

The Effect of Employing Electronic Portfolio on Iranian EFL Learners' Writing Skill

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Abstract—A superior method of language teaching is what all researchers and language teachers look for. In order to facilitate the process of language learning, technological tools can be helpful. The present study aimed to investigate the effect to employing electronic portfolio on Iranian EFL learners' writing skill in a language institute in Isfahan, Iran in summer 2014. To find the homogeneity of subjects, the Oxford Quick Placement Test was administered and the subjects were divided into experimental and control groups. The experimental group received the treatment which was employing the electronic portfolio, while the control group had the conventional context of language classes. At the end of the study, the obtained scores on the pretests and post-tests were analyzed. Independent t-tests were run to compare the collected scores in the two groups. The results of the study showed significant difference between the experimental group and the control group. The findings of the study can bear implications for EFL student, teachers, policy makers, university and institute organizations, and syllabus designers.

Index Terms—electronic portfolio, Iranian EFL learners, web-folio, writing skill

I. INTRODUCTION

Teaching and learning languages have become more and more important these days, parents look for the best language schools to register their children, and children seek for the most attractive and fun classes to take. Based on the curriculum used in different language schools and language institutes, different methods are being employed by teachers and are being focused differently. The majority of students agree that coping with productive skills, speaking and writing, are much more difficult compared to coping with the receptive ones, listening and reading. Sometimes, teachers employ different tools and activities to make the learning process easier and more attractive. Many teachers believe that using technology and especially the Internet can affect the process of teaching and learning, so they employ different technological devices or make use of different websites, blogs, or wikis to make teaching process more attractive to their learners. Some teachers employ electronic portfolios and web-folios both to make the learners study more and to evaluate them regularly throughout the semester. This study seeks the possible effects of employing electronic portfolios on a group of Iranian EFL learners' writing ability in a language school, Isfahan, Iran.

The concept of portfolio has been attractive to many researchers from 1986 up to now. Portfolio use involves collecting samples of students' work and experiences which reflect through the things they do and say the ways in which they think. Teachers that have paid attention to the process of learning as well as to the products of that learning evident in the portfolio collection, can collaboratively assess the students' abilities, skills and knowledge to accurately evaluate, whether or not their teaching is preparing the students for the real world (Batzle, 1992).

Ali (2005), a researcher in this field says that, on most traditional tests the learners are given a specific time-frame to take the test. This makes the learners think, reflect upon and judge their work in a limited set of time that means little or no opportunity to present what they had done throughout the course. Sometimes peer-correction is assigned to the learners and as a result the final draft reaches the teacher after corrections that means less mistakes in each draft. The portfolio approach is developed from this concept of reflective practice. Portfolios also give students the opportunity to reflect on their learning so they may evaluate their progress in a course or program. Ali (2005) also mentions that: "The electronic portfolio is a result of technology being readily and conveniently used in most classrooms today. They are highly motivating for the students who are encouraged by exhibiting their work."

Electronic Portfolio

According to Busby (2012), first portfolios, which were paper-based, were used by early adopters in Alverno College in the U.S. in 1970s. In late 1980s, they were used in general education, and the development of electronic portfolios was in late 1990s. As described on the McGraw-Hill Higher Education webpage, portfolios are considered as both objects and methods of assessment. As objects, they are place for holding materials such as paper photographs, or drawings that represent students' work, and as a method of assessment, a portfolio is used by a teacher to continuously observe students' work and assess them not just by one test but along the course.

Barrett (1999, 2000) described e-portfolio as the combination of technology and portfolios that means applying technological tools to make the appropriate work for the portfolio. E-portfolio may include videos, audio tracks, graphics, and text. She also believed that an electronic portfolio is not a haphazard gathering of homework like a digital scrapbook! It is a tool which can reflect improvement along the course. Barrett (2006) defined a portfolio as “a collection of work that a learner has collected, selected, organized, reflected upon, and presented to show understanding and growth over time (p. 1).”

Writing is a productive skill which is totally dynamic and is getting more and more important in different aspects of education, business and communication. According to Ferris (2002), many learners are getting interested in and motivated about improving their writing skills to be more successful in research and pedagogy fields. Many researchers have conducted studies to investigate different aspects of writing skills. Al-Jawi (2011) wrote an article on teaching the productive skills in TEFL with the focus on teaching EFL writing skills. In his article, he pointed out the necessity of writing as a productive skill which has to be taught to students so that they can communicate with the world. He mentioned that writing is putting signs and symbols on paper in order to communicate ideas. According to him, there are different factors a writer needs to keep in mind when writing, which are the subject matter, the purpose, the interaction and sense of audience, language, and writing conventions regarding different genres.

This study could be a significant one because of the absence of similar settings in the Iranian context. Moreover this study can have implications for teachers, learners, test developers and curriculum designers. It also aimed to provide evidence that using e-portfolios can help both learners and instructors improve learning and make better assessment tools in EFL classes. As a result, ordinary testing methods may be replaced by using portfolios, both to motivate learners and to help teachers provide better environment for teaching, learning and testing. To achieve this goal, current study was done on a number of students in a language school in Isfahan, Iran. The results gathered from this study can be useful to all language schools and teachers who hope to improve the learning environments in their language institutes.

II. LITERATURE REVIEW

Many researchers around the world have thought of portfolio as an appealing topic and have worked on different types of portfolios. Driessen, Muijtjens, Tartwijk, and Vleuten (2007) studied the effect of web-based and paper-based portfolios to see whether there are any differences or not. To conduct the study, a total of 92 reflective portfolios of year one medical students were scored independently by two mentors using a portfolio quality-rating instrument. Although the quality of evidence and reflection showed no significant effects of the presentation medium, multi-level analysis results revealed that web-based portfolios had been more motivating for the students since they had spent much more time providing visuals in their portfolios. The researchers concluded that the web-based portfolios can be more productive since they enhance students' motivation and are user-friendly for the mentors.

Lucas (2007) conducted an experimental study on portfolio assessment as an effective student self-evaluation scheme. To do his research, a group of 156 reflective essays written by college students taking the first grade, were chosen and analyzed. The essays were a part of a portfolio project. The results of this study revealed that through self-evaluation, students were able to recognize linguistic problems in all macro skills. The students were also able to define deficiencies in self autonomy and independence in learning that they have developed.

Iranian researchers also worked on different aspects of employing portfolios on students' proficiency. Madaran and Hedayati (2011) investigated the impact of portfolios and conferencing on Iranian EFL learners' writing skill. Their study was conducted on a group of Iranian intermediate students who were assigned into two experimental and a control group. One of the experimental groups were asked to provide portfolios of their written texts during the course, the other group prepared and presented their writings in the form of a conference, and the control group was taught and assessed in the traditional way. The experimental group significantly outperformed the control group, however the two experimental groups were not significantly different.

Biglarbeigi, Pooersgasemian, and Yazdani (2014) conducted their study on the impact of electronic portfolio assessment on Iranian EFL learners' proficiency level regarding their metacognitive awareness. To do their research, they chose two groups of learners and assigned them into two groups of experimental and control. First they taught the two groups the concepts of metacognition, metacognitive strategies, self-management and self-monitoring. Each group was taught eight TOEFL reading passages during the semester. While the control group was exposed to traditional teaching and assessment, the experimental group received the expected treatment which was using e-portfolios to collect their work. The results of their study revealed that both groups performed better in post-test due to their becoming metacognitively aware in taking tests. Extra progress was observed in the experimental group because of using e-portfolios.

III. METHOD

In this study, the researcher employed electronic tools and the Internet in order to conduct the study on the effect of using electronic portfolios on Iranian foreign language learners' writing ability in summer 2014, in one of the leading

language institutes in Iran. Certain instruments, data collection and data analysis procedures were used to conduct this research.

A. Subjects

The research was conducted in summer 2014, in one of the leading language institutes in Isfahan (Pooyesh Language School) in which most of the students are teenagers. Among several classrooms in this language institute, four classes of the same level were chosen; two as the control group and two as the experimental group. These classes were chosen because the researcher was the teacher of all these four classes. The classes were held six days a week and lasted for 30 sessions that was 45 hours of instruction in five weeks. The institute headmaster claims that the approach of teaching in this language school is the communicative approach. In other words, CLT is the dominant teaching method in this language school.

The subjects of this study were all female students at the pre-intermediate level in one of the main language institutes in Isfahan, Iran. The researcher chose the subjects because of their being available, so convenience sampling was employed in this study. The researcher who has been teaching English for nine years in different language institutions and schools, is a student of TEFL in Islamic Azad University of Isfahan, Khorasgan Branch, in Isfahan Iran. The table below demonstrates the demographic information of the subjects of this study.

SUBJECTS' DEMOGRAPHIC INFORMATION	
Number of participants in control group	32
Number of participants in experimental group	32
Sex	Female
Age	15 to 22
Mother tongue	Persian
Nationality	Iranian
Level of proficiency	Pre-intermediate

Lack of Interest and motivation seems to be the main reason of students' unwillingness in writing in a foreign language. Most of the teenagers like working online and even typing homework compared to the traditional ways of contacting their teachers and handing over their homework, so the researcher made use of the students' interest in using technological tools both to gather their homework and to assess their work according to what they had done throughout the course and not just in one achievement test called the final exam.

B. Instruments

The Oxford Quick Placement Test (Version 2, 2001), a writing pretest and its parallel post-test, observation and interview were the instruments used to conduct this research and answer the research questions. The researcher made use of several instruments in order to get to more reliable results. The researcher also employed observation and interview to check students' attitude before, during and after the course.

In order to make sure that all the students were the same level of proficiency, The Oxford Quick Placement Test was given to all the subjects in both control and experimental groups of the students with higher scores were chosen for the experiment. In order to have a homogeneous group of subjects and more reliable results, administering this test was necessary.

The subjects were given a topic related to the first unit's topic and were asked to write one paragraph on that topic. Students' writing papers were corrected afterwards using the Jacob et al.'s ESL Composition Profile (1981) which provided criteria for the researcher to correct writing papers within a certain framework considering the content, organization, vocabulary, language use, and the mechanics of writing.

The students were also given other topics related to what they learned in their books and during receiving the treatment which was using e-portfolios and web-folios instead of the conventional type of data collection. Their papers were corrected using the same criteria. In the control group the learners' homework was collected in the traditional way and the writing post-test showed the students' improvement in that group while in the experimental group all of their writings were corrected and at the end of the course. They took the post-test too so that the researcher could compare the two groups, their improvement and their problems.

The researcher in this study was in charge of teaching the subjects and as a result she was able to observe the subjects, their attitude toward using web-folios and e-portfolios, and even their improvement in writing paragraphs. The researcher also observed the amount of motivation in the experimental group which made the students more active and eventually ended in significantly better paragraphs.

C. Data Collection Procedure

The needed data to do this research were gathered by using pretests, post-tests, observation, and interviews. The researcher employed different types of data collection in order for the results to be more precise. How the students reacted or felt toward a certain procedure mattered a lot in addition to what the numerical results showed with regard to the efficiency and practicality of the procedure.

The data from the pretest and the post-test given to the subjects were analysed statistically to explore the probable effect of the treatment, applying matched t-test. The collected data in this research was analyzed in a way that makes the

results more reliable. In order for the data to be analyzed, the SPSS (Statistical Package for Social Science) was employed. The pretest writing paragraphs, written by the learners were corrected two times by two different teachers, and the estimated mean of the two scores divided by two demonstrated the score of the learners so that we found more reliable results. The post tests were also corrected by the same teachers, and were divided by two too. A t-test was administered in order to show the difference between the performance of students, before and after the research. The analysis of data is discussed thoroughly in the next chapter.

IV. RESULTS

The data from the pretest and the post-test given to the subjects were subjected to statistical analyses to explore the probable effect of the treatment, applying matched t-test. The collected data in this research was analyzed in a way that makes the results more reliable. In order for the data to be analyzed, the SPSS (Statistical Package for Social Science) was employed. The pretest writing paragraphs, written by the learners were corrected two times by two different teachers, and the estimated mean of the two scores divided by two demonstrated the score of the learners so that the researcher would find more reliable results. The post tests were also corrected by the same teachers, and were divided by two too. A t-test was administered in order to show the difference between the performance of students, before and after the research. The results are all demonstrated in the tables below.

TABLE 1.
RESULTS OF DESCRIPTIVE STATISTICS FOR COMPARING PRETEST WRITING ABILITY OF THE LEARNERS
IN THE EXPERIMENTAL GROUP (EG) AND CONTROL GROUP (CG)

	Test Level	N	Mean	Std. Deviation
EG	Pretest	32	72.63	10.78
CG	Pretest	32	72.28	9.44

TABLE 2.
RESULTS OF THE INDEPENDENT-SAMPLES T-TEST FOR COMPARING THE EG AND CG WRITING ABILITY PRETEST SCORES

	p-value	Df	T-test value
Pretest Scores' Comparison	0.893	62	-0.14

The results from the above table show that Iranian EFL students' writing skill in both control group and experimental group was the same before the experimental group received the treatment which was using electronic portfolios and webfolios. The following table, shows the results of descriptive statistics for comparing post-test writing ability of the learners in the experimental group and control group. From this table it could be concluded that e-portfolio significantly affected the fluency and complexity of the written production of female pre-intermediate Iranian EFL learners.

TABLE 3.
RESULTS OF DESCRIPTIVE STATISTICS FOR COMPARING POST-TEST WRITING ABILITY OF THE LEARNERS
IN THE EXPERIMENTAL AND CONTROL GROUPS

	Test Level	N	Mean	Std. Deviation
EG	Post-test	32	85.47	8.01
CG	Post-test	32	80.66	6.89

The table below shows the results of the independent sample t-test for comparing the Experimental group and control group's writing ability post-test.

TABLE 4.
RESULTS OF THE INDEPENDENT-SAMPLE T-TEST FOR COMPARING THE EG AND CG WRITING ABILITY POST-TEST SCORES

	p-value	Df	T-test value
Post-test Scores' Comparison	0.012	62	-2.58

Results from the last table revealed that Iranian EFL students' writing skill in the experimental group significantly outperformed that of the subjects in the control group. The results of this study showed that employing e-portfolios and web-folios can be good technique to gather students' homework and to assess them. Knowing that all the homework is part of the final score, the students try to do their best when doing their homework. E-portfolios and web-folios can be used in different classes. The researcher conducted this study in an intermediate level class in a language institute in which almost all of the students were female teenagers.

V. CONCLUSION

Teaching techniques and methods have developed through years and language teaching has not been an exception. Employing technology in teaching has recently become attractive to language teachers and learners. Portfolios may also affect teaching and learning. Many researchers favor portfolios and believe in the positive effects of employing them on teaching and assessing students, there are teachers who prefer the conventional type of teaching and assessment though. As using portfolios involves collecting students' work which reflects what students have done throughout the course

and not just in one final test, it can be considered as a useful technique, especially for teachers who care about their students' product as well as the process of learning.

Writing is one of the main skills in language learning which is usually overlooked because of students' lack of interest and teachers' unfamiliarity with effective and motivating methods of teaching this skill to their learners. Employing technology can be of good help to both teachers and their learners. Among different technological tools, this study focused on using e-portfolios as a treatment which can be helpful in the process of learning. Using e-portfolios helped the learners use other devices and be more creative and motivated in doing their homework. Although it seems to be hard in the beginning for the teacher to correct homework in electronic files, as the time passed, the teacher found it easier and rewarding to correct electronic homework and give feedback to students' activities in an electronic file rather than in the traditional form of papers.

The results of the study revealed that the students were more satisfied with the new material which was the e-portfolio and also they got better results out of the writing post-test. The teacher also described the treatment as motivating for the learners and rewarding for the teacher. Altogether both learners and the teacher believed that employing e-portfolio had positive effects on the process of language learning.

This study can provide language teachers with the opportunity to apply other tools in language learning process. Teachers should first get to know their learners, their expectations and their interests so that they can make use of e-portfolios in the best way. Teachers who want to employ e-portfolios and web-folios should also be trained before the course. They need to study about the techniques used in classes which are employing e-portfolios and web-folios.

Learning English as a foreign language is very crucial to each and every one because of popularity of this international language and the urge to use it in different settings. The ability to communicate with the world around us is one of the needs of each and every one. Different skills can be used in order for communication to happen, among which writing skill has to be attended more, because of its unique characteristic in linking people to each other from different parts of the world without a word spoken.

Different techniques and methods should be applied to improve the process of language teaching and learning. Despite writing skill has always been overlooked in language classes, it has to be emphasized more these days. Employing e-portfolios and web-folios can be good technique for language teachers to make learners more motivated and to make writing skill more appealing to them.

The results of this study showed that employing e-portfolios and web-folios can be good technique to gather students' homework and to assess them. Knowing that all the homework is part of the final score, the students try to do their best when doing their homework. E-portfolios and web-folios can be used in different classes. The researcher conducted this study in an intermediate level class in a language institute in which almost all of the students were female teenagers.

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