A WEBLOG-BASED ELECTRONIC PORTFOLIO TO IMPROVE ENGLISH WRITING SKILLS OF THAI EFL UNDERGRADUATE STUDENTS

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Abstract

Among English skills taught in Thailand, writing is viewed to be the least emphasized and most disregarded of all skills. Previous research studies show that Thai EFL students meet several difficulties in writing. Most Thai EFL students rarely have the chance to write in English both inside and outside the classroom. This concern led to the design of present study. This study was conducted to investigate the implementation of Weblog-based E-portfolio for improving English writing skills of 45 Thai undergraduate students who enrolled in the English IV course at Suranaree University of Technology in Trimester 1/2016. Prior to the experiment, the participants were assessed for their writing skills by a pre-test. Then, a post-test was given to the participants after they had studied writing by using the Weblog-based E-portfolio. The data obtained were analyzed. The results highlighted that the students' English writing skills were improved by the implementation of Weblog-based E-portfolio.

1 Introduction

Writing skills are important for communicating. Writing was seen as a developmental process of many aspects such as inquiring, problem solving rather than resulting in a product (Wennerstrom, 2006). In order for students to develop their writing skills, they need to have background knowledge of the language concerning rhetorical organization, proper language use or specialist vocabulary that the writers want to communicate to the readers (Tangpermpoon, 2008). Writing could be anticipated as the most difficult skills for Thai students (Tangpermpoon, 2008; Watcharapunyawong & Usaha, 2013; Wimolmas, 2013). Learners need to pay considerable time for practicing writing.

At Suranaree University of Technology (SUT), a large number of students have low proficiency in English, particularly writing skills. The low English proficiency level of the students may result from their limited exposure to an English environment (Wannaruk, 2008), and ineffective English teaching methods. The English courses at SUT focus on English for communication but writing skills are given little attention. The teachers may not have sufficient time to cover or explain details from the textbook with the purpose of improving English skills, especially writing skills (Linh & Suppasetseree, 2016). Moreover, when SUT

students have to do some writing tasks, they may have problems with sentences in terms of vocabulary and grammar (Udomyamokkul, 2004). Therefore, SUT students need to have more opportunities to practice and use English writing outside the classroom.

Technology enhanced language learning (TELL) is one method for encouraging students to learn both inside and outside classroom. Using unusual and exciting activities instead of textbooks can motivate learners to study the English language (Geoffrion & Geoffrion, 1983). Technology and the computer have become widely available. Technology is a good method of instruction to assist the students to communicate (Prapphal, 2004). Among many popular social media sites, Weblog is one kind of them which is popularly used in an educational context. Weblog has a positive impact on the teaching of writing (Tu, Chen, & Lee, 2007). It can develop EFL students' English writing competency. An E-portfolio also can improve the EFL students writing skills (Meyer et al., 2010). Electronic portfolio uses electronic technology that make the users of portfolio collect pieces of work in many formats such as text, audio, video, and pictures that can put together easily (Barrett, 2000). It is easy to access, organize and search. E-portfolio also helps the students to become involved in the assessment process. It can also promote the exchange of ideas and provide feedback. Students can get feedback regularly and quickly because of the development of media channels.

Because of the problems of teaching and learning the writing skills of Thai EFL students, the researcher realized that learning writing by using E-portfolio can help students learn to write more effectively. The researcher conducted a study of the use of Weblog-based E-portfolio. The present study could provide more opportunities for students to practice writing skills via technology in order to improve EFL students writing skills which have largely been ignored. Therefore, the research study was set up to develop Weblog-based E-portfolio to improve EFL students' writing skills with the purpose to answer the following research questions.

- 1. Does Weblog-based E-portfolio improve Thai EFL undergraduate students' English writing skills meet the prescribed 80/80 Standard?
- 2. What is the effect of Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning?

2 Literature Review

The literature review provides background information and reviews of related literature about process writing, writing assessment, Technology Enhanced Language Learning, technology in writing instruction and E-portfolio.

2.1 Process Writing

The process writing approach focuses on the writer rather than text. The process writing approach largely concentrates on a writer-based approach. The concept of this approach is that writing is a process of discovering meaning and developing organization (Matsuda, 2003). Writing is recursive process which writer often move back and forth during the process. To create a writing product, the writers generally follow the process such as organizing, drafting, revising, editing and publishing (Sokolik, 2003). The process writing involves several steps to guide the students from the beginning of writing to creating a final product. The teachers who believe in the process writing approach try to help their students improve fluency rather than accuracy. The students evaluate their own process by showing

evidence of the process and final products (Barbera, 2009). Hedge (2002) claimed that in the writing class, teacher and peers can be the readers. They can exchange some ideas which help the writer to be clear and accessible to readers.

2.2 Writing Assessment

Writing assessment relates to the evaluation of a writer's ability or performance in a writing task. Writing assessment can help students with guidelines for use both inside and outside the classroom, for example, giving a grade, placing students in proper places, allowing students to finish the course, identifying proficiency and evaluating programs. One of the problems of the teachers is being a guide and a rater at the same time. The most important characteristics of the raters are fairness and explicitness in their assessment and feedback. To solve the problem about process writing, some researchers have developed another way to assess writing which is by using portfolio assessment. The portfolio is a collection of writings produced over a period of time in a particular context (Hamp-Lyons, 1991). Thus, by using portfolio assessment the teacher can be both a guide and a rater at the same time.

2.3 Technology Enhanced Language Learning

Technology has been applied to language instruction for decades. Technology is considered as a tool for inquiry, learning, communicating and composing (MacArthur, 2006). As the use of technology in language classrooms has increased rapidly over the past years, the language teachers have recognized and acknowledged its value for teaching and learning. Language learners can learn about language anywhere and anytime by using a portable electronic device. Yang and Chen (2007) claimed that during the past two decades, multimedia technology for foreign language instructions has been used widely. Many teachers use technology instruction to replace traditional classroom instruction. Because of the advancement of computer technology, it can analyze and show data of students' performances. Technology can make students more independent than the traditional classroom by giving students the option to work at any time (Jonassen, 1996). It provides the students the opportunity to learn at their own pace.

2.4 Technology in Writing Instruction

The new ways of writing teaching and learning with the implementation of technology have been emerged. A large number of technology tools are created and employed for developing language skills especially writing skills such as drill and practice, automated essay scoring, and web-based peer reviews (Kelley, 2008). The use of technology tools such as word processing, computer writing systems, and computer-assisted writing software increased the quantity and quality of student writing more than traditional instructional methods (Jones, 2006).

2.5 E-portfolio

One technology tool that frequently use in writing instruction is an E-portfolio. E-portfolio is an electronic version of the portfolio which can also be supported the process writing approach. The users of e-portfolio can collect the pieces of work in many formats such as text, picture, audio, and video. It is stored digitally and organized by some sources of software.

The E-portfolio allows students to express their competence (Milman & Kilbane, 2005). The students can demonstrate their performance, knowledge, abilities, and also improve their work by themselves. However, sometimes the teacher can guide the students in how to assemble their E-portfolio. There are numerous advantages of using E-portfolio in classrooms. It is an evidence of learning. E-portfolio is easy to share, access, organize and search. From the results of Erice (2008) and Meyer et al., (2010) studies showed significant developments in the writing skills of the students who used the E-portfolio.

3 Research Methodology

3.1 Research Design

The present study was conducted in the form of one group pre-test and post-test design. The study included forty-five participants. The experiment with the Weblog-based E-portfolio aimed to improve students' English writing skills took ten periods. Prior to the experiment, the participants were assessed for their writing skills by means of a pre-test. Then, a post-test was given to the participants after they had studied writing by using the Weblog-based E-portfolio.

3.2 Research Participants

A group of forty-five undergraduate students who studied the English IV course (203204) at Suranaree University of Technology (SUT), Nakhon Ratchasima, in the first trimester of the academic year 2016 was purposively selected as the participants for this study by using a convenience sampling method. The researcher randomly chose one class of English IV course. English IV course is a compulsory English course at SUT which focuses on text-based tasks involving integrated skills. However, the teachers usually have insufficient time to cover all details about the integrated skills, especially the writing skills.

3.3 Research Instruments

3.3.1 Weblog-based E-portfolio

Weblog-based E-portfolio was created by both researcher and participants. For the English IV's Weblog-based E-portfolio, the researcher posted the lessons, exercises, and useful information for the participants. The lessons were based on the topics of the English IV textbook (Read This! Fascinating Stories from the Content Areas Book 3 by Alice Savage). The researcher chose two units: Unit 3 (Sport and Fitness) and Unit 5 (Automotive Technology) for creating two Weblog-based E-portfolio lessons. Each lesson consists of the lesson contents, exercises, and assignment. The participants were required to learn all the contents and do the online exercises and assignments provided. For the participants' Weblog-based E-portfolio, the participants had to create a Weblog-based E-portfolio themselves for the purpose of improving their English writing skills. The participants created it as a tool for writing during the English IV course.

3.3.2 Writing pre-test and post-test

Writing pre-test and post-test were set up to analyze and compare the participants' writing skills before and after learning writing through the Weblog-based E-portfolio. The results of writing pre-test and post-test were compared. All participants were asked to write the same topic of the English IV course syllabus at least 40 words within 60 minutes. The researcher and two teachers of the English IV course who have been teaching English at least five years were the raters who evaluated the participants' writing tests by using the scoring rubrics.

3.4 Data Collection

Data collection for this present study was conducted by the following procedure:

- (1) In the 1st period, an orientation on the Weblog-based E-portfolio was organized for the participants. A pre-test was also administered.
- (2) In the 2nd period and 3rd period, there was a training for the participants on how to construct and use their personal Weblog-based E-portfolio. The process writing and writing assessment were also described.
- (3) From the 4th period to the 9th period, the participants studied and completed the exercises, first draft and subsequent drafts of their process writing assignment.
- (4) In the 10th period, the post-test was administered.

3.5 Data Analysis

The quantitative data analysis was carried out with the data obtained from the writing pre-test and post-test. The statistical method employed to compare the students' English achievement was the t-test to measure improvement of writing skills after using the Weblog-based E-portfolio. Moreover, and the Pearson product-moment correlation coefficient was also used for analyzing inter-rater reliability.

3.6 Weblog-based E-portfolio Tryout

To evaluate the efficiency of the Weblog-based E-portfolio, the examination was conducted in three steps of tryout: Individual Testing, Small Group Testing, and Field Testing, respectively. The students' scores for the exercises and assignments from the three steps of the tryout were calculated in order to determine the efficiency of the Weblog-based E-portfolio based on the criteria of the 80/80 standard proposed by Brahmawong (2013). The first 80 or E1 is the efficiency of the process and the second 80 or E2 is the efficiency of the learning outcomes. In this study, E1 was the scores from the exercises and E2 was the scores form the writing assignments. After the end of each tryout step, the Weblog-based E-portfolio evaluation was conducted to revise and improve its efficiency.

3.6.1 The Individual Testing

The first step of tryout was the individual testing with three students who in difference English proficiency levels (able, moderate, less able) and were not participants in the study. The three students were assigned to study and practice two lessons through Weblog-based E-portfolio for studying English IV. In the first step of tryout, the E1/E2 scores for each lesson were 77.78/75.00 in lesson 1, and 75.56/70.83 in lesson 2. The E1/E2 scores did not reach the

80/80 standard criterion. The researcher asked the students for their feedback their experiences in using the Weblog-based E-portfolio. Then, the researcher revised the lessons on the basis of the results and feedback received.

3.6.2 The Small Group Testing

The small group testing, the second step, was conducted with six students with different proficiency levels of English (2 able, 2 moderate, 2 less able) and were not participants in the study. The same procedure as the individual testing was used with this step. The overall scores in the small group testing were 78.89/77.08 in lesson 1 and 77.78/75.00 in lesson 2. The participants were unable to get over 80 percentage of the scores in both lessons. The researcher had to revise the lessons.

3.6.3 The Field Testing

The last step of tryout was the field testing with forty-five students in difference English proficiency levels in one classroom and were not participants in the study. The same procedure was conducted with this group. In the last step, the efficiency of the process and product in both lessons reached the 80/80 standard criterion. The E1/E2 scores were 81.63/81.11 in lesson 1, 80.59/80.28 in lesson 2. However, the Weblog-based E-portfolio had to be revised again based on the suggestions and feedback from the students before implementation. The results of the E1/E2 scores of the three steps of tryout are presented in Table 1.

Step Step 2 Step 3 **Field Testing Individual Testing** Small Group 3 Students 45 Students **Testing 6 Students** Writing lesson **E1 E2** $\mathbf{E1}$ **E2 E1 E2** 77.78 75.00 78.89 77.08 81.63 81.11 Lesson 1 75.56 70.83 77.78 75.00 80.59 80.28 Lesson 2 Evaluate/ Evaluate/ Evaluate/ **Improve** mprove Improve

Table 1: The E1/E2 scores of Weblog-based E-portfolio Tryout

4 Results

This section presents the findings of the research questions organized in sub-sections.

4.1 Research Question 1: Does Weblog-based E-portfolio improve Thai EFL undergraduate students' English writing skills meet the prescribed 80/80 Standard?

To answer this research question, the 45 participants were required to learn and do the exercises and assignment through the Weblog-based E-portfolio. The E1/E2 scores of the experiment in both lessons reached the 80/80 standard criterion. The E1/E2 scores were 82.52/82.22 in lesson 1, 81.63/81.39 in lesson 2. The Weblog-based E-portfolio was

successfully developed and implemented to reach the 80/80 standard criterion. The results of the E1/E2 scores for the experiment are showed in Table 2.

Table 2: Results of the E1/E2 scores for the Experiment

Writing Lesson	Experiment	Experiment		
	E 1	E2		
Lesson 1	82.52	82.22		
Lesson 2	81.63	81.39		

4.2 Research Question 2: What is the effect of Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning?

To answer this research question, the data was used from the participants' writing pre-test and post-test. The writing pre-test and post-test were set up to analyze and compare the participants' writing skills before and after studying writing through the Weblog-based E-portfolio. All participants were asked to write the same topic of the English IV course syllabus. Then, the participants' pre-test and post-test scores were compared. A Pearson product-moment correlation coefficient was used to investigate the inter-rater reliability between the scores obtained from the three raters. The pre-test mean scores for 45 participants received from Rater A, Rater B, and Rater C were 10.56, 11.00 and 11.27. A Pearson product-moment correlation coefficient (r) was used for analyzing inter-rater reliability. The data showed that a correlation between the pre-test scores from Rater A and Rater B was 0.860, Rater A and Rater C was 0.819, and Rater B and Rater C was 0.843. The results of the mean scores of the pre-test from three raters are presented in Table 3.

Table 3: Results of the Mean Scores of the Pre-test from Three Raters

	Mean*	Std. Deviation	N
Pre-test scores from Rater A	10.56	2.377	45
Pre-test scores from Rater B	11.00	2.223	45
Pre-test scores from Rater C	11.27	2.107	45

^{*}The maximum score possible is 20

The mean scores were increased from 10.56, 11.00 and 11.27 for the pre-test to 14.83, 15.06 and 15.17 for the post-test. It was found that the correlation between the posttest scores from Rater A and Rater B as r = 0.912, Rater A and Rater C as r = 0.874, and Rater B and Rater C as r = 0.892. To sum up, the scores for the writing pre-test and post-test were positively acceptable in terms of their inter-rater reliability. The results of the mean scores of the post-test from three raters are presented in Table 4.

Table 4: Results of the Mean Scores of the Post-test from Three Raters

	Mean*	Std. Deviation	N
Pretest scores from Rater A	14.83	2.407	45
Pretest scores from Rater B	15.06	2.527	45
Pretest scores from Rater C	15.17	2.578	45

^{*}The maximum score possible is 20

The students' score in the writing pre-test and post-test was compared. It was found that the mean scores of the post-test (15.02) were higher than the pre-test (10.94). It means that Weblog-based E-portfolio helped the participants to improve their English writing skills. The results of a comparison of pre-test and post-test scores are presented in Table 5.

Table 5: Results of a Comparison of Pretest and Posttest Scores

	Mean*	Std. Deviation	N
Pretest	10.94	2.114	45
Posttest	15.02	2.413	45

^{*}The maximum score possible is 20

5 Discussion

The discussions of the efficiency of the Weblog-based E-portfolio and the improvement of learning achievement in writing skills are presented in the following sections.

5.1 Discussions on the Weblog-based E-portfolio

The Weblog-based E-portfolio was successfully developed and implemented to reach the 80/80 standard criterion proposed by Brahmawong (2013). It was because the Weblog-based E-portfolio was examined in three steps: individual testing, small group testing and field testing in order to develop the efficiency. The results of efficiency of the Weblog-based E-portfolio in the first step, the individual testing, was not meet to the 80/80 standard criterion. The researcher revised some contents and exercises according to the students' feedback. Then, the efficiency of the Weblog-based E-portfolio in the small group testing was improved. However, some contents and exercises were revised again because both E1 and E2 were not reached the 80/80 standard criterion. Finally, the efficiency of the Weblog-based E-portfolio reached the 80/80 standard criterion in the field testing after it was revised in the individual testing and the small group testing. The results of this study were similar to Somdee and Suppasetseree's results (2013) which stated that the online lesson was successfully implemented in the experiment because it was checked by the three steps of tryout with the 80/80 standard criterion.

Moreover, the Weblog-based E-portfolio lessons were designed by the researcher based on the process writing approach. In process writing, writer does not follow a neat order of planning, organizing and writing procedures (Hughey et al., 2011). Writing is recursive process which writer often move back and forth during the process. The participants could learn any topics as they needed. The participants were allowed to spend as much time as they want on learning or reviewing on the Weblog-based E-portfolio. They were given an opportunity to take the exercises up to three times in which the highest scores were recorded.

5.2 Discussions on the Learning Achievement in Writing Skills

Based on the results of the study from a comparison of the writing pre-test and the writing post-test, the average scores of the writing post-test were higher than the average of the pre-test. This means that the Weblog-based E-portfolio helped the participants to improve their English writing skills. The improvement of their writing skills may be due to the fact that the

participants had a chance to apply what they learned on the Weblog-based E-portfolio. The participants were encouraged to learn by E-portfolio technology. E-portfolio uses electronic technology that make the users of portfolio collect pieces of work in many formats such as text, audio, video, and pictures (Barrett, 2000). The participants learned and did the online exercises and activities about paragraph writing from the Weblog-based E-portfolio lessons. They received enough knowledge and information for writing. They were able to access numerous online resources. Joshi (2012) stated that the students' performance can be improved by using multimedia in the process of teaching and learning. Moreover, these findings confirm the previous study of Erice (2008) and Meyer et al. (2010) of the use of E-portfolio who found that E-portfolio can develop the students' writing skills.

6 Conclusion

The purposes of this study were to develop and evaluate the Weblog-based E-portfolio for improving English writing skills of Thai undergraduate students. The Weblog-based E-portfolio was implemented, examined, and revised for efficiency in the three tryout steps to meet the 80/80 standard criterion. Then, it was used with the forty-five participants in the experiment. The participants took a writing pre-test. Then, they learned the lessons designed by the researcher and did the exercises, a first draft and then subsequent drafts of writing assignments (process writing) through the Weblog-based E-portfolio. Finally, they took a writing post-test. The findings of the study showed that the Weblog-based E-portfolio was effective based on the 80/80 standard criterion. The scores of E1 and E2 in two lesson were 82.52/82.22 in lesson 1 and 81.63/81.39 in lesson 2. The participants' post-test mean scores (15.02) were significantly higher than the pre-test mean scores (10.94). Therefore, the Weblog-based E-portfolio was a suitable tool for Thai undergraduate students for improving their writing skills.

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