, say, the writing skill of the ISE exam (Integrated Skills in English)
being extracted from the Trinity Website (www.trinitycollege.co.uk) and was administered at the premises of ECO
College of Insurance. The differences between the pretest and posttest results in both groups indicate a significant
difference between the experimental and control groups in writing skill. The following tables represent the obtained
t as 3.199 with the Pvalue of 0.000 which is big enough to approve of the hypothesis that there is a significant
difference between the performances of the students in both groups in answering writing tests after passing a
portfolio based instruction and a traditional based (non-portfolio based) instruction. See table 4 for T-Test and graph
4 for paired samples statistics.

The bar graph 4 represents the mean difference between the performances of experimental and control group under
examination conditions. This means that students in experimental group (portfolio-based group) had by far better
performance in their writing skill than that of control group (non-portfolio-based group). See table 5 for paired
samples correlations and table 6 for paired samples test.

Considering the data obtained in the above t-test tables, the findings of this study evidenced that First, portfolio

234
assessments was an effective way of preparation for writing text under examination conditions (questions 1), second, the differences in instructional method (non-portfolio vs. portfolio-based instruction) were reflected in students’ final examination scores (question 2).

The results of these statistical analyses confirmed the significant effect of writing and assessing portfolios on final examination scores of writing of EFL students. A possible explanation of these results may be linked to efficiency of portfolio-based writing and assessment. It may be that these subjects were benefited from a sufficient time span that the researcher calls it gift of time that enables them to use challenging structures in their written task performance. Findings from this study indicated that writing and assessing portfolios were beneficial to students. Even if they encountered many problems in the process, they learned a lot from solving their problems and shouldering the ownership of responsibility of learning. The students of portfolio-based group benefited from the reflective nature of the task. Reflection was a self-assessment tool, which helped the learner in the experimental group of the current study to look at the strength and weaknesses of a particular learning activity and consider how to improve the weakness.

Discussion

The motivation for this study was to provide the best possible writing experience for freshman students. The instructional method which seemed to provide the solutions to the students’ predicament was portfolio assessment. Using this method, the instructor postpones assigning grades until students have had time to internalize instruction; this technique empowers students by giving them the opportunity to rewrite and polish their papers before selecting their best work for grading. A standardized teacher evaluation administered at the end of the term hardly constitutes an effective method for capturing the writing process. Portfolios can be used to support one shot traditional assessment by integrating a well-defined scoring guide or rubric developed by both the teacher and the learner (Delfina 1992, 37). Further, that along with that grade or score, a narrative by the teacher and the student should accompany the overall evaluation of the student's progress, including the student's strengths and weaknesses as well as the student's achievement, effort, and goals (Tierney, Carter, and Desai 1991, P.147). Hence, the implementation of portfolios is a complementary alternative to traditional assessment for improving the effectiveness of writing instruction and the curriculum.

Since portfolio assessment provides a greater degree of student empowerment, with students able to continually improve previously written papers and select their best papers for final grading, a significant correlation occurred between the portfolio method of writing and assessment (portfolio-based instruction and evaluation) and their final examination scores. Thus finding of this study corroborated that of Ruetten (1994) that portfolio assessment is indeed very useful for ESL students.

Song & August (2002) argue that there is an increase of subjectivity in portfolio assessment because students’ work is not graded based on right or wrong answers that threatens the reliability and consistency of scores. To address the inter-rater reliability in the current study, an independent scorer evaluated the students’ final portfolios. Higher final scores in the portfolio-evaluated group represent the culmination of the learning during the term. The students in this group benefited from what the researcher calls it the gift of time. The results of the current study highlighted the fact that portfolio evaluation, as a teaching and assessment device, gives students a sense of greater control over their writing outcomes, and appears to contribute to increase their final scores. The data evidenced in the current study that portfolio assessment can enhance the one shot traditional assessment of writing by supplementing numerous drafts and other related writing assignments that are collected in the student’s portfolio.

Hutchings (1990) point out that those unfamiliar with portfolios may consider them soft, subjective, and easily subverted, but a properly run portfolio course is indeed a viable alternative, both as a teaching and assessment device which gives students a sense of greater control over their writing outcomes. Portfolios provide not only a context for assessment but a focus on the enhancement of writing skills, namely organizing, presenting, and reflecting on learning. Writing portfolios afford teachers the opportunity to learn how students see themselves as writers. One of the most positive aspects of the portfolio-based method of evaluation is its movement away from the teacher-as-examiner toward teacher-as-facilitator.

Recommendations and Suggestions for Future Research

The condition is rapidly becoming more favorable for use of the portfolio as an assessment instrument. It sounds instrumental to refrain as much as possible from using grades to evaluate and respond to student writing as it is common in traditional (non-portfolio based) evaluation. It appears that we need to investigate alternative ways of giving students grades in writing courses. With the increasing use of portfolios, however, more research studies with different research designs should be conducted to further examine the effects of portfolio assessment as a practical
evaluation process. With the advent of the web technology the electronic portfolios added new dimension to writing assessment by integrating real time interactive feedback that opens new horizons and requires new research agenda into portfolio assessment of writing.

References


**Appendix A**

The following evaluation scale has been taken from (ISE Handbook From 2004) *Integrated Skills in English examinations I, II and III*

**Evaluation scale for the writing skills assessment test**

6

The essay provides a well-organized response to the topic and maintains a central focus. The ideas are expressed in appropriate language. A sense of pattern of development is present from beginning to end. The writer supports assertions with explanation or illustration, and the vocabulary is well suited to the context. Sentences reflect a command of syntax within the ordinary range of standard written English. Grammar, punctuation, and spelling are almost always correct.

5

The essay provides an organized response to the topic. The ideas are expressed in clear language most of the time. The writer develops ideas and generally signals relationships within and between paragraphs. The writer uses vocabulary that is appropriate for the essay topic and avoids oversimplifications or distortions. Sentences generally are correct grammatically, although some errors may be present when sentence structure is particularly complex. With few exceptions, grammar, punctuation, and spelling are correct.

4

The essay shows a basic understanding of the demands of essay organization, although there might be occasional digression. The development of ideas is sometimes incomplete or rudimentary, but a basic logical structure can be discerned. Vocabulary generally is appropriate for the essay topic but at times is oversimplified. Sentences reflect a sufficient command of standard written English to ensure reasonable clarity of expression. Common forms of agreement and grammatical inflection are usually, although not always, correct. The writer generally demonstrates through punctuation an understanding of the boundaries of the sentence. The writer spells common words, except perhaps so-called "demons," with a reasonable degree of accuracy.

3

The essay provides a response to the topic but generally has no overall pattern of organization. Ideas are often repeated or undeveloped, though occasionally a paragraph within the essay does have some structure. The writer uses informal language occasionally and records conversational speech when appropriate written prose is needed. Vocabulary often is limited. The writer generally does not signal relationships within and between paragraphs. Syntax is often rudimentary and lacking in variety. The essay has recurrent grammatical problems, or because of an extremely narrow range of syntactical choices, only occasional grammatical problems appear. The writer does not demonstrate a firm understanding of the boundaries of the sentence. The writer occasionally misspells common words of the language.

2

The essay begins with a response to the topic but does not develop that response. Ideas are repeated frequently, or are presented randomly, or both. The writer uses informal language frequently and does little more than record conversational speech. Words are often misused, and vocabulary is limited. Syntax is often tangled and is not sufficiently stable to ensure reasonable clarity of expression. Errors in grammar, punctuation, and spelling occur often.

1

The essay suffers from general incoherence and has no discernible pattern of organization. It displays a high frequency of error in the regular features of standard written English. Lapses in punctuation, spelling, and grammar often frustrate the reader. Or, the essay is so brief that any reasonably accurate judgment of the writer's competence is impossible.
Appendix B
INSTRUCTIONS FOR COMPILING YOUR PORTFOLIO

Your writing portfolio is a showcase of the best writing you have done this term. It should contain the following:

1. A table of contents
2. A reflective evaluation on your growth as a writer this term. You may wish to make specific references to other writings you have included in your portfolio.
3. Two polished, along with all revised drafts, peer evaluations, self evaluations sheets for each paper.

When grading your portfolio, I will use the evaluation form that we went over in class. You have a copy in your folder.

Appendix C
Sample Drafts
Task1 Draft1

The letter shows a basic understanding of the demands of letter organization, although there might be occasional digression. The development of ideas is sometimes incomplete or rudimentary, but a basic logical structure can be discerned. Vocabulary generally is appropriate for the topic but at times is oversimplified. Sentences reflect a sufficient command of standard written English to ensure reasonable clarity of expression. Common forms of agreement and grammatical inflection are usually, although not always, correct. The writer generally demonstrates through punctuation an understanding of the boundaries of the sentence. The writer spells common words, except perhaps so-called "demons," with a reasonable degree of accuracy.

Advice to the student

Task Fulfillment
You should add some more ideas
You should give more reasons/opinions
You should give more description

Organization
Your presentation and/or layout need to be tidied up
You should check your organization and/or paragraphing
You need to add an introduction
You need to add a conclusion

Grammar
You need to check the grammar of your work
You should use a greater range of grammatical structures
You need to check your word order

Vocabulary
You should use a greater range of vocabulary
You need to check you are using the correct words

Spelling/Punctuation
You should check the spellings of words in your work
You should check and improve the punctuation in your work.
Table 1.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>34</td>
<td>58.2813</td>
<td>7.0949</td>
<td>1.2542</td>
<td>55.7233 – 60.8392</td>
<td>47.00</td>
<td>75.00</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>58.7813</td>
<td>8.7279</td>
<td>1.5429</td>
<td>55.6345 – 61.9280</td>
<td>43.00</td>
<td>75.00</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>58.5313</td>
<td>7.8941</td>
<td>.9868</td>
<td>56.5594 – 60.5031</td>
<td>43.00</td>
<td>75.00</td>
</tr>
</tbody>
</table>

Table 2. Test of Homogeneity of Variances Derived by SPSS Software

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.000</td>
<td>66</td>
<td>66</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.00</td>
<td>1</td>
<td>4.00</td>
<td>.063</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3921.938</td>
<td>1</td>
<td>63.257</td>
<td>.802</td>
</tr>
<tr>
<td>Total</td>
<td>3925.938</td>
<td>67</td>
<td>.063</td>
<td>.802</td>
</tr>
</tbody>
</table>

Table 4. (T-Test) Paired Samples Statistics

<table>
<thead>
<tr>
<th>Writing Skill in experimental Group (Portfolio Based)</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Skill in Control Group (Traditional based)</td>
<td>1.950</td>
<td>2</td>
<td>0</td>
<td>.1535</td>
</tr>
<tr>
<td>Writing Skill in experimental Group (Portfolio Based)</td>
<td>1.250</td>
<td>2</td>
<td>.6863</td>
<td>.1758</td>
</tr>
</tbody>
</table>

Table 5. Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Skill in experimental Group (Portfolio Based) and Writing Skill in Control Group (Traditional based)</td>
<td>20</td>
<td>.122</td>
<td>.609</td>
</tr>
</tbody>
</table>
Table 6. Paired Samples Test

<table>
<thead>
<tr>
<th>Writing Skill in experimental Group (Portfolio Based) and Writing Skill in Control Group (Traditional based)</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>.7000</td>
<td>.9787</td>
<td>.2188</td>
<td>.2419</td>
<td>1.1581</td>
<td>3.199</td>
</tr>
</tbody>
</table>

The T-test table indicates that the amount of Obtained t, 3.199 is big enough to approve of the difference between the two variables, since the P value is 0.000.
Dependent Variable: CELT
Statistics: Mean

Graph 3

Paired Samples Statistics
Statistics: Mean

Graph 4