การพัฒนาเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์เพื่อปรับปรุง ทักษะการเขียนภาษาอังกฤษของนักศึกษาไทยระดับปริญญาตรี ที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาอังกฤษศึกษา มหาวิทยาลัยเทคโนโลยีสุรนารี ปีการศึกษา 2559

THE DEVELOPMENT OF A WEBLOG-BASED ELECTRONIC PORTFOLIO TO IMPROVE ENGLISH WRITING SKILLS OF THAI EFL

UNDERGRADUATE STUDENTS

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

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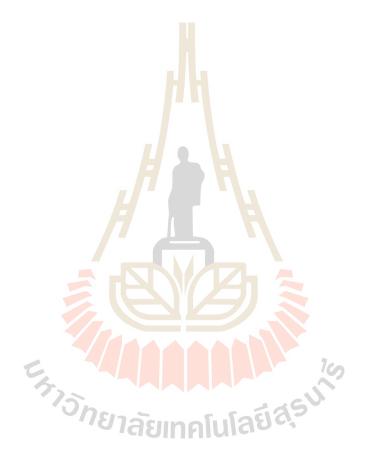
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จิรายุ คงสืบชาติ : การพัฒนาเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์เพื่อปรับปรุงทักษะ การเขียนภาษาอังกฤษของนักศึกษาไทยระดับปริญญาตรีที่เรียนภาษาอังกฤษในฐานะ ภาษาต่างประเทศ (THE DEVELOPMENT OF A WEBLOG-BASED ELECTRONIC PORTFOLIO TO IMPROVE ENGLISH WRITING SKILLS OF THAI EFL UNDERGRADUATE STUDENTS) อาจารย์ที่ปรึกษา : อาจารย์ คร.สุขสรรพ์ ศุภเศรษฐเสรี, 198 หน้า

วัตถุประสงค์ของงานวิจัยนี้คือ 1) เพื่อเปรียบเทียบผลสัมฤทธิ์ก่อนและหลังการเรียนทักษะ การเขียนโดยใช้เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ของนักศึกษาไทยระดับปริญญาตรีที่ เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ 2) เพื่อสำรวจความคิดเห็นของนักศึกษาไทยระดับ ปริญญาตรีที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศเกี่ยวกับการเรียนโดยใช้เว็บบล็อกแฟ้ม สะสมผลงานอิเล็กทรอนิกส์ในการปรับปรุงทักษะการเขียนภาษาอังกฤษ

งานวิจัยนี้เป็นการวิจัยเชิงทดลองแบบการทดสอบก่อนและหลังเรียน ผู้เข้าร่วมงานวิจัยเป็น นักศึกษาระดับปริญญาตรี 45 คนที่เรียนวิชาภาษาอังกฤษ 4 ที่มหาวิทยาลัยเทคโนโลยีสุรนารี ในภาคเรียนที่ 1 ปีการศึกษา 2559 ก่อนการทดลองนักศึกษาจะถูกประเมินทักษะการเขียนโดยใช้ แบบทดสอบก่อนเรียน จากนั้นแบบทดสอบหลังเรียนจะนำมาให้นักศึกษาทำหลังจากเรียนโดยใช้ เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ นอกจากนี้แล้วนักศึกษาจะต้องแสดงความกิดเห็นโดย เขียนบันทึกและตอบแบบสอบถามเกี่ยวกับการปรับปรุงทักษะการเขียนโดยใช้เว็บบล็อกแฟ้ม สะสมผลงานอิเล็กทรอนิกส์ ข้อมูลที่ได้รับจะถูกนำมาวิเคราะห์

ผลจากการทคลองมีดังนี้ ประการที่หนึ่ง เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์มีค่า ประสิทธิภาพตามเกณฑ์มาตรฐาน 80/80 ค่าประสิทธิภาพของบทเรียนที่ 1 และ 2 คือ 82.52/82.22 และ 81.63/81.39 ตามลำดับ นอกจากนี้คะแนนจากแบบทดสอบหลังเรียนของนักศึกษาสูงกว่า คะแนนแบบทคสอบก่อนเรียนอย่างมีนัยสำคัญทางสถิติ ทั้งนี้เนื่องจากนักศึกษาได้ถูกสนับสนุนให้ เรียนทักษะการเขียนโดยใช้เทคโนโลยีมัลติมีเคียของเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ พวกเขาสามารถปรับปรุงทักษะการเขียนโดยใช้ข้อมูลชี้นำจากอาจารย์และการแลกเปลี่ยนความ คิดเห็นระหว่างเพื่อน ประการที่สองผลที่ได้จากแบบสอบถาม (x = 4.10) และการเขียนบันทึก แสดงความคิดเห็น แสดงให้เห็นว่านักศึกษามีความคิดเห็นเชิงบวกต่อการเรียนโดยใช้เว็บบล็อก แฟ้มสะสมผลงานอิเล็กทรอนิกส์ เนื่องจากเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ส่งเสริมการ เรียนได้ในทุกหนทุกแห่ง ข้อเสนอแนะติชมจากอาจารย์และเพื่อนสามารถช่วยปรับปรุงคุณภาพของ งานเขียนและพวกเขาสามารถเรียนและฝึกฝนทักษะการเขียนได้ด้วยตนเอง โดยสรุป การเรียนทักษะการเขียนภาษาอังกฤษโดยใช้เว็บบล็อกแฟ้มสะสมผลงาน อิเล็กทรอนิกส์ช่วยให้นักศึกษาปรับปรุงทักษะการเขียนภาษาอังกฤษ นอกจากนี้การเรียนทักษะการ เขียนภาษาอังกฤษโดยใช้เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ยังช่วยกระตุ้นความคิดเห็น เชิงบวกต่อการเรียนออนไลน์ เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ถูกตรวจสอบแล้วว่าเป็น วิธีการที่เหมาะสมในการปรับปรุงทักษะการเขียนภาษาอังกฤษของนักศึกษา



สาขาวิชาภาษาต่างประเทศ ปีการศึกษา 2559

ลายมือชื่อนักศึกษา	
ลายมือชื่ออาจารย์ที่ปรึกษา	

JIRAYU KONGSUEBCHART : THE DEVELOPMENT OF A WEBLOG-BASED ELECTRONIC PORTFOLIO TO IMPROVE ENGLISH WRITING SKILLS OF THAI EFL UNDERGRADUATE STUDENTS. THESIS ADVISOR : SUKSAN SUPPASETSEREE, Ph.D., 198 PP.

ENGLISH WRITING SKILLS/TECHNOLOGY ENHANCED LANGUAGE LEARNING/E-PORTFOLIO/THAI EFL UNDERGRADUATE STUDENTS

The purposes of this study were (1) to investigate the effect of a Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning; (2) to explore Thai EFL undergraduate students' opinions toward learning through a Weblog-based E-portfolio to improve their English writing skills.

This study was a quasi-experiment with a pre-test and post-test design. The participants of the study were forty-five undergraduate students who were studying 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 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. Furthermore, the participants expressed their opinions by means of reflective journal and questionnaire about the improvements in their writing skills through the use of the Weblog-based E-portfolio. The data obtained were analyzed.

The results of the study are as follows: First, the Weblog-based E-portfolio was effective based on the 80/80 standard criterion. The scores from the E1 and E2 in lesson 1 and lesson 2 were 82.52/82.22 and 81.63/81.39, respectively. Moreover, the writing

post-test results of the participants were significantly higher than the writing pre-test results. It may be due to the fact that the participants were encouraged to learn writing by using multimedia technology of the Weblog-based E-portfolio. They improved their writing skills through guided information from the teacher and interaction with their peers. Second, the results obtained from the questionnaire ($\bar{x} = 4.10$) and reflective journal showed that the participants had positive opinions towards learning through the Weblog-based E-portfolio. It was because the Weblog-based E-portfolio enhanced ubiquitous learning. The feedback from the teacher and peers helped them to improve the quality of writing and they could learn and practice their writing skills autonomously.

In conclusion, learning English writing through the Weblog-based E-portfolio helped the participants to improve their English writing skills. Moreover, it promoted positive opinions towards online learning. The Weblog-based E-portfolio was proved to be an appropriate method to improve the English writing skills of the participants.



School of Foreign Languages

Student's Signature

Academic Year 2016

Advisor's Signature

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LIST OF ABBREVIATIONS

CAI	Computer-assisted Instruction
CALL	Computer-assisted Language Learning
CD-ROMs	.Compact Disk Read-Only Memory
DVD	.Digital Video discs
EAP	English for Academic Purposes
EFL	.English as a Foreign Language
ELT	.English Learning and Teaching
ESL	.English as <mark>a s</mark> econd Language
ESP	English for Specific Purposes.
юс	Item Objective Congruence Index
TELL	Technology Enhanced Language Learning
SPSS.	Statistics Package for Social Science
	Suranaree University of Technology

CHAPTER 1

INTRODUCTION

This chapter gives a brief introduction to the present study which aims at investigating an electronic portfolio to improve the writing skills of Thai EFL undergraduate students. It consists of the research background and a statement of the problems. The rationale of the study, its purposes and the research questions are also provided. Then, this chapter presents the significance of the study and definitions of the key terms. Finally, it ends with the summary of the chapter.

1.1 Background of the Study

English is the main language that is used in various countries around the world. Each person has various objectives in learning English. English is used in many contexts such as education, technology, science, and business. Harmer (1991) claimed that people learn English for many reasons: for their professional lives, for communication, and for specific reasons regarding their needs. Crystal (2003) also stated that English is very important in the world of communication. English is an international language so it has become one of the most important academic and business means of communication. In Thailand, English is considered as the most important foreign language. It is the first foreign language that Thai students learn in school (O'Sullivan & Tajaroensuk, 1997). English is a subject taught at all educational levels. It is also a compulsory subject and a popular elective subject that is regarded as the language for international communication. English is an important tool for communication and a key for advanced technology (Siramard, 1992). Therefore, Thai students have to take English as a foreign language for their studies and future career prospects.

According to the Ministry of Education (2003), Thailand's formal system of education is divided into two levels: basic education and higher education. Basic education is the formal system provided by both public and private institutions which is divided into six years of elementary education and six years of secondary education. Higher education is predominantly provided at universities and colleges. Most bachelor degrees in Thailand require four years' full-time attendance. Generally, English is a compulsory subject at every educational level in the context of Thai education. English courses are taught at the tertiary level and can be classified into two main groups (Intaraprasert, 2000). First, general English courses are about the general content of English in everyday life. Second, advanced English courses are about specialist skills in English for Academic Purposes (EAP) or English for Specific Purposes (ESP). Both these advanced courses are taught to students depending on their majors and the requirements of the university.

According to Wiriyachitra (2002), students who study at tertiary level are generally required to take at least four compulsory English courses. Foundation courses 1 and 2are integrated language skills and study skills courses and the others may be English for Academic Purposes (EAP) or English for Specific Purposes (ESP) courses as required by each major. The purpose of these four English courses is to improve students' communicative competence in English (Ministry of Education, 2001). These courses cover two main areas of the English language: social language and academic language. The aims in the area of social language are to deal with the use of English in personal and social interaction tasks, including distinguishing the differences between language and culture. The aims in the area of academic language focus on using English in academic tasks and to promote life-long learning.

Suranaree University of Technology (SUT) was established as the first public autonomous university. In undergraduate programs, SUT has 9 program clusters: Science, Information Technology, Management Technology, Agricultural Technology, Engineering, Medicine, Public Health, Nursing and Dentistry (Suranaree University of Technology, 2016). All SUT students are science-oriented students. SUT students are required to study five English courses, English I to English V. English I and English II mainly focus on listening and speaking skills. English III mainly focuses on reading skills. English IV mainly focuses on reading and writing skills, whereas English V focuses on preparation for employment.

The major goal of EFL teaching is to develop the four integrated skills: listening, speaking, reading and writing (Cabrera & Bazo, 2002). Both reading and listening are receptive skills and both writing and speaking are productive skills. These four skills are very important for communication. However, writing is thought to be the most difficult skill for students. In the late 1960s and early 1970s, the process approach to writing emerged. Consequently, writing was seen as a developmental process of many aspects, such as inquiring, problem solving rather than focusing on the end product (Wennerstrom, 2006). Writing involves many activities, such as setting goals, organizing information, generating ideas, writing a draft, reviewing, revising, and editing (Hedge, 2002; Oshima & Hogue, 2006). The ability to write is not a skill that is acquired naturally; it needs to be learned. 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 to enable them to communicate to their readers (Tangpermpoon, 2008). Acquiring writing skills is not easy because they require considerable practice. So, writing skills are considered as one of the most complicated language skills. There are serious issues concerning the extent to which the efficient teaching of writing can improve students' writing skills. However, those students who are able to learn to write correctly will be able to write English for authentic situations. Not only teaching writing can improve students' writing skills as well.

Writing assessment is an important means for improving the teaching and learning of writing. It can promote teaching, both conceptually and practically (White, 1985) and can be used for many purposes both inside and outside the classroom, such as giving a grade to students, placing them on appropriate courses, and evaluating their courses. Writing assessment that involves actual writing can be considered as performance assessment (Weigle, 2002). Performance assessments require the test-takers to have both language knowledge and skill in using their knowledge in communicative situations (Shohamy, 1983). The criteria for scoring should be clear and raters should be trained to use the criteria too. However, Thai EFL students do not know much about the criteria for assessing their writing. So, their writings do not reach the expectation of the teacher. To sum up, there are many Thai EFL students who cannot write English properly. They might have low ability and low motivation for learning. These various problems are discussed further.

1.2 Statement of the Problems

Among other English language skills taught in Thailand, writing is viewed to be the least emphasized and most disregarded (Nipitkul, 1995; Chinnawong, 2002).In the Thai environment, writing in English is a complicated skill that Thai students have little opportunity to use in authentic situations or in their everyday lives (Kitjaroonchai, 2006). A large number of Thai EFL students cannot write correctly in English. Thai EFL students do not have the opportunity to write English outside the classroom, so that is the only place where students can practice writing in English. Wiriyachitra (2003) stated that the lack of an opportunity to learn English in an authentic situation or students avoiding interaction in English results in unsuccessful learning in Thailand. Students also have little opportunity to use language and to take part in class activities, especially writing activities.

Thai EFL students may have difficulties with some aspects of writing skills, such as vocabulary, spelling, use of grammar, writing conventions, and punctuation. It has been stated that using the correct form of English grammar is the main problem for Thai students writing in English (Mahaboonpati, 2013). Students cannot write English correctly and therefore they encounter considerable difficulties in their writing tasks because they lack English language proficiency. Furthermore, Pak-TaoNg (2003) also stated that writing consists of many activities that result in understanding how information is related to a topic and how data should be collected. Writers need knowledge and intelligence to convey their ideas in a text that should be easily comprehensible to their readers.

Writing can be seen as the most difficult skill for Thai students (Tangpermpoon, 2008; Watcharapunyawong & Usaha, 2013; Wimolmas, 2013). In the context of

Thailand, many students who have limitations in their English writing skills need some suitable and effective teaching method and activities for developing their writing skills (Kitchakarn, 2012). The most significant problem is the teacher-centered approach or traditional teaching style which is still used in the teaching of writing in Thailand. This approach contrasts with the concept of a student-centered approach which means that students have little opportunity to use English and to participate in the learning process.

In Thai universities, students are required to write different genres, such as summaries, term papers, research papers, etc. Chinnawong (2002) conducted a study on the writing performance of Thai science undergraduates by giving the students an opportunity to generate, write, and organize their own thoughts. The results from the students' writing in this study showed that the major problems are grammar, vocabulary, discourse organization and the development of ideas. Lush (2002) found that Thai students have five major problems with writing in English which are the misuse of definite and indefinite articles, singular and plural nouns, tense usage, subject-verb agreement and prepositions. Similarly, the studies of Lertpreedakorn (2009) and Promwinai (2010) stated that Thai EFL students are incompetent in areas ranging from grammar structure to the collocation of organized ideas. Nonkukhetkhong (2013) also investigated the grammatical errors made by first year English major students in Thailand. The results showed that the errors made by the students were errors in the use of verbs, nouns, possessive case, articles, prepositions, adjectives, adverbs, sentence structure, ordering, coordination, capitalization, spelling, punctuations, word selection, word formation, and communication. Furthermore, Thuratham and Khampusaen (2015) stated that Thai students have difficulties with writing accurately. Most students make numerous errors in essay writing.

Many researchers have found other problems in the writing of Thai students. Pawapatcharaudom (2007) found that the major writing problems of the students in the study were: students were unable to write an essay within a limited time and they were unable to write an academic paper in English. They failed to develop certain basic skills in their previous studies, so they were unable to write with the speed and fluency required. Sattayatham and Ratanapinyowong (2008) studied errors in the organization of writing paragraphs in English among Thai students. The students were assigned to write their opinions about some passages. The results revealed that the top four errors in their paragraph writing were 1) no transitional words, 2) lack of organization, 3) no introduction and 4) no conclusion. Furthermore, Ka-kan-dee and Kaur (2014) investigated the difficulties of Thai EFL English major students when they write essays. The findings revealed that the main difficulties faced by Thai EFL English major students were the structure of writing, providing solid evidence, time constraints, organization idea, fulfilling task demand, understanding the questions, translating, evaluating, topic choice and length.

At Suranaree University of Technology (SUT), a large number of students have a low proficiency in English writing skills. Suppasetseree (2005) claimed that many SUT students achieve very low scores in reading and writing in their University Entrance Examination. The students at SUT have little opportunity to use their English writing skills either inside or outside the classroom. Wannaruk (2008) stated that the low English proficiency level of the students may result from their limited exposure to an English environment. Most students at SUT have a very limited knowledge of vocabulary in English (Ward, 2000). They have little opportunity to develop their writing skills in the English language classroom. Udomyamokkul (2004) claimed that when SUT students have to do some writing tasks, they may have problems with writing sentences in terms of both vocabulary and grammar. Moreover, writing skills are given little attention. Teachers may not have sufficient time to cover the teaching material or explain details from the textbook with the purpose of improving English skills, especially writing skills (Linh & Suppasetseree, 2016). Therefore, SUT students need to have more opportunity to practice and use English writing outside the classroom. As a result of the problems of SUT students mentioned above, the researcher became aware that SUT students still have considerable problems with their writing skills. These problems need to be fully investigated and resolved.

1.3 Rationale of the Study

Many students believe that the traditional English classroom is boring because English textbooks and the teaching methodology do not stimulate them to study. Punthumasen (2007) claimed that many students do not want to study English because they think that English is a boring subject. According to Hussin, Maarof and D'Cruz (2001), creative ways of teaching need to be found to teach and increase students' motivation in order for them to learn and appreciate the language. Technology enhanced language learning (TELL) is one method for encouraging students to learn. Technology enhanced language learning can be an effective tool for language learning. Geoffrion and Geoffrion (1983) stated that using unusual and exciting activities instead of textbooks can motivate learners to study the English language in the classroom. The teacher presents new materials in various formats, including texts, pictures and sound. Modern technology and the computer have become widely available. Prapphal (2004) also stated that technology is a good method of instruction to assist the students to communicate. At present, teachers at all levels should use technology to enhance language learning instruction. Nowadays, there are many kinds of technology and media tools that can be used in the classroom, such as the Internet, audios, videos, and teleconferencing. The benefits of technology in the classroom include interactive lessons, immediate feedback, active learning, independent learning, serving students' needs, and increasing students' motivation. Teachers or institutions need to select which of the available methods is most suitable for their students.

Web 2.0 is the latest technology which is popularly used in an educational context, especially with the net generation. There are various kinds of Web 2.0 technology tools, such as Facebook, Twitter, MySpace, and YouTube. Weblog is also one of the Web 2.0 technology tools. People who use the Weblog can post texts, pictures and videos, and the readers are usually allowed to add comments to their posts. Ellison and Wu (2008) stated that Weblog writing encourages critical and analytical thinking because it allows students to develop their own attitudes through interaction with their peers. It is an online tool that everyone can use to share their opinions on topics with others. There were research studies which claimed that Weblog has positive effects on students' writing. Jones (2006) conducted a study on how Weblog was used in an L2 process writing classroom. The findings revealed that Weblog serves as a suitable tool for the process writing approach and it also provides some easy word processing features for writing, editing, and revising. Tu, Chen, and Lee (2007) studied the effects of Weblog to develop EFL students' English writing competency. Webbased guided-writing tasks are taught to students. The results also indicated that Weblog has a positive impact on the teaching of writing.

Electronic portfolio or E-portfolio is a collection of students' work assembled and managed by the students themselves, usually on the Web. One important difference between the traditional portfolio and the E-portfolio is that E-portfolio uses sources of technology, such as CDs, DVDs, and the Web. Technology allows students to collect and organize portfolio artifacts in many media types (audio, video, graphics, and text). Students can also use hypertext links to organize their materials and then connect to appropriate outcomes, goals, or standards (Barrett, 2006). E-portfolio also helps students to become involved in the assessment process. It can be used as a tool for developing students' writing skills. There are a lot of benefits from using E-portfolio for assessment which can help improve students' writing. It can also promote the exchange of ideas and provide feedback. Not only teachers can be the evaluators when using E-portfolio, but students' peers can also do it. Peer feedback has been introduced at the revision stage of the writing process to provide responses to a student's work. Erice (2008) studied the influence of E-portfolio on students' writing by using scores obtained from the students before and after the experiment. The findings revealed that the students who were using E-portfolio were more successful. Meyer et al., (2010) also studied E-portfolio by using pre-test and post-test. They compared the scores of the students who used E-portfolio and those who did not use it. The results showed significant developments in the writing skills of the students who used E-portfolio.

Because of the problems of teaching and learning writing skills for Thai EFL undergraduate students, the researcher realizes that learning writing by using Eportfolio can help students learn to write more effectively. Nowadays, there are many open source E-portfolio systems and Web 2.0 systems. In the present study, the researcher plans to conduct a study of the use of a Weblog-based E-portfolio. In order to make sure that the Weblog-based E-portfolio is efficient, there is a standard criterion which can be used for evaluating its efficiency.

After the process of developing the Weblog-based E-portfolio, three steps of the tryout phase are performed to ensure the validity and efficiency of the lessons. The 80/80 standard proposed by Brahmawong (2013) is employed as the criteria to evaluate the efficiency of the lessons for each tryout step. The first 80 is the efficiency of the process which means the scores which the participants gain from doing the exercises. The second 80 is the efficiency of the learning outcomes which means the scores which the participants gain from doing the writing assignments.

In foreign language writing research, the topic of using E-portfolio for improving writing skills has received scant attention. Some second language research studies on E-portfolios showed that EFL students can improve their writing skills by using them (Erice, 2008; Meyer et al., 2010). However, in the educational context of Thailand, there is a need for more research on the use of E-portfolio. Therefore, the researcher aims to develop a Weblog-based E-portfolio for teaching writing to Thai ้ารากยาลัยเกลโนโลยีสุรุป EFL students at Suranaree University of Technology.

1.4 Purposes of the Study

As mentioned earlier, the use of electronic portfolio is becoming a crucial method in the teaching and learning of EFL writing. The purposes of this study are as follows:

1. To investigate the effect of a Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning.

2. To explore Thai EFL undergraduate students' opinions toward learning through a Weblog-based E-portfolio to improve their English writing skills.

1.5 Research Questions

To achieve the aforementioned purposes, two research questions have been formulated:

1. What is the effect of a Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning?

2. What are Thai EFL undergraduate students' opinions toward learning English writing skills through a Weblog-based E-portfolio?

1.6 Significance of the Study

This study attempts to help researchers and teachers to use technology to solve the existing problems in English language teaching and learning. The original purpose of this study was to provide the students with a Weblog-based E-portfolio that will help to improve students' writing skills. This study provides practical research on the shift from writing instruction in a traditional classroom to instruction using a Weblog-based E-portfolio. The use of technology will be the main method for improving students' English writing skills. Thus, this study will benefit students, teachers and researchers.

The students who know the advantages of using this technology will want to pay particular attention to language learning by using a Weblog-based E-portfolio. It may help students become more autonomous, active learners, and encourage them to take responsibility for their own studies. They will also understand how feedback on their language learning through a Weblog-based E-portfolio can improve their writing skills.

The teachers and researchers who have little experience in the use of technology may read and apply this study in the classroom. This study will also provide pedagogical suggestions that could solve some of the problems in terms of students' writing skills. Some instruments of this present study will be useful for both researchers and teachers who are interested in using Weblog-based E-portfolio, lessons, tests, questionnaire and reflective journal. Furthermore, this study will provide a set of guidelines for future studies which will be able to research similar problems. The findings of the study can be used to improve the teaching and learning of writing and to develop suitable materials for teaching. Hence, future researchers will benefit from this study. Moreover, this study will increase the awareness of researchers of developments in the field of new technology in language teaching and learning to improve the standards of English in the Thai educational system.

1.7 Definitions of the Key Terms

1. "A Weblog-based E-portfolio" refers to a collection of students' work assembled and managed by the students themselves. This study used Weblog as a tool for creating E-portfolio. It was also considered as an assessment tool.

2. "Thai EFL Undergraduate Students" refers to the students who study English IV in the first trimester of the academic year 2016 at Suranaree University of Technology. These students have various levels of English proficiency, for example, there are able students, moderate students, and less able students. **3. "80/80 Standard"** is the efficiency of the Weblog-based E-portfolio lessons according to the 80/80 standard criteria (Brahmawong, 2013).

(1) The first 80 is the efficiency of the process which means the scores which the participants gain from doing the exercises on a Weblog-based E-portfolio.

(2) The second 80 is the efficiency of the learning outcomes which means the scores which participants gain from doing the writing assignments on a Weblog-based E-portfolio

4. "English Writing Skills" refers to the students' writing ability that helps them communicate and express their thoughts.

5. "Opinions" refers to students' attitudes or perspectives about learning writing through the use of a Weblog-based E-portfolio.

6. "Writing Scoring Rubrics" refer to the criteria used to judge the quality of writing with regard to the five aspects: topic sentences, supporting sentences, concluding sentences, organization of ideas, and grammar/mechanics.

7. "Web 2.0" refers to the second generation of Internet technology. It serves as a source for providing information to an interconnected community. Web 2.0 applications include web blogs, wikis, and social networking websites, such as Facebook and Twitter.

8. **"Reflective Journal"** refers to the spaces on the Weblog-based E-portfolio that is provided for participants to write their thoughts about performing each writing assignment using a series of guided questions.

1.8 Summary

This chapter provides a brief introduction that focuses on English language teaching and learning in Thailand. First, it provided a background to the study. Then, it made statements of the problems, rationale of the study, purposes of the study, research questions, the significance of the study, and then some definitions of the key terms used were presented. In the next chapter, a review of the related literature, the theoretical framework and previous studies in the context of electronic portfolio will be presented.



CHAPTER 2

LITERATUREREVIEW

The purpose of this chapter is to provide a foundation for an understanding of this study by reviewing the theories and previous research and providing extensive discussion of important topics related to the use of E-portfolio. It consists of ten sections: 1) Writing Instruction in ESL/EFL,2) The Process Writing Approach, 3) Writing Assessment, 4) Technology Enhanced Language Learning, 5) Technology in Writing Instruction, 6) Weblog,7) Electronic portfolio, 8) Constructivism Theory, 9) Previous Research Studies, and 10) Summary.

2.1 Writing Instruction in ESL/EFL

Writing is a medium of human communication that represents language and emotion through the recording of signs and symbols. Good writing skills allow you to communicate your message with clarity and ease to a far larger audience than through face to face conversation. Strong writing skills in English often come from practice and determination. Nobody is born to be a good writer. Therefore, students of the English language must practice writing English if they want to improve.

"One of the most controversial aspects of writing pedagogy has been the tension between process and product approaches to the teaching of writing" (Nunan, 1999, p.272). There are various approaches to EFL writing instruction that have been introduced by many researchers in the EFL writing field. There are two major approaches that have been used in classrooms extensively. They are the product writing approach and the process writing approach. Table 2.1 shows a comparison between the product writing approach and the process writing approach (Steele, 2004)

Product Writing	Process Writing
Imitate model text	Text as a resource for comparison
Organization of ideas are more important than ideas themselves	Ideas as starting point
One draft	More than one draft
Features highlighted including	More global, focused on purpose,
controlled practice of those features	theme, text type i.e. reader is
	emphasized
Individual	Collaborative
Emphasis on end product	Emphasis on creative process

Table 2.1: A Comparison of Product and Process Writing (Steele, 2004)

Writing well in a foreign language is one of the most difficult skills to acquire. The primary reason for writing instruction is to help students express their thoughts. Sokolik (2003) offered the principles of writing instruction. First, the teacher has to understand the students' reasons for writing. It is necessary that teachers and students must know the goals of writing. The goals of both teachers and students should match each other or match with the goals of the school. It helps the teacher to find a focus for the writing that is to be done in the class. Second, the teacher should give students many opportunities to write. Writing skills require considerable time for drills and practice. The more students practice their writing the more they will improve. The students

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should have various types of writing practice such as essays, journal entries, letter writing, and writing short answers. Third, the students should receive detailed feedback. The feedback that the teacher gives the students should be clear and meaningful so it will help students to revise their writing. The teacher should not correct the students' writing, but should make some useful comments that will lead the students to solve their problems so they can rewrite their work by themselves. Fourth, in order to clarify how the students' work will be evaluated, the teacher needs to explain the students' scores in detail. The scoring rubrics for writing assessment should be developed and clarified for both the teacher and students.

Furthermore, there are four principles of writing instruction as summarized by Nation (2009). The first principle is meaning-focused input. The learners acquire knowledge and experience through the process of writing. If the learners prepare what they write carefully, the writing will be meaningful and successful. The second principle is meaning-focused output. Learners should use many kinds of writing to increase their knowledge. Furthermore, it focuses on communicating a message to the reader. A good writer should have a reader in mind. The third principle is languagefocused learning. Spelling should be given more attention. The teacher should provide feedback to improve their learners' writing. The learners should have an awareness of the necessary strategies to deal with various parts of the writing process. The fourth principle is fluency development. The learners should increase their writing speed more and more so they can write at a reasonable speed. Fluency development will occur when the learners drill and practice the activities regularly.

To create a writing product, the writers generally follow a process which consists of organizing, drafting, revising, editing and publishing (Sokolik, 2003). Good

writers normally plan and produce multiple drafts before producing their final product. Process writing involves several steps to guide the students from the beginning to creating a final product. In this study, the process writing approach is applied to the writing instruction. Therefore, the process writing approach will be reviewed in the next section.

2.2 The Process Writing Approach

The process writing approach focuses on the writer, rather than the 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 considered as personal expression that is a creative activity. It is a complicated process that involves the cognitive process, the social context and the need for people to follow a routine in their lives. Hughey, Wormuth, Hartfiel and Jacobs (2011) stated that in the writing process, the writer does not follow a neat order of planning, organizing and writing procedures. Writing is a recursive process which requires writers to move back and forth frequently during the process. Hyland (2003) stated that writing is learned. It cannot be taught. Pedagogical methods are devised to assist students to acquire effective writing skills. Thus, writing instruction for this approach is nondirective and personal.

Barbera (2009) claimed that the students evaluate their own process by showing evidence of the process and final products. Self-assessment keeps the students involved in the process and it encourages them to take on responsibility and to be motivated. Self-assessment gives students the opportunity to reflect on the objectives of their learning and their accomplishments. In the process writing approach, teachers play the role of facilitators or consultants instead of examiners. The teachers who believe in the process writing approach try to help their students improve fluency rather than accuracy. Hedge (2002) also claimed that in the writing class, teacher and peers can be the readers. They can exchange ideas which help the writer to be clear and accessible to readers. The teachers and students should be collaboratively involved in discovering what written language is and how a piece of writing is produced (Hughey et al., 2011). Ferris (2003) revealed the findings of survey research in which students say that they pay attention to teacher feedback and it helps them to improve their writing. As a result, the students can write meaningful and creative pieces of writing by themselves.

Peer feedback is a pedagogical approach that allows students to provide feedback to their peers' writing pieces. Liu and Hansen (2002, p.1) defined peer feedback as "the learners' use of sources of information and interactions for each other in such a way that learners take on the responsibilities in commenting on each other's drafts in the process of writing". So, the students who receive these comments can revise their pieces of writing. It also promotes critical thinking when the students give feedback to their peers. Furthermore, students can learn the good points from others. The feedback system in the process writing approach is considered as one of its most significant benefits. Appropriate feedback to students can improve students' writing skills.

Jones (2006) stated that generally there are five stages in the process writing approach which consist of prewriting, drafting, revising, editing and publishing. The first stage is prewriting. Ideas are generated through talking, drawing, brainstorming, reading, free writing, note-taking, free-association of ideas and questions in order to generate ideas and find topics. The second stage is drafting. This is an exploratory piece of writing in which ideas are organized and written up into a coherent draft. This stage of writing should be supported. The third stage is revising. This stage includes looking at the work through the different perspectives of other readers. This includes peerresponse. It also considers other people's questions and comments. The responses generally focus on the meaning and not the accuracy of a text. A variety of responses make the writing more complex and interesting. The fourth stage is editing. The students receive the responses from their teacher and peers and then they do their own proofreading, structure checking, vocabulary corrections, and modifying and rearranging their ideas. Then, the students revise their writing. The teacher can also provide focused mini-lessons based on the students errors in specific areas such as grammar, mechanics, and vocabulary. The fifth stage is publishing. In this stage, the students share their final written versions with others.

To sum up, writing should involve a process that includes brainstorming, generating ideas, collecting data, organizing details, and revising drafts etc. So, the students can write meaningful and creative pieces of writing by themselves through guidance, feedback and revision. Moreover, interaction between teacher and peers during writing is also important. Therefore, many research studies, including this study, prefer the process writing approach. Writing instruction and process writing have been discussed previously. Another important point is how to assess writing. Writing assessment should be a part of every writing course in order to evaluate the achievement of the students and the efficiency of the lessons. For this reason, writing assessment is reviewed in the next section.

2.3 Writing Assessment

Writing assessment relates to the evaluation of a writer's ability or performance in a writing task. Yancey (1999) stated that the history of writing assessment can be divided into three major shifts in the methods used in assessing writing. The first shift in writing assessment (1950-1970) focused on objective tests with indirect assessment. The second shift (1970-1986) concentrated on holistic scoring. The third shift (since 1986) focused on the scores from collections of students' work, such as portfolio assessment.

Product writing uses timed-writing tests to measure proficiency. Timed-writing tests consist of direct tests and indirect tests. The direct tests assess a whole piece of writing. The direct tests should have at least five characteristics (Hamp-Lyons, 1991). First, each student is required to write at least 100 words in one or more pieces. Second, the student is provided with a room and the student responds to prompts. Third, the writing is read by raters who are well trained in assessing writing. Fourth, all the ratings use the same criteria for scoring. Fifth, the raters react to the texts in numbers instead of in verbal or written reactions. However, the indirect test assesses the writing in separable features, but not in a whole piece of writing with respect to grammar, vocabulary, punctuation, or spelling.

On the other hand, Beach (1976) argued that process writing is as important as or more important than the final product. There might be a problem with the process writing approach to assessment. Giving feedback and assessing writing in a processoriented classroom is a "thorny issue" (Brown, 2001, p. 356). One of the problems of the teachers is being a guide and a rater at the same time. To solve the problem about process writing, some researchers have developed another way to assess writing which is by using portfolio assessment. Hamp-Lyons and Condon (2000) stated that portfolios have been used in assessment. Portfolio assessment has been introduced to assess writing for a variety of purposes. It is one of the most widely used alternative assessment methods. 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. The most important characteristics of the raters are fairness and explicitness in their assessment and feedback.

Jordan (1997) described the forms of feedback in assessment. First, the use of correcting codes or code devices motivates students to engage in a process of self-correction and it also has some beneficial effects on grammatical errors. Second, grammar is fundamental to language learning. Third, when using self-monitoring or self-evaluation, the students also like to receive the teacher's comments. Students are involved in the process of correction. Fourth, the students take responsibility for editing and correcting their work. Fifth, peers can give worth feedback when the students discuss their work and thoughts together.

Writing assessment can be used to achieve many objectives. Writing assessment can help students with guidelines for use both inside and outside the classroom, for example, giving a grade, placing students on appropriate courses, allowing students to finish the course, identifying proficiency and evaluating programs. Perceptions of writing are shaped by the methods used to assess writing. A good method of assessment should communicate clearly to the students what is valued and expected from them and does not interrupt their writing. There are many methods to assess writing. Methods of writing assessment depend on the context or situation. The purpose of the assessment should drive the procedure. A teacher is not the only person who can assess a piece of writing because students can assess their own writing. Small groups of students can meet and discuss their written work by using checklists or rating scales. However, most methods use rubrics as a scoring method.

Rubrics were used in higher education in the 1960s to evaluate specific purposes or assignments (Isaacson & Stacy, 2009). Diederich, French, and Carlton (1961) were the developers of rubrics. They examined a research study and they found that 94% (300 student papers) received grades that were inconsistent. In their research, they created a list of content areas that teachers should take into consideration when they evaluate student assignments. These areas are ideas (relevance), form (organization), favor (style), mechanics (grammar), and wording. As a result of this idea, the traditional five-point analytical rubric has come to be used to evaluate students' work nowadays (Broad, 2003).

Rubrics are scoring tools that set the criteria for each assignment and calculate the grades for quality according to the criteria. Rubrics are a tool that can improve student performance by showing the teachers' expectations and by letting the students know how to meet the teachers' expectations. Rubrics do not only serve as a guide for a teacher's feedback, but they can also serve as tools for self-assessment and peerassessment for the learning process (Saddler & Andrade, 2004). Rubrics are very suitable tools for assisting students to become good judges of the quality of their own work and their peers' work. Rubrics are tools to help students know the criteria for the evaluation of their work from the beginning (Montgomery, 2002). Rubrics have three characteristics. First, the criteria for assessment must take into account the important goals of the tasks. Second, rubrics have criteria and descriptions for each level so that they can be used for grading the different levels of the work that the students have done. Third, the students can compare their work against the criteria in the rubrics. Rubrics should be given to students before they start their work because they can help the students reach the appropriate goals (Andrade & Valtcheva, 2009).

There are two major types of rubrics: holistic scoring rubrics and analytic scoring rubrics. Holistic scoring rubrics give a single score for each composition that indicates various levels of writing performance (Nelson & Van Meter, 2007). The evaluator matches an overall impression with the descriptors which then produces a score. On the other hand, analytic scoring rubrics identify each component of a writing task. Analytic scoring rubrics describe specific levels of proficiency. The criteria of writing are scored separately. A piece of writing might be evaluated on varied aspects such as content, organization, grammar, vocabulary, or cohesion (Weigle, 2002). In analytic scoring rubrics, many aspects of writing are evaluated separately rather than being given a single score for the whole work.

The benefits of rubrics in an assessment are that they elicit written responses that may be both lengthy and complex. For example, rubrics are frequently used for assessing portfolios and journals. A teacher's responses to students can be subjective without specifying students' strengths and weaknesses. Students can directly focus on the objectives (Brown & Abeywickrama, 2010). Rubrics provide an easily comprehended criteria score chart. Inexperienced raters can easily understand and apply scales for the criteria. Analytic scoring can be more reliable because reliability tends to increase when additional items are added to a discrete-point test, a scoring scheme in which multiple scores are given to each script tends to improve reliability (Hamp-Lyons, 1991). In this present study, the researcher uses scoring rubrics for assessing various aspects of writing. Nowadays, most teachers and students can use technology and computers quite easily. In order to teach or assess writing skills or other skills, technology can make it more convenient. An overview of technology enhanced language learning, including its advantages and disadvantages in language learning, is reviewed in the next section.

2.4 Technology Enhanced Language Learning

Technology plays a significant role in language teaching and learning. Many teachers now use technology to replace traditional classroom instruction. The present study also has as a significant purpose in the use of technology to improve students' writing skills. Yang and Chen (2007) claimed that during the past two decades, multimedia technology for foreign language instruction has been used widely.

Technology Enhanced Language Learning or TELL was first known as Computer Assisted Instruction (CAI) or Computer Assisted Language Learning (CALL).Computer technology and language teaching and learning began in the 1960s (Delcoque, 2000). Egbert (2005) defined CALL as learning a language in any context with a computer. Bush and Terry (1997) claim that TELL emphasizes the technology rather than the computer itself. Later, CALL was transformed into TELL, in which teachers applied technology to their foreign language teaching. With the advancement of technology, several educational institutions adopted technology into the educational environment. Teachers began to integrate technology into many activities in the classroom to improve their students' learning. TELL has become widely used nowadays.

2.4.1 Definitions of Technology Enhanced Language Learning

Technology in the field of education is defined by The Association for Educational Communications and Technology (AECT) (2004) as creating and using technological processes and resources for study which also improves performance. Technology enhanced language learning has different explanations. According to Bush and Terry (1997), technology enhanced language learning is related to the effects of technology on language teaching and learning. TELL is a means for teachers to use computers to display multimedia in their teaching. It is not a teaching method. However, TELL provides assistance for teaching. Patel (2014) also stated that technology enhanced language learning is using a computer as a technological tool for the display of multimedia for assisting a teaching method.

At present, TELL includes every type of technology used in the classroom such as videos, audios or entire language labs. TELL is the use of all technologies in language instruction both inside and outside the classroom. The main purpose of TELL is to assist and enhance language learning. In order to use technology in language teaching and learning efficiently, both the advantages and disadvantages of technology enhanced language learning are reviewed in the next section.

2.4.2 Advantages of Technology Enhanced Language Learning

Recently, using multimedia technology to support language instruction has become more popular. There are many advantages of TELL in terms of teaching and learning. Computers and programs can make students more independent than the traditional classroom teaching approach by giving students the option to work at any time (Jonassen, 1996). Students are given many chances to study and practice the lessons as many times they want. Because of the advancement of computer technology, it can analyze and show the data for students' performances. Whenever a teacher wants to evaluate a student's progress, the teacher can get the essential information from a well-designed computer program (Taylor& Gitsaki, 2003). Moreover, TELL provides immediate feedback that can be given to the students without the threat of face to face confrontation (Borras, 1993). It is also a communication tool between teachers and peers by giving feedback and for submitting pieces of work.

Warschauer (1996) demonstrated three factors in student motivation that have been influenced by technology, which are communication, empowerment, and learning. The first factor is communication. The students prefer to communicate with others and to engage in real life situations. The second factor is empowerment. The students feel empowered in a technology environment since they feel less isolated and they are less afraid to contact others. The third factor is learning. The students believe that the computer gives them more opportunity for controlling their learning by enabling them to learn faster and more independently. TELL gives students control over their learning so students' attitudes and motivation tend to improve.

2.4.3 Disadvantages of Technology Enhanced Language Learning

As every coin has two sides, so does technology. The first disadvantage is that it will increase educational costs (Gips, DiMattia, & Gips, 2004). Some hardware and software are very expensive. Second, teachers and students should have basic knowledge of technology before they use computer technology for teaching and learning. Roblyer (2003) stated that the benefits of computer technology for those students who are not familiar with computers are nonexistent. Third, some software programs are not suitable for use. Fourth, TELL cannot cope with unexpected situations. It cannot handle unexpected problems that may occur in authentic situations. There are so many situations they are always changing. For example, technology cannot respond to students' questions as immediately as a teacher can. Therefore, there is still a need to develop technology to assist students more.

Although there are some disadvantages of technology enhanced language learning, it still has many considerable advantages. An understanding of using technology in language instruction, especially the writing skills can be used as the foundation for improving teaching and learning writing. This present study focuses on writing skills. Therefore, the technology available for writing instruction will be reviewed in the next section.

2.5 Technology in Writing Instruction

Technology has been applied to language instruction for decades. New methods of language teaching and learning have emerged with the implementation of computer technology. 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 recent years, language teachers have recognized and acknowledged its value for teaching and learning. The implementation of technology into the classroom and curriculum design and technology enhanced language learning activities have been focused on. There is a continuing interest in examining the effects of writing technology on teaching and learning (Zhao, 2003). Also, there are some research studies which have examined the use of technology tools such as word processing, telecommunication technology, computer writing systems, and computer-assisted writing software to increase the quantity and quality of student writing more than traditional instructional methods (Jones, 2006). In addition, students have positive attitudes toward writing with the use of technology. Teachers of writing skills in English also have positive attitudes toward the potential of word processing and other computer-based writing tools to facilitate students' writing processes and improve their end products (Ferris & Hedgcock, 2005). Computers offer students opportunities to create new types of documents. A large number of technology tools have been designed and employed for developing language skills, especially writing skills such as drills and practice, automated essay scoring, and web-based peer reviews (Kelley, 2008).

The Internet is one of the most important elements of technology for education. The Internet provides many opportunities for both teachers and students. Teachers can benefit from the Internet since it contains many valuable websites (Strangman, 2001). Kelley (2008) also claimed that the Internet expands potential access to authentic language resources in various forms. Teachers of writing can integrate the use of the Internet into their writing classrooms by creating such activities as teacher conferencing, peer conferencing, etc. Students can access online dictionaries or useful websites with writing resources such as grammars, usage and style guides. Kroll (2003) also emphasized that the Internet has the potential for motivating the students to write and to revise. It also helps students to seek out the resources they need for developing their ideas. They are able to work collaboratively on writing with other students and the teacher to expand their ideas, get feedback and acquire different perspectives on writing (Strangman, 2001).

Technology can make many dimensions of the writing process easier and improve students' attitudes. There are many technology tools available for writing instruction such as Facebook, WordPress, and email. One technology tool that is frequently used for writing instruction is the Weblog. Many writing researchers use Weblog as a tool for conducting their research studies (Jones, 2006; Pham, 2010; Surakhai, 2012). Weblog improves students' writing skills and builds their confidence as writers. Students can take ownership of their writing. Weblog can be implemented to facilitate the process writing approach. In this study, technology tools and E-portfolio will be used for teaching and learning writing. The E-portfolio in this study will use the Weblog platform. Therefore, Weblog will be described in more detail in the next section.

2.6 Weblog

"Blog" is an abbreviation of the term "Weblog". In 1997, the term "Weblog" was first used by Jorn Barger. It refers to an ongoing log of written commentaries which is posted on a website. However, Blog as a short form was introduced by Peter Merholz in 1999 when he broke up the word Weblog into the word "we-blog" in his personal blog. Bloggers, people who own a blog, can post text, pictures, audio, videos, or any other materials and readers are usually allowed to make comments on the posts. Bloggers can edit or delete their posts whenever they want (Oravec, 2002; Du & Wagner, 2007). Weblog is still popular because there are many benefits for using Weblog in many ways (Palla, 2016). Weblog normally operates on social networks and with communities so that users can easily interact and communicate their perspectives and thoughts.

2.6.1 Definitions of Weblog

Since the term Weblog emerged, different scholars have offered various explanations for it. According to Wagner and Bolloju (2005), Weblog is a tool for people who want to post their ideas to a wide audience. It is also suitable for people who want to share their stories within a group. Wang and Woo (2008) stated that the blog is a technology tool that allows users to create their own web pages. Weblog provides a channel for people to write stories in a public space and it allows its readers to comment. Weblog has changed the way people use the Internet as consumers to creators of information. Teachers have to discover the potential of Weblog, social networking, and other software that can encourage students' learning and encourage various ways of thinking. Nowadays, learning online with various sources of technology focuses particularly on collaboration and two-way communication.

2.6.2 Types of Weblog

According to Campbell (2003), there are three ways that Weblog can be employed to support EFL classrooms.

First, a tutor blog is authored by the tutor or teacher. So, the teacher is responsible for managing the content, customizing and setting the blogs. The objectives of this kind of blog are to provide reading practice to the learners, provide class or syllabus information, promote exploration of English websites, encourage online exchange using comment buttons, and serve as a resource of links for self-study. The students are encouraged to exchange or share ideas online by pressing comment buttons. Campbell (2003) recommended that teachers should provide learners with posts, guided-questions, or anything that encourages students to comment.

Second, the learner blog is created by individual learners. The learner blog is appropriate for reading and writing classes because learners are allowed to write about subjects that they are interested in and they can also post comments on other learners' blogs. It encourages an individual learner to post online his/her thoughts on subjects they are interested in (Dudeney & Hockly, 2007). A learner blog is usually used to promote reading practice and enhance writing skills. It helps learners to express themselves and it allows them to exchange feedback with teachers and peers.

Lastly, in a class blog, the teacher and learners in the classroom both create the blog. The purpose is to foster a feeling of community between members of the class. Posting messages, images, videos, and links related to topics that discussed in the classroom is allowed for this kind of blog.

2.6.3 Advantages of Weblog

There are many advantages of using Weblog in a language classroom. Firstly, the Weblog has a positive impact on learners' writing with regard to content and quantity (O'Connor, 2011). Students will try to do their best in what they write because they know that their writing will be commented on by others. Secondly, Weblog can improve students' reading comprehension (Pinkman, 2005). The teacher can put the teaching materials on a Weblog which the students can then read. Most Weblogs are usually linked to other relevant websites, so students will have more chance to read related materials. Thirdly, the Weblog can develop students' autonomous learning. The Weblog encourages the students to take responsibility for their own learning. Students can observe their peers' learning on a Weblog. Fourthly, the Weblog provides students with authentic tasks and an interactive community. When the students post their writings on the Weblog, others can leave their comments. This will create opportunities for interaction with others. Weblog provides comments for the writer so that the writer can then develop his/her ideas further. Through this process, knowledge is constructed. Ellison and Wu (2008) recommended that writing a Weblog leads to critical and analytical thinking because it allows students to develop their attitudes or perspectives through interaction with others.

2.6.4 Disadvantages of Weblog

The use of Weblog in the English language classroom offers several advantages. However, Min-Chen (2008) stated that Weblog also has some disadvantages.

First, the language use on a Weblog is a disadvantage because on-line language use is often intentional, playful and excessive (Wallace, 1999). So language use should be related to social norms and customs. Second, the teacher has more work to do when making corrections. The students can post a lot of things on their Weblog that require extra work for the teacher with correcting. Third, time-investment is another disadvantage of Weblog. Min-Chen (2008) claimed that to make and organize a good Weblog, bloggers need a certain number of hours. Wiebrand's study (2006) revealed that many Weblogs were unsuccessful because the bloggers did not have time to update their Weblogs.

To sum up, some disadvantages of Weblog in terms of teaching and learning need to be considered. However, many benefits of Weblog are appropriate and effective for using in teaching and learning writing. It is well known that Weblog allows students to post their writings and share them with others in public. The students can use Weblog to make an E-portfolio or journal. This present study uses the Weblog as a tool for creating an E-portfolio. In the next section, the considerable information now available about E-portfolio is reviewed.

2.7 E-Portfolio

A portfolio is a systematic collection of activities or related materials that show students' progress, efforts and achievements in their fields. The portfolio has been considered as an alternative means of assessment among ESL writers and assessment experts since the 1980s (Hirvela & Sweetland, 2005). The E-portfolio is an electronic version of the portfolio.

2.7.1 Definitions of E-portfolio

Numerous researchers have defined E-portfolio from slightly different perspectives. Niguidula (1993) described an E-portfolio as software that people use to display their abilities and performances. An E-portfolio is a digital collection that a person creates for his/her own purposes. Barrett (2000) defined an electronic portfolio as using electronic technology that allows users of the portfolio to collect pieces of work in many formats such as text, audio, videos, and pictures that can be put together easily.

Mason, Pegler, and Weller (2004) stated that the E-portfolio is a multimedia tool for the presentation of students' work that shows aspects of students' learning that they have selected for themselves. However, sometimes the teacher can guide students in how to assemble their E-portfolio. An E-portfolio is a concrete thing that represents the student's learning. It reveals a student's accomplishments. It is stored digitally and organized by some sources of software. It is developed by using multimedia and it is retrieved from a website, or by CD-ROM or DVD. An E-portfolio combines synchronous and asynchronous communication functions. Clark and Eynon (2009) summarized all of these functions as "collect, select, reflect and connect". The students choose for themselves what they would like to hand in for assessment. The most important aspect of using a portfolio is that students can become active learners when building it.

2.7.2 Types of E-portfolio

There are three main types of E-portfolio: Assessment, Learning, and Professional.

The first type is the assessment E-portfolio. This type of E-portfolio is frequently used for program evaluation and accreditation intentions. The main advantage of the E-portfolio for assessment is that it helps teachers and students share the responsibility for setting purposes and evaluating progress. It enables the measurement of many dimensions of a student's progress by including a variety of data (Venn, 2000). Students have an important role in the assessment process because the E-portfolio demonstrates the students' competences and skills.

The second type is the learning E-portfolio or the developmental E-portfolio. The learning E-portfolio is a collection of artifacts such as students' work. The students collect the assignments that they had in a course and the activities that they participated in (DiBiase, 2002). The principal purpose is to provide a means of communication between student and teacher. This type of E-portfolio is institutionally required, but student driven. Zubizarretta (2004) stated that a learning portfolio has more validation as a result of discussions and reflections as an assessment tool. He said that the main purpose of a learning E-portfolio is "to improve student learning by providing a structure for students to reflect systematically over time on the learning process and to develop the aptitudes, skills, and habits that come from critical reflection" (Zubizarretta, 2004, p. 15). Documentation, reflection, and collaboration are the three fundamental components of the learning E-portfolio.

Some researchers also claimed that students will be able to see gaps in their learning, determine strategies that support their learning, set goals for future learning, and see change and development over time (Porter & Cleland, 1995). Thus, the Eportfolio becomes an effective means to develop students' language skills.

The third type is the professional E-portfolio. The professional E-portfolio or Showcase E-portfolio is a collection of representative artifacts collected by individuals that represent their best practices for the purposes of self-reflection. This type of Eportfolio is a collection of selected work and demonstrates the experience and achievement of the students. It also boosts the students' self-esteem and gives them a sense of pride in what they have done. It focuses on the E-portfolio as a product. If this type of E-portfolio is used for a job application, it should be called a career E-portfolio.

2.7.3 Uses of E-portfolio

There are three major purposes for using E-portfolio which are for students while studying, for graduate students while moving through the workplace, and for institutions for program assessment. First, 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. E-Portfolio also provides evidence of reflection. Second, graduate students use E-portfolio in the workplace to show their competencies or performances in job interviews and for promotion as well. Third, E-portfolio is a means for institution reflection and improvement to make accreditation processes visible and to display the students' progress.

There are five steps in the process to develop an E-portfolio which were created by Danielson and Abrutyn (1997). First, the students collect artifacts and save them to represent their achievement. Second, the students select, review and evaluate their artifacts. Third, the students reflect on their work and they evaluate their progress and achievement over time. Fourth, the students compare their reflections with the standards and set the objectives for future work. Fifth, the students share their work on E-portfolio with their teacher and peers.

2.7.4 Benefits of E-portfolio

There are numerous benefits of E-portfolio. In terms of learning, first, an Eportfolio is evidence of learning. E-portfolio encourages the distribution of evidence of learning and variable times for learning. E-Portfolio facilitates authentic learning and encourages students to demonstrate past learning and current learning activities (Wade, Abrami, & Sclater, 2005). It is considered as a tool for helping students to compare projects. Second, E-portfolio has some psychological benefits. E-portfolio can give students a sense of personal achievement and a sense of pride in their work (Sherry & Bartlett, 2005). Third, E-portfolio encourages skills development. An electronic portfolio definitely develops technology multimedia skills, communication skills and general literacy as well. It gives some space for the students to show their technology performances such as using various types of software or creating their own web pages.

In terms of assessment, first, the students should be involved in the assessment process (Wade et al., 2005). As a result they will then know how they should revise their E-portfolio. In addition, if students have an understanding of the assessment process they can improve their learning process. Teachers can evaluate their students' E-portfolio then they can give their comments immediately. Second, the E-portfolio encourages feedback and the exchange of ideas (Lorenzo & Ittelson, 2005). Students can get feedback regularly and quickly because of the development of media channels. The use of E-portfolio makes the work of teachers easier as well. Third, E-portfolio is

like a traditional portfolio in that it encourages students to reflect on their pieces of work and their reasons for selecting the pieces of work in their portfolios.

In terms of convenience, first, E-portfolio is easy to share with other people, and it can be used on CD-ROM or online. It has longevity, existing beyond the end of a particular skill level obtained. Second, because the E-portfolio is an electronic format, it is easy to organize and search. E-portfolio also has efficient storage. Third, E-portfolio is easy for everybody to access. It is also easy to maintain, edit and update. Students can collect their works on their E-portfolio then teachers or peers can assess them (Ahn, 2004). Because E-portfolio can be accessed easily, larger audiences can see it. Fourth, students can collect many kinds of artifacts in their E-portfolio such as text, pictures, graphics, audio and videos. All of these artifacts can be stored in electronic form.

2.7.5 Drawbacks of E-portfolio

Apart from the benefits mentioned above, E-portfolio has some drawbacks as well. First, in order to keep files or artifacts in an E-portfolio, students need to consider both process and product. If the students do not spend time on the process of developing the artifacts, the final product will be poor. Developing the artifacts is time-consuming as well. Second, cross-platform compatibility is one serious drawback with using the E-portfolio (Barrett, 1997). The E-portfolio may need to be saved in different formats to prevent compatibility issues. Third, students should have a basic knowledge of technology before using the E-portfolio for learning. This is a drawback for those students who are not familiar with technology. Fourth, E-portfolio can attach pictures, audios, and videos, some of which may be difficult to show. Hardware limitations may restrict these types of items. To sum up, E-portfolio has some drawbacks which might complicate the teaching. However, E-portfolio offers numerous benefits for both teachers and learners in terms of teaching and learning. In this study, the researcher uses the E-portfolio for improving students' writing skills. In order to do that it will be necessary to explain the learning theory which will be done in the following section.

2.8 Constructivism Theory

Learning theories are explanations of what happens when learning takes place; therefore, learning theories describe how people learn so that the inherently complex processes of learning can be understood (Shen, 2010). Constructivism theory is the main theory related to this study.

Constructivism attempts to explain the ways in which people acquire knowledge and learn about the world (Von Glasersfeld, 1989). It has been applied to the education field. Constructivism underlines a learner-centered approach. Knowledge exists inside the learner, so learners make sense of meaning individually by adapting their prior knowledge (Piaget, 1930). McDonough (2001) stated that constructivists believe that knowledge is not transmitted to the individual, but is constructed by the individual. The main emphasis of constructivist philosophy is how people make meaning of the world. People construct their own meaning from their experience and knowledge, so people do not have exactly the same perceptions as other people. Swan (2005) also claimed that meaning in constructivism is imposed on the world rather than existing in it. Meaning is constructed in an individuals' mind. Aytekin, Mehmet, Fahme, and Hatice (2005) explained that learning is an active process of constructing, rather than acquiring knowledge, and the goal of instruction is to support that construction rather than trying to transmit knowledge. Learners have to be told less and to discover more. They construct their own knowledge rather than receive it from teachers and textbooks.

From a constructivist perspective, knowledge is temporary, developmental, and socially and culturally mediated (Brooks & Brooks, 1993). Learners learn by adding new information to what they already know. It is believed that learners learn best when they are involved in the process of understanding, and instructional materials should engage the learners and enhance their process of knowledge construction.

Jonassen (1994) stated that there are eight general characteristics of constructivist learning environments. First, it provides multiple representations of reality. Second, it avoids oversimplification and represents the complexity of the real world. Third, it emphasizes knowledge construction and the means of knowledge reproduction. Fourth, it emphasizes authentic tasks in a meaningful context, rather than providing abstract instruction out of context. Fifth, it provides learning environments, such as real-world settings or case-based learning instead of predetermined sequences of instruction. Sixth, it encourages thoughtful reflection on experience. Seventh, it provides a dependent context and encourages knowledge construction. Eighth, it supports the construction of knowledge through social negotiation.

Constructivism theory consists of two strands: cognitive constructivism and social constructivism. Cognitive constructivism mainly focuses on how individual learners understand things and construct knowledge discovered by interactions with the environment, while social constructivism mainly concentrates on the knowledge emerging from social interaction, dialogues, and collaboration (Bonk & Cunningham, 1998). Social interaction in learning is supported by Vygotsky (1978) and the concept of scaffolding. It includes the assistance received from a more capable person which

can also improve learning. The interaction with others is an effective way of developing skills and strategies. Many teaching methods developed under the umbrella of constructivism were based on Vygotsky's theory of zone of proximal development (ZPD). Vygotsky (1978) defines the term ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p.86). Teachers need to provide learners with the necessary scaffolding to facilitate their learners by means of the process of ZPD. Scaffolding is the various kinds of support or assistance provided by an instructor or more capable peers (Edington, 2007).

Learning materials should be authentic, meaningful and practical, because learners need to learn what relates to their life or work (Huang, 2002; Knowles et al., 2011). So, teachers should involve learners in setting realistic expectations or learning objectives, deciding what topic or materials to learn, and agreeing on how to learn and how to assess learning. The teacher may also provide opportunities for learning to be participatory, proactive, and collaborative, because successful learners tend to actively construct rather than passively receive knowledge (Bruner, 1996). Constructivist theories of learning can be used to show that technology can be a useful tool in language teaching and learning (Duhaney & Duhaney, 2000).

In summary, constructivism believes that individual learners construct their own knowledge from existing or previous knowledge and interactions. Learners should engage in authentic, life-centered learning in order to foster the construction of new knowledge (Merriam et al., 2007). This present study applies this theory. The participants construct their knowledge themselves while they learn how to write. The researcher provides them with some useful learning materials to assist them in their learning. Moreover, writing improvements take place through interaction with others and by receiving useful feedback from teachers and peers. Therefore, the interaction process is important in this study.

2.9 Previous Research Studies

2.9.1 Previous Research Studies on Weblog in Writing Instruction

There are many researchers who have conducted studies using Weblog for improving students' writing skills. Jones (2006) conducted a study about how a weblog was used in a second language process writing classroom. This study took place at a community college in San Antonio, Texas. There were 18 participants enrolled in the writing class. This study used a weblog as a tool for teaching process writing. In order to evaluate the use of a Weblog and process writing in this study, Jones examined participants' writing assignments and blog entries. All the comments received and given were then analyzed, including semi-structured interviews, open-ended questionnaires, and reflective journals. A variety of data were used to fulfill the purpose of the study. The findings revealed that the Weblog served as a suitable tool for the process writing approach. Jones also specified that the Weblog has some easy word processing features for writing, editing, and revising. Jones also claimed that Weblog had an impact on a process writing classroom. The following advantages of Weblog for process writing were found in this study. First, Weblog allows the students to concentrate on the content of writing, not on creating a website. Weblog provides easy access for students because it does not require an HTML editor. Second, Weblog aids the writing process approach with respect to public access and making comments,

because in process writing, the students receive feedback in order to help them revise their work. Moreover, the public access nature of Weblog means that students can get feedback not only from peers in the classroom, but also from other learners in other classrooms.

Tu, Chen, and Lee (2007) pointed out the effects of using the application of a Weblog to develop EFL students' English writing competency. This study included writing instruction and a survey. The subjects of this study were 34 students at a junior high school in Taiwan. The Yahoo! Blog was used for this study. Web-based guided-writing tasks were taught to the students. After the students finished writing their drafts, they received corrections from peer feedback and also teacher feedback. Then, the students were assigned to fill out a questionnaire to find out the attitudes of the students toward their experiences with their Weblog and their strategies for web-based guided writing. The results indicated that this Weblog had a positive impact on the learning of writing.

Pham (2010) conducted a study about blog-based peer response for second language writing revision. The participants were 32 second-year English major students at Nong Lam University in Ho Chi Minh City, Vietnam. They took a 15-week academic writing course with blog-based peer response training. A quantitative data analysis was obtained from Drafts 1 - 3, peer comments on Drafts 1 - 2, subsequent revisions and a questionnaire. Qualitative data analysis was obtained from writing journals and semi-structured interviews after the blog-based peer response training. The results of the study showed that the interactions on the blog-based peer response activities engaged the participants in the learning process. The participants wrote better and longer and they were also satisfied with their writing quality after revisions. Moreover, the

questionnaire, semi-structured interviews, and writing journals revealed that the participants had positive attitudes towards using blogs for peer responses in second language writing revisions.

Noytim (2010) investigated the potential value of Weblog use on English language learning in the context of Thailand. This study explored students' perceptions of and opinions towards using Weblog. The participants of this study were 20 English major students in Nakhon Pathom Rajabhat University. They were required to create a Weblog during reading and writing for an Academic Purposes II course. At the end of the semester, interviews and questionnaires were administered to the students. A content analysis was applied to analyze the data that was obtained from the questionnaires and the interviews. The findings indicated that the students perceived the Weblog as a tool for the development of their English, in terms of writing, reading, vocabulary, and recording their learning experience. The students also viewed weblog as giving an opportunity for self-expression in English, writing for both a local and global audience, fostering creative, analytical and critical thinking skills, creating social interaction and developing good relationships between writer and reader and also supporting the learning community.

Sun and Chang (2012) studied how the interactive and collaborative features of Weblog helped academically-advanced graduate students' process writing knowledge and made sense of their identities as writers. 7 graduate students taking Master's level course in TESOL and Linguistics in Taiwan were participants of this study. The students could choose a Weblog service of their preference. Throughout the semester, they were required to post 13 entries on their own weblog as well as 13 comments on their classmates' Weblogs. They were encouraged to reflect upon the process of developing their academic writing skills. The findings revealed that the Weblog activity encouraged the students to actively and reflectively engage in knowledge sharing and that they developed many strategies to solve the difficulties encountered in the learning process. The Weblog also motivated the students with a sense of authorship as the writers of blog entries and encouraged them to find out their purposes for writing.

Surakhai (2012) studied the development of a Weblog-based English writing instructional model for university students. Surakhai developed a Weblog-based English writing instructional model for teaching writing. The efficiency of the model was examined using a single group pretest and posttest research design. The participants were 30 first-year students in the English for Study Skills Development course in the second semester of 2011 at Valaya Alongkorn Rajabhat University, Thailand. The participants performed writing practice through a Weblog-based English writing instructional model beyond the classroom. The instruments consisted of a Weblogbased English writing instructional model, a pretest, a posttest, reflective journal writing, and a questionnaire. After being given a pretest, the students were taught using the Weblog-based English writing instructional model. After each writing task, the students were required to write a reflective journal. At the end of the course, they were required to do a posttest and answer a questionnaire. The results of this research revealed that the participants' learning achievement after learning with a Weblog-based English writing instructional model was significantly higher than their learning achievement before learning. Moreover, the participants also expressed high levels of satisfaction towards learning with the developed Weblog-based English writing instructional model.

Ozdemir and Aydin (2015) investigated the effects of the use of Weblog on EFL writing achievement among Turkish EFL learners. The participants consisted of 48 students at the ELT Department of Balikesir University. This was an experimental study that administered a questionnaire, a writing achievement pre-test and a post-test to the participants. The participants were divided into two groups. They were given fourweeks for process-based writing instruction. During the process, participants in the control group completed their tasks in a traditional pen-paper writing process. On the other hand, the participants in the experimental group used a Weblog to complete their tasks. The findings revealed that when a Weblog is used with process-based writing instruction, there were positive effects on the participants' achievement in both traditional and Weblog environments.

Based on these previous research studies, many researchers have integrated Weblog into their writing instruction to improve students' writing skills. Most learners had positive attitudes towards Weblog as has been proved by several studies. Moreover, many previous studies using weblog in a writing classroom enabled students to share, create, and interact with others by discussing the development of their language writing skills. Consequently, the researcher will employ Weblog as a means for creating an Eportfolio for improving students' writing skills.

2.9.2 Previous Research Studies on Using E-portfolio for Learning and Assessment

Many researchers have conducted studies by using E-portfolio. Wang (2004) conducted a case study about learning experiences in developing an electronic portfolio in a master's educational technology program. The purpose of this qualitative case study was to investigate and understand the learning experiences and learning processes

that occurred in the Master of Education students' development of their electronic portfolio. The participants of this study were 7 M.Ed. students at a large Midwestern university in the United States. They were asked to create an electronic portfolio as their culminating project rather than write a research paper. Many kinds of sources of information were used to gather data: in-depth interviews, observations, and document analysis. Findings from this study showed that creating an electronic portfolio helps students develop technology skills, critical thinking and problem-solving skills. It showed that creating an electronic portfolio is a meaningful task because it provides an opportunity for students to synthesize what they have learned, shows their growth over time, and demonstrates that they have mastered the program's standards. Moreover, the process of developing an electronic portfolio involves self-evaluation, because students have to reflect on their strengths and weaknesses.

Tezci and Dikici (2006) explored the effect of the digital portfolio assessment process on the story writing performances of their students. The digital portfolio assessment rubric was prepared for assessing students' writing tasks. 52 high school students in Turkey participated in this study. An experimental and a control group were used in the study: 17 students were in the experimental group and 35 students were in the control group. All students were selected by random sampling. All the students were familiar with the Internet environment. A digital portfolio assessment process was used in the experimental group while a traditional assessment plan was used in the control group. The study was conducted during 4 months. In both groups students were asked to engage in drawing and writing. The researcher used the scores from the pre- and post-tests to assess the students' writing performance. The results showed a significant difference in favor of the experimental group from the post-test scores of both groups. This means that the writing performance of the experimental group using digital portfolio assessment was higher than the traditional assessment method.

Erice (2008) investigated the effects of E-portfolio use on developing writing skills. The students in this study were at pre-intermediate language proficiency level. There were 47 students at Abant İzzet Baysal University in Turkey who participated in this study. Erice divided the participants into two groups: an experimental group and a control group. The experimental group, which had 23 participants, were required to enroll in an online classroom to keep an online portfolio for the whole semester. On the other hand, the control group, which had 24 participants, kept a paper portfolio. During the whole semester, the portfolio process of 10 weeks included assigning tasks, giving and managing feedback. The researcher conducted a study by using the scores of preand post- writing tests to check the development in the students' writing skills at the paragraph level. The questionnaires were used in addition to the collection of data. This study provides insights into using a portfolio for online writing practice compared with paper-based practice in terms of achievement. The findings revealed that the students in the experimental group who were using an electronic portfolio application were more successful in their writing skills than the students who kept their portfolio in paper files. The results also suggested that the digital environment contributes to language writing skills and that factors, such as previous computer experience, influence attitudes towards the use of computers.

Tonbul (2009) conducted a study using an E-portfolio model for students. This study investigated the perceptions and attitudes of the electronic portfolio as a learning and assessment tool for students of English Language Teaching. There were26 students in the English Teaching Department of Gazi University in Turkey who participated in this study. They used electronic portfolios in the classroom. The participants took two months to develop the electronic portfolio application. E-portfolio software for personal blog sites from Microsoft Corporation was used. At the end of the study, students liked the E-portfolio practice, and student-teacher and student-student interactions using their E-portfolio were effective. In the process of preparing the E-portfolio, it was observed that the students' writing skills improved.

Meyer, Abrami, Wade, Aslan, and Deault (2010) studied the use of E-portfolio by using a pre-test and a post-test and a standardized literacy measure. This study was conducted in three Canadian provinces. There were 296 students who participated in this study. They compared the students in grade 4–6 who used an E-portfolio as an experimental group (121 students) and the control group (175 students) who did not use it. All students were required to take the Canadian Achievement Test (version 4) to assess their reading and writing skills. Questionnaires were also used in addition to collecting data. The results of this study showed significant developments in the writing skills of the students in the experimental group that were using an E-portfolio, especially with content management, when compared with the control group. It also indicated that teaching with an E-portfolio has positive impacts on students' literacy and self-regulated learning skills when the tool is integrated into classroom instruction.

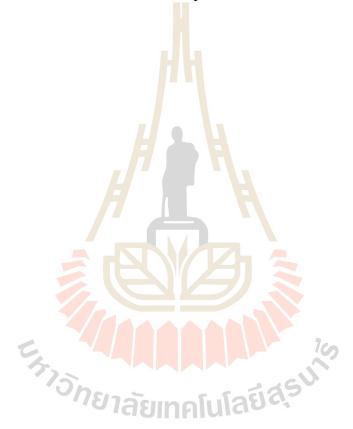
Chang, Tseng, and Lou (2012) conducted their study on E-portfolios by exploring the consistency and differences in teacher-assessment, student selfassessment and peer-assessment. The researchers used 72 high school students in Taiwan who had registered for a computer course which used web-based portfolio assessment. The study lasted for a 12-week period with 3 hours each week. The students were allowed to create an E-portfolio (setting learning goals, writing reflection, online uploading artifacts, etc.), self-assessment and peer-assessment. Through the assessment system, the students performed self- and peer-assessment; three teachers reviewed the E-portfolio and evaluated the students' learning performances. The results of self- and teacher-assessment were found to be consistent. However, no such consistency was found between self- and peer-assessment and peer- and teacher-assessment. In analyzing consistency with the end-of-course examination, teacher- and self-assessment demonstrated a high consistency.

Nicolaidou (2013) conducted a study about the effect of using an E-portfolio to support primary students' writing performance and peer feedback. The participants of the study were 20 fourth-grade students in Cyprus. Before using the E-portfolios, they were required to do a pre-test on their writing performance. The students used the E-portfolio for writing their essays and giving peer feedback. Then, the students were given a post-test on their writing performance and interviews were conducted. The results from the data analysis showed that there was a statistically significant difference between students' pre-test and post-test for their writing performance. Furthermore, the data analysis of the students' comments showed that students provided more useful feedback. This study also claimed that E-portfolio can support the development of students' writing performance.

Based on these research studies, it can be seen that the students who used Eportfolio benefitted in various ways, for example, in their achievement in learning, attitudes towards the course and the E-portfolio. Furthermore, from these previous research studies, the use of E-portfolio showed that it made positive contributions both in learning and assessment, particularly for writing skills. For this reason, the researcher uses E-portfolio for improving students' writing skills in the present study.

2.10 Summary

To sum up, this chapter presents a review of the concepts of teaching writing, language assessment, writing assessment, technology enhanced language learning, Weblog, and E-portfolio. It also discusses theory in second language learning and reviews some relevant previous research studies. The research methodology of this study is presented in detail in the next chapter.



CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research methodology used in the present study. The research methodology includes the research participants, research procedures, variables, and research instruments. The construction and efficiency of the instruments, data collection, data analysis and the time frame are also presented. Finally, the researcher reports the results of the tryout phase and gives a summary of the chapter.

3.1 Research Methodology

Research methodology is important for every research study. An appropriate methodology shows the researcher how to conduct a study. There are three common types of methods used in research studies (Creswell, 2003). First, quantitative research presents data collection procedures that mainly involve numerical data and the data is analyzed by statistical methods. Second, qualitative research presents data collection procedures that mainly involve numerical data is analyzed by non-statistical methods such as content method analysis. Third, a mixed methods research approach presents a combination of quantitative research and qualitative research in the data collection and data analysis.

The present study is a quasi-experimental research study that uses the mixed methods approach (both quantitative and qualitative methods) to analyze the data. The experiment with the Weblog-based E-portfolio, which aimed to improve students' English writing skills, took ten hours. The study included forty-five participants. Prior to the experiment, the participants were assessed for their writing skills in English by means of a writing pre-test. Then, a writing post-test was given to the participants after they had studied writing by using the Weblog-based E-portfolio. Furthermore, the participants expressed their opinions by means of a reflective journal, and a questionnaire about the improvements in their writing skills through the use of the Weblog-based E-portfolio. Then, the data obtained were analyzed. A single group pre-test/post-test design is presented in Figure 3.1.

	Experimental	
01	X	02
Pre-test	Treatment	Post-test
Note: $01 - Pre_{test} X - Treatment 02 - Post test$		

Note: 01 = Pre-test, X = Treatment, 02 = Post-test

Figure 3.1: Design of the Study

3.2 Research Participants

A group of forty-five undergraduate students who studied the English IV course (203204) at Suranaree University of Technology, 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 from the English IV course. After studying the course description of English IV, the researcher found that the objectives of this course are the "further enhancement of student's language learning skills and ability in science and technology content developed from English III; exposure to authentic language in science and technology

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from both printed and audiovisual materials, as well as on-line resources; focus on textbased tasks involving integrated skills with the emphasis on writing" (The School of Foreign Languages, 2016, p.1). The English IV course consists of authentic writing tasks but the students cannot do them correctly face to face in the classroom because the students had little opportunity to learn how to write in English and they did not have enough time to practice writing in the classroom. The students might need more knowledge and information about process writing, language structure, and related vocabulary to guide them on how to write. The supplementary materials should be designed to help them learn how to write better. Therefore, the researcher chose the English IV course to develop a Weblog-based E-portfolio to improve students' writing skills.

3.3 Research Procedures

All participants took a writing pre-test in order to measure their writing skills before they used the Weblog-based E-portfolio. In order to make sure that all the participants could create and use the Weblog-based E-portfolio, there was a training for them on how to construct and use the Weblog-based E-portfolio for two hours. The training also explained process writing step by step and the scoring rubrics used for the writing assessment. Then, the participants learned the lessons designed by the researcher and did the exercises, a first draft and then subsequent drafts of writing assignments, self-assessment, peer feedback, and a reflective journal through the Weblog-based E-portfolio. After using the Weblog-based E-portfolio, all of the participants were given a writing post-test. Then, the results of the writing pre-test and the writing post-test were compared. After that, a questionnaire was administered to the participants to explore their opinions toward learning through the Weblog-based Eportfolio. The research procedures are illustrated in Figure 3.2.

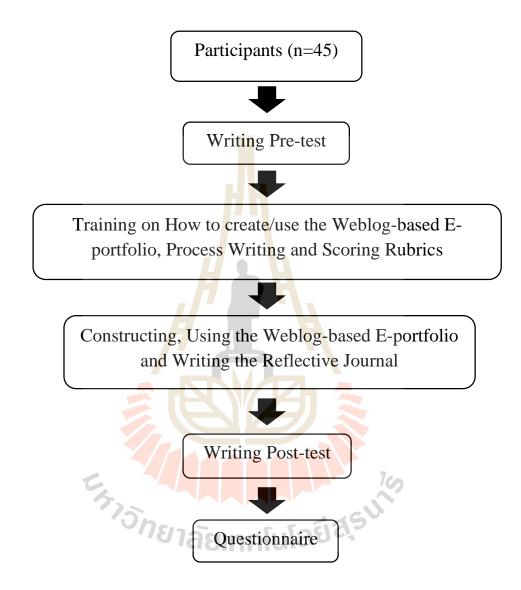


Figure 3.2: Research Procedures

3.4 Variables

The variables in this research were categorized into two main types: independent variables and dependent variables.

3.4.1 Independent Variable

An independent variable is something that the researcher has control over. This "control" may involve manipulating existing variables. An independent variable is the presumed cause. The independent variable of this present study was the Weblog-based E-portfolio lessons.

3.4.2 Dependent Variable

A dependent variable is the value that results from an independent variable. The dependent variable is the presumed effect. The dependent variables of this present study were the participants' writing skills and their opinions towards learning English by using the Weblog-based E-portfolio.

3.5 Research Instruments

There were six instruments in this study which included the Weblog-based Eportfolio, lesson plan, writing tests, scoring rubrics, questionnaire, and reflective journal.

3.5.1 Weblog-based E-portfolio

The teacher and participants had to create the Weblog-based E-portfolio in this study. Both the teacher and participants used the open-source named Blogger.com as a tool for creating the Weblog-based E-portfolio. Blogger.com is user-friendly, so the teacher and the participants were able to create an E-portfolio easily.

For the English IV's Weblog-based E-portfolio, the teacher posted the course description, lessons, exercises, assignments, and useful information for the participants (see Appendix Q). The lessons were based on the lesson plan and followed 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) to create two Weblog-based E-portfolio lessons for this study. The participants were required to learn all the contents and to do the online exercises provided. They were given an opportunity to take the exercises up to three times from which the highest scores were recorded. Moreover, the English IV's Weblog-based E-portfolio was an important tool for the participants to communicate with both the teacher and their peers. It could be used by the participants to post messages to the teacher. It also provided a link to their peers' work.

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 (see Appendix R). The participants used it as a tool for writing during the English IV course. The participants were required to do the writing assignments on their own Weblog-based E-portfolio. There was one writing assignment designed by the researcher in each unit. Thus, there were two writing assignments in total. The participants were able to attach audios, videos, or pictures in their Weblog-based E-portfolio. Both teacher and peers were able to read and give some feedback. Then, the participants revised their writing. It also provided some spaces for them to write a reflective journal. They were required to write their opinions in the form of a reflective journal after each writing assignment.

3.5.2 Lesson Plan

The lesson plan is a detailed description of the lessons. The researcher developed guided instruction throughout the study for the class. The lesson plan with the use of the Weblog-based E-portfolio was given to the participants after the writing pre-test. It consisted of the two units of English IV content that were used with the participants. The participants had to create and use the Weblog-based E-portfolio during their English IV course.

3.5.3 Writing Tests

A test is an assessment intended to measure a test taker's knowledge, skill, and aptitude. A writing test is a procedure to measure writing ability that requires the test takers to write a text. In this study, the writing tests were set up to analyze and compare the participants' writing skills before and after learning writing through the Weblog-based E-portfolio. The writing pre-test was given before using the Weblog-based E-portfolio. All participants were asked to write a paragraph at least 80 words within 60 minutes on the same topic of the English IV course syllabus. The researcher and two teachers of the English IV course who have been teaching English for at least five years were the raters who evaluated the participants' writing tests by using the scoring rubrics. The main purpose of these writing tests was to assess the participants' pre-test and post-test scores, the researcher was able to see clearly whether the participants had improved their writing skills or not.

3.5.4 Scoring Rubrics

The scoring rubrics were employed to rate the participants' written work in the present study. The researcher adapted both the Rubric for Elementary Paragraph Writing from RCampus and the Rubric for a Well-Written Paragraph from the Saskatchewan Literacy Network for this present study because they provided clear components and their descriptions were easy to understand. The scales were classified into five main aspects of paragraph writing which were topic sentences, supporting

sentences, concluding sentences, organization, and grammar/mechanics. The five aspects were weighted with the same number of points to reflect their importance. Three aspects (topic sentences, supporting sentences and concluding sentences) were adapted from the Rubric for a Well-Written Paragraph. Two aspects (organization and grammar/mechanics) were adapted from the Rubric for Elementary Paragraph Writing. The scoring rubrics were employed to rate the participants' writings by three raters. Inter-rater training was also provided in this study.

3.5.5 Questionnaire

The questionnaire is one of the most popular research instruments applied in the social sciences. Brown (2001) stated that the questionnaire is efficient for gathering data on a large-scale basis. If any researcher would like to collect data from a large number of people, the questionnaire provides a very efficient means.

To explore the participants' opinions toward learning through a Weblog-based E-portfolio, a questionnaire was used to collect the data. In this study, the questionnaire was divided into two parts. The first part was about the participants' personal information that consists of 6 questions, such as age, gender, field of study, etc. The second part was the participants' opinions toward the Weblog-based E-portfolio. There were 18 questions. The researcher adapted some questions from Surakhai's study (2012). The participants were required to choose their opinions according to a five-point Likert scale. The scale ranged from 1(strongly disagree) to 5 (strongly agree). To ensure that the participants understood the statements and instructions correctly, the questionnaire was in Thai. Before it was used, the questionnaire was evaluated by three experts in the English Language Teaching field who had experience in evaluating questionnaires using an Item Objective Congruence (IOC).

The Item Objective Congruence Index (IOC) is a validation method which was used for the questionnaire in this present study. The evaluation form uses a 3-point scale (1 represents 'appropriate', 0 represents 'uncertain', and -1 represents 'not appropriate'). The researcher checked the results of the IOC index for each item and the questions using item analysis (IAS) based on the experts' advice. According to Booncherd (1974), the acceptable value should be higher than or equal to $0.5 (\geq 0.5)$.

3.5.6 Reflective Journal

A journal is a log or account of people's feelings, ideas, thoughts, reactions, assessments, or progress. Students usually write their journals with little attention to structure or accuracy. The students can produce their ideas without the threat of their ideas being judged later. In the present study, the participants were required to write a reflective journal in the spaces in their Weblog-based E-portfolio using a series of guided questions to express their opinions toward learning writing through the Weblog-based E-portfolio. The guided questions were evaluated by three experts in the field of English Language Teaching who had experience in the evaluation using Item Objective Congruence (IOC). To ensure that the participants understood the guided questions correctly, they were written in Thai. The participants also wrote their reflective journals in Thai.

3.6 Construction and Efficiency of the Instruments

The research instruments were carried out for the construction and efficiency in accordance with the suggestions of the experts in the field of English language teaching.

3.6.1 Weblog-based E-portfolio

1. The researcher reviewed related literature on the Weblog-based E-portfolio and studied the English IV course syllabus at Suranaree University of Technology. 2. The researcher studied how to create an E-portfolio by using the Weblog platform.

3. The researcher studied how to create the contents, exercises, and assignments.

4. The Weblog-based E-portfolio was examined by the experts in the field of English Language Teaching who have experience in evaluation by using a checklist (see Appendix I).

5. The researcher revised the Weblog-based E-portfolio before using it in the tryout phase.

To evaluate the efficiency of the lessons, the examination was conducted in three steps of the tryout phase: Individual Testing, Small group Testing, and Field Testing respectively. The purpose of each step of the tryout phase was to improve the lessons.

The Individual Testing (1:1)

The Weblog-based E-portfolio was tried out with three students with different proficiency levels of English, one of whom was an able student, one a moderate student and one a less able student. The criteria of discriminating the samples into different levels of English proficiency were: an able student referred to a student who got grade A or B+ from the English III course (203203), a moderate student got grade B, C+, or C, and a less able student got grade D+ or D. All the students studied English IV (203204) in Trimester 3/2015 and none of them were used as participants in the experimental phase. The three students were assigned to use the Weblog-based Eportfolio for studying English IV. They studied and practiced two lessons using the Weblog-based E-portfolio. After that, the students were asked to do the assignments. Then, the researcher asked them for their feedback and comments about their experiences in using the Weblog-based E-portfolio. Finally, the researcher revised the lessons in accordance with the results of the individual testing.

Small Group Testing (1:10)

Six students, who studied English IV in Trimester 3/2015, participated in the small group testing but they did not participate in the experimental phase. There were two able students, two moderate students, and two less able students. The same criteria as above were used for placing the students at different levels of English proficiency. The students were assigned to study English IV through a Weblog-based E-portfolio. After analyzing the data from the exercises and assignments, the researcher asked the participants' for their feedback and comments about the lessons. On the basis of the comments received, the researcher revised the lessons.

Field Testing (1:100)

The last step of the tryout phase was a field testing. This step included fortyfive students who studied English IV in Trimester 3/2015, but they did not participate in the experimental phase. All of them were assigned to study through the Weblogbased E-portfolio. After studying English IV through the Weblog-based E-portfolio, the students did the exercises and assignments to enable the researcher to examine the efficiency of the Weblog-based E-portfolio. Then, the researcher asked them for their feedback and comments about the Weblog-based E-portfolio. Subsequently, the researcher revised the lessons on the basis of the feedback received.

Students' scores from the exercises and assignments from the three steps of the tryout phase (Individual testing, Small Group testing, Field testing) 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 80/80 standard is

symbolized as E1/E2, where E1 refers to the first 80 and E2 refers to the second 80. The formulas for the computation of E1 and E2 are as follows:

$$E_{1} = \frac{\left[\sum_{N} X\right]}{A} \times 100$$

$$E_{1} = \text{Efficiency of the process}$$

$$\sum X = \text{Average score from the exercises}$$

$$N = \text{Population number}$$

$$A = \text{Total score of the exercises in the lessons}$$

$$E_{2} = \frac{\left[\sum_{N} F\right]}{B} \times 100$$

$$E_{2} = \text{Efficiency of the product}$$

$$\sum F = \text{Average score obtained from the test}$$

$$N = \text{Population number}$$

$$B = \text{Total score of the test in the lessons}$$

(Brahmawong, 2013)

When the three step tryouts were completed, the Weblog-based E-portfolio was revised and improved for implementation in the experimental phase. The process of the three step tryouts is shown in Figure 3.3.

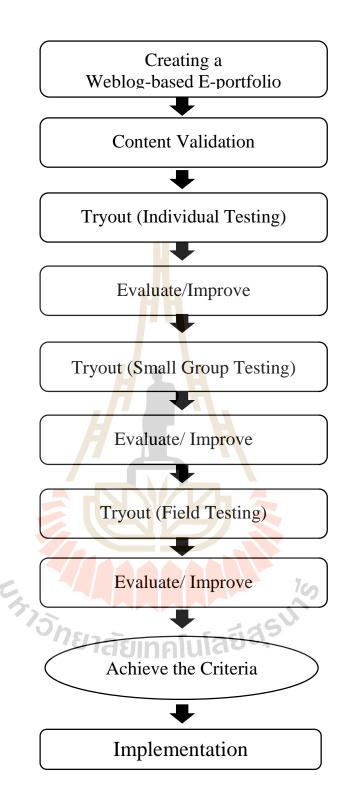


Figure 3.3: The Steps of the Weblog-based E-portfolio's Construction and

Evaluation

3.6.2 Lesson Plan

The lesson plan plays an important role in teaching. It helps the teachers to teach in the classroom efficiently. In this study, the lesson plan with the use of the Weblogbased E-portfolio was implemented with the participants after the writing pre-test (see Appendix A). The procedures for constructing the lesson plan for the present study were carried out as follows:

- 1. The researcher studied the course syllabus of the English IV course at SUT
- 2. The researcher constructed a lesson plan based on the course syllabus and the teacher's book.
- 3. The researcher sent a lesson plan to two teachers who teach English IV and have been teaching English for at least five years, to examine its contents and format according to the checklist (see Appendix B).
- 4. The researcher improved and revised the lesson plan based on the feedback from the English IV teachers.
- The lesson plan was used as a guide to the teaching of the English IV course when using the Weblog-based E-portfolio.

3.6.3 Writing Tests

In the present study, the writing tests were set up to analyze and compare the participants' writing skills before and after studying writing through the Weblog-based E-portfolio. All the participants were asked to write a paragraph at least 80 words within 60 minutes on the same topic of the English IV course syllabus (see Appendix C). Then the participants' pre-test and post-test scores were compared. The main purpose of the writing tests was to assess participants' improvement in their English writing skills.

The development of the tests can be explained as follows:

- 1. The researcher studied the English IV course syllabus then set the test objectives from the learning objectives of the English IV course.
- 2. The researcher consulted the teachers regarding the procedures for the test construction.
- 3. The researcher developed the writing tests.
- 4. The writing tests were sent to teachers who were academically qualified and have been teaching English for many years for a validity check of their content.
- 5. The researcher revised the content according to the feedback of the teachers.

3.6.4 Scoring Rubrics

The scoring rubrics were employed to rate the participants' writings in the present study. The researcher adapted both the Rubric for Elementary Paragraph Writing and the Rubric for a Well-Written Paragraph for this present study (see Appendix D).

English writing skills might be the most difficult language skill to assess because assessment depends on the raters' subjective ratings. It is necessary to conduct an inter-rater training procedure to ensure the reliability of scoring. Moreover, rater training can improve inter-rater reliability so that the raters agree with each other when rating the same performance. Inter-rater training will be discussed in the next section.

3.6.5 Inter-Rater Training and Inter-Rater Reliability

The assessment of written performance presents the raters with a difficult task because a piece of writing reflects the characteristics of the complexity and uniqueness of an individual. Inter-rater training is a process whereby raters are trained to become familiar with the rating criteria and to promote greater consistency of individual scoring between two or more raters (Lombard, Duch, & Bracken, 2003). In order to ensure the raters' reliability for this study, the data were evaluated by three raters, of whom one was the researcher and the other two were teachers of the English IV course. These two teachers had a high proficiency in English and experience in teaching English IV at Suranaree University of Technology.

In the training, the researcher conducted the following procedures:

1. The researcher provided the raters with the scoring rubrics. The raters were asked to check the scoring rubrics to ensure that the meaning of the contents was clear to them. The content and the definitions of the rating criteria were negotiated between the two raters and the researcher. In this way, any points that were unclear could be clarified.

2. The inter-rater training started with scoring two samples of the writing test. The scoring rubrics were used. Then, the researcher compared the scores from the two raters to try to reach an overall agreement.

To ensure that the scores given by the different raters (inter-rater reliability) are consistent, all the scores assigned by the three raters were compared. The scores were calculated using the Pearson Product Moment Correlation (r) formula. The higher the value of the correlation coefficient (r) approaching 1, the stronger the agreement between the raters or their assigned scores, indicating greater reliability from the statistical inferences made from the scores. To determine the degree of success of the overall ratings, the SPSS program was used for assessing inter-rater reliability. A threshold level of the reliability coefficient alpha is expected to be 0.80 or greater.

3.6.6 Questionnaire

To elicit the participants' opinions toward learning through a Weblog-based Eportfolio, the researcher used a questionnaire (see Appendix E). The questionnaire was divided into two parts. The first part, which consisted of 6 questions, asked about the participants' personal information. The second part, which consisted of 18 questions, investigated the participants' opinions toward learning through a Weblog-based Eportfolio. To ensure that the participants understood the statements and instructions correctly, the questionnaire was in Thai (see Appendix F).

In developing the questionnaire for this study, the researcher used the following procedures:

1. The researcher reviewed information about questionnaire.

2. The researcher adapted and created a questionnaire in both a Thai and English version.

3. The content validity of all the statements in the questionnaire was evaluated by three experts in English Language Teaching field who had experience in the evaluation of questionnaires. The acceptable value of IOC ranges from 0.5-1.0, otherwise it is considered invalid.

4. The IOC value of the questionnaire was 0.85

5. The questionnaire was tried-out with the students in the tryout phase.

3.6.7 Reflective Journal

The participants were required to write their opinions in the form of a reflective journal in the spaces on their own Weblog-based E-portfolio after they had finished each writing assignment (see Appendix G). The reflective journal was used to supplement the information obtained from the data collection. It was used for the qualitative analysis of the study. To ensure that the participants understood the guided questions correctly, the guided questions were in Thai (see Appendix H). To construct the guided questions for writing the reflective journal, the researcher proceeded as follows:

1. The researcher studied related studies about writing a reflective journal.

2. The researcher wrote the guided questions which related to the study in both

a Thai and English version.

3. The researcher sent guided questions to three experts in the English Language Teaching field to check for content validity. The acceptable value of IOC ranges from 0.5-1.0, otherwise it is considered invalid.

4. The IOC value of the guided questions was 0.88

5. The guided questions were tried-out with the students in the tryout phase.

3.7 Data Collection

The data collection for this present study was conducted using the following procedure:

(1) In the 1st hour, an orientation on the Weblog-based E-portfolio was organized for the participants. A writing pre-test was also administered.

(2) In the 2nd and 3rd hours, there was a training session for the participants on how to construct and use their personal Weblog-based E-portfolio. The training explained how the participants should write their opinions in their reflective journal. Furthermore, the researcher also described the process writing step by step and the scoring rubrics used for the writing assessment. (3) From the 4th to the 9th hours, the participants studied and completed the exercises, the first draft and subsequent drafts of their writing assignment, self-assessment (see Appendix J), peer feedback (see Appendix L) and they wrote the reflective journal after each writing assignment.

(4) In the 10th hour, the writing post-test was administered, and the participants were requested to do the questionnaire afterwards.

3.8 Data Analysis

The data obtained from the different instruments were analyzed and interpreted both quantitatively and qualitatively. The quantitative data was obtained from the writing pre-test, post-test, and questionnaire. On the other hand, the qualitative data was obtained from the reflective journal.

3.8.1 Quantitative Data Analysis

The quantitative data analysis included the data obtained from the writing pretest and post-test and the questionnaire. The data were coded and analyzed using the Statistical Package for the Social Sciences (SPSS)

3.8.1.1 Writing Pre-test and Post-test

The quantitative data analysis was carried out with the data obtained from the writing tests. Improvements in the participants' writing skills were assessed from the results obtained before and after they used the Weblog-based E-portfolio and were rated by the three raters according to the scoring rubrics. The scoring rubrics were used to measure the improvements in writing quality between the pre-test and post-test and between the participants' writing assignments. The statistical method employed to compare the students' improvements was the t-test. Then, the mean values of the scores were compared and analyzed by using the SPSS Program.

3.8.1.2 Questionnaire

The data from a five-point rating scale was calculated for the arithmetic means. These means showed the participants' opinions toward writing through the use of the Weblog-based E-portfolio. The five-point Likert scale was used for measuring the participants' opinions toward the Weblog-based E-portfolio. The Likert-scaled responses were given values as 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. The criteria for the interpretation of the five-point rating scale are presented in Table 3.1.

Statement	Ranges
Strongly Agree	4.50 to 5.00
Agree	3.50 to 4.49
Undecided	2.50 to 3.49
Disagree	1.50 to 2.49
Strongly Disagree	1.00 to 1.49
Strongly Disagree	1.00 to 1.495

 Table 3.1: The Criteria for the Interpretation of the Five-point Rating Scale

3.8.2 Qualitative Data Analysis

The data from the reflective journal reflected the participants' opinions on the use of the Weblog-based E-portfolio for the improvements of their writing skills. Thus, the data collected were analyzed and described qualitatively. The data obtained were transcribed and interpreted by means of the content analysis method.

Reflective Journal Writing

The qualitative data analysis was conducted using the data obtained from the reflective journal. The reflective journal was written immediately after each writing assignment. The data obtained from the reflective journal were translated and transcribed from Thai to English, coded, categorized and interpreted to explore the participants' opinions toward learning English writing skills through the use of the Weblog-based E-portfolio.

3.9 Time Frame for the Study

To achieve the objectives of this research study, it was necessary to use a time frame of 12 months in 2016 (see Table 3.2).

Table 3.2: Time Frame for the Main Procedures of the Study

Activities	2016											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Proposal		/P										
Defense			\prod					1	6			
Instrument	V											
Construction	1	ns	าวั		-5	Sai	12	SV				
Try out Phase			$\overline{\mathbf{A}}$	J				6				
Instrument												
Revision												
Experimental												
Phase/ Data												
Collection												
Data Analysis									\checkmark			
Thesis												
Writing-up												

3.10 Results of the Tryout Phase

The efficiency of the Weblog-based E-portfolio was evaluated in two phases: the tryout phase and the experimental phase (Presented in Chapter 4). The tryout phase was conducted to ensure that the efficiency of the Weblog-based E-portfolio reached the 80/80 standard criterion. There were three steps in the tryout phase: individual testing with three students, small group testing with six students, and field testing with forty-five students. The results of the tryout phase are presented in the following sections.

3.10.1 Results of the Individual Testing

The first step of the tryout phase was the individual testing. Three scienceoriented students with different English proficiency levels participated in this step. They were able, moderate, and less able students. These three students were assigned to use the Weblog-based E-portfolio to study the English IV writing course. They studied and practiced two lessons using the Weblog-based E-portfolio. After that, they were asked to do the assignments. The scores obtained from the exercises and assignments as well as the suggestions from their feedback and comments were thoroughly considered. The results of the efficiency of the process (E1: exercises) and product (E2: assignments) for the individual testing are presented in Table 3.3.

Individual Testing						
Writing LessonE1 Score (%)E2 Score (%)						
Lesson 1 : Sport and Fitness	77.78	76.38				
Lesson 2 : Automotive	75.56	73.62				
Technology						

According to Table 3.3, the results from the individual testing with three students shows that the Weblog-based E-portfolio needed to be revised because the E1/E2 scores were not reached the 80/80 standard criterion. The students were unable to obtain more than 80 percent of the scores in both lessons. The students' E1/E2 scores for lesson 1 and lesson 2 were 77.78/76.38 and 75.56/73.62, respectively.

In the first step of the tryout phase, the students' scores did not reach the 80/80 standard criterion because the students encountered a lot of difficulties with some of the contents and exercises, particularly in lesson 2. According to the students' feedback and suggestions, the scores did not achieve the 80/80 standard criterion for three aspects. These aspects were the contents, exercises, and assignments.

Revisions were made in these three aspects. The first aspect was the contents. Most of the contents were reconsidered in terms of level of difficulty. The researcher deleted some irrelevant contents to make the lessons clearer and more concise. The researcher also added some more examples which were easier for the students to understand. The second aspect was the exercises. The difficult exercises were a serious problem. The exercises in both lessons were reconsidered in terms of length and level of difficulty, particularly in lesson 2. Some exercises in lesson 2 were changed. The third aspect was the assignments. The assignments were not provided sufficient guidance. The instructions for the assignment in lesson 2 were not clear. Therefore, the instructions and the guidance were rewritten with clear explanations.

3.10.2 Results of the Small Group Testing

After the individual testing, the Weblog-based E-portfolio was revised and it was then used for the small group testing. The second step of the tryout phase was given to six science-oriented students: two able, two moderate, and two less able students. The students were assigned to study English IV writing through the Weblog-based Eportfolio. After analyzing the data from the exercises and assignments, the researcher asked the students for feedback and comments about the lessons. In this second step of the tryout phase, the overall scores in both lessons were improved. The E1/E2 scores of the small group testing are presented in Table 3.4.

Small Group Testing					
Writing Lesson	I	E1 Score (%)	E2 Score (%)		
Lesson 1 : Sport and Fitness		78.89	78.47		
Lesson 2 : Automotive Technology	2	77.78	77.08		

 Table 3.4: The E1/E2 Scores from the Small Group Testing

Table 3.4 reports the E1/E2 scores for the second step of the tryout phase. The students were unable to obtain over 80 percent of the scores in either lesson. The overall scores of lesson 1 and lesson 2 in the small group testing were 78.89/78.47 and 77.78/77.08, respectively.

Based on the students' feedback and suggestions, revisions were made in two aspects. The vocabulary and exercises needed to be revised in order to increase the E1/E2 scores. With regard to the vocabulary, the students did not have sufficient knowledge to enable them to understand the lessons. The amount of vocabulary in the lessons was too small. Moreover, some of the contents in both the lessons contained some words which were unfamiliar. Therefore, the researcher provided more useful words in both lessons to give the students sufficient vocabulary knowledge. The unfamiliar words were replaced by more common words. An online dictionary was added to the Weblog-based E-portfolio to help the students check the meanings of unfamiliar words. In the aspect of the exercises, some of the questions were too difficult. The researcher replaced the difficult word with more common ones and simplified the questions. The students also required more pictures or audio to comprehend the exercises easily. Therefore, the researcher revised the exercises by making them easier to understand by adding some pictures and audio before they were used in the last step of the tryout phase.

3.10.3 Results of the Field Testing

The last step of the tryout phase was the field testing. The same procedure as for the previous two steps was conducted for this step. Forty-five science-oriented students, who were not the same students as in the previous two steps, were assigned to study through the Weblog-based E-portfolio. After studying English IV writing through the Weblog-based E-portfolio, the students did the exercises and assignments to examine the efficiency of the Weblog-based E-portfolio. Then, the researcher asked them for their feedback and comments about the Weblog-based E-portfolio. The E1/E2 scores for each lesson are presented in Table 3.5.

Field Testing						
Writing Lesson	E1 Score (%)	E2 Score (%)				
Lesson 1 : Sport and Fitness	81.63	81.11				
Lesson 2 : Automotive	80.59	80.28				
Technology						

Table 3.5:	The E1/E2	Scores from	n the Fiel	d Testing
	7.			U

As can be seen in Table 3.5, the E1/E2 scores in lessons 1 and 2 were above the 80/80 standard criterion. The E1/E2 scores for lesson 1 and lesson 2 were 81.63/81.11 and 80.59/80.28, respectively. The efficiency of the process and product or E1/E2 in

both lessons reached the 80/80 standard criterion after the Weblog-based E-portfolio was revised for the individual testing and small group testing.

From the results obtained, it can be assumed that the Weblog-based E-portfolio would be successful in helping students at SUT to improve their writing skills. However, the Weblog-based E-portfolio had to be revised again based on the comments and suggestions from the students in the field testing. Before the experimental phase, the revisions to the Weblog-based E-portfolio were made in two aspects: exercises and contents. The size and color of the texts in most of the exercises were modified. Some of the contents in lesson 2were improved with the addition of more details and clearer explanations. Another change was the rearrangement of some of the contents. After the rearrangement, the contents were organized more logically.

3.11 Summary

This chapter describes the research methodology used in the research study that includes the participants, the research procedures, the variables, and the research instruments. It also describes the construction and efficiency of the instruments, the data collection, the data analysis and the time frame for the study. Furthermore, the results of the tryout phase are presented.

CHAPTER 4

RESULTS OF THE STUDY

The results of the study are divided into three sections. The first section shows the results of the efficiency of the Weblog-based E-portfolio. The second section presents the results of the learning achievement of the participants' English writing skills. The third section reports the results of the participants' opinions toward learning English writing skills through the Weblog-based E-portfolio.

4.1 Results of the Efficiency of the Weblog-based E-portfolio of the Experimental Phase

After the Weblog-based E-portfolio was revised in the three steps of the tryout phase, it was implemented in the experimental phase (see Appendix N). It was conducted with forty-five science-oriented students who were the participants of this study. All participants took a writing pre-test. Then, they studied and completed the exercises, the first draft and the subsequent drafts of their writing assignment through the Weblog-based E-portfolio. After using the Weblog-based E-portfolio, all of the participants were given the writing post-test. They were requested to write up their reflective journals and to answer the questionnaires afterwards. The results of the E1 (exercises) and E2 (assignments) scores of the experimental phase are presented in Table 4.1

The Experiment						
Writing LessonE1 Score (%)E2 Score (%)						
Lesson 1 : Sport and Fitness	82.52	82.22				
Lesson 2 : Automotive Technology	81.63	81.39				

Table 4.1: The E1/E2 Scores from the Experiment

According to Table 4.1, the E1/E2 scores for both lessons reached the 80/80 standard criterion. The E1/E2 scores of lesson 1 and lesson 2 were 82.52/82.22and 81.63/81.39, respectively. These results were obtained after revisions had been made to the three steps of the tryout phase. Therefore, it can be concluded that the Weblog-based E-portfolio was efficient based on the 80/80 standard criterion.

To sum up, the Weblog-based E-portfolio was successfully developed and implemented to reach the80/80 standard criterion. Several revisions were made in many aspects during the three steps of the tryout phase. Therefore, the scores of 82.52/82.22 in lesson 1 and 81.63/81.39 in lesson 2 from the experimental phase showed that the Weblog-based E-portfolio was efficient based on the 80/80 standard criterion.

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4.2 Results of the Learning Achievement in Writing Skills

Forty-five participants in the experimental phase were required to do a writing pre-test and a writing post-test to find out their learning achievements in writing before and after learning through the Weblog-based E-portfolio. Writing tests were used to investigate the improvement of the participants' writing skills. Each writing test took 60 minutes. Two raters and the researcher were trained to use the scoring rubrics as a tool for evaluating the writing tests. The scoring rubrics comprised five categories: topic sentences, supporting sentences, concluding sentences, organization of ideas, and grammar/mechanics. Detailed descriptions of each category are listed according to four levels of performance (See Appendix D).

Three sets of the writing pre-test scores and the writing post-test scores (Appendix O) were assessed by three raters and the results were compared statistically to evaluate the participants' achievements in English writing skills before and after learning through the Weblog-based E-portfolio. A Pearson product-moment correlation coefficient was applied to investigate the inter-rater reliability between the scores obtained from the three raters. The results of the mean scores and the inter-rater reliability of the three raters for the writing pre-test are presented in Table 4.2 and Table 4.3, respectively.

 Table 4.2: Results of the Mean Scores of the Pre-test from the Three Raters

	Mean*	Std. Deviation	Ν
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 Suppluta	ja ^{2.107}	45

*The maximum score possible is 20

	Writing Pre-test			
	Rater A	Rater B	Rater C	
Rater A	1.000	0.860**	0.819**	
Rater B	0.860**	1.000	0.843**	
Rater C	0.819**	0.843**	1.000	

** Correlation is significant at the 0.01 level (2-tailed)

The maximum score of the scoring rubrics used in this present study is20. The writing pre-test mean scores of 45participants received from Rater A, Rater B, and Rater C as shown in Table 4.2 were 10.56, 11.00 and 11.27, respectively. A Pearson product-moment correlation coefficient (r) was used for analyzing inter-rater reliability. According to Table 4.3, the correlation between Rater A and Rater B for the writing pre-test scores was 0.860, Rater A and Rater C was 0.819, and Rater B and Rater C was 0.843. The Pearson product-moment correlation coefficient at 0.860, 0.819 and 0.843 showed that there was a positive correlation between the three raters' writing pre-test scores. The three raters agreed in their assessment decisions.

 Table 4.4: Results of the Mean Scores of the Post-test from the Three Raters

H	Mean*	Std. Deviation	Ν
Post-test scores from Rater A	14.83	2.407	45
Post-test scores from Rater B	15.06	2.527	45
Post-test scores from Rater C	15.17	2.578	45

*The maximum score possible is 20

Table 4.5: Results of the C	Correlation	between the	Three Raters for	the Post-Test
~				

	Writing Post-test				
	Rater A	Rater B	Rater C		
Rater A	1.000	0.912**	0.874**		
Rater B	0.912**	1.000	0.892**		
Rater C	0.874**	0.892**	1.000		

** Correlation is significant at the 0.01 level (2-tailed)

As can be seen from Table 4.4, the mean scores increased from 10.56, 11.00 and 11.27 for the writing pre-test to 14.83, 15.06 and 15.17 for the writing post-test. A

Pearson product-moment correlation coefficient (r) was also used for analyzing interrater reliability between the writing post-test scores rated by Rater A, Rater B, and Rater C. The results are shown in Table 4.5. The correlation between Rater A and Rater B was 0.912, between Rater A and Rater C was 0.874, and between Rater B and Rater C was 0.892. There was a positive correlation between the three raters' writing post-test scores.

To sum up, the scores from the writing pre-test and post-test were positive in terms of inter-rater reliability. The writing pre-test and post-test from the three raters were calculated to find out the participants' learning achievements in writing skills before and after learning through the Weblog-based E-portfolio.

The mean scores of the writing pre-test and post-test at 10.94 and 15.02 suggest that the participants' learning achievement in writing skills improved after learning through the Weblog-based E-portfolio. The mean scores, the standard deviation of the writing pre-test and the post-test, mean difference, and p-value are presented in Table 4.6 **Table 4.6: Results of a Comparison of Writing Pre-test and Post-test Scores**

	57			T-Test	- UN		_	
	Mean	ISD.	Mean Difference	Interva	nfidence ll of the rence	Т	Df	Sig.
				Lower	Upper			(2-tancu)
Pre-test	10.94	2.114	-4.08	-4.671	-3.477	-13.746	44	.000
Post-test	15.02	2.413						

As presented in Table 4.6, the participants' mean scores for the writing pre-test and post-test were 10.94 (S.D. = 2.114) and 15.02 (S.D. = 2.413), respectively. It was also revealed that there was a highly significant difference (p<.01) between the mean

scores of the writing pre-test and post-test of the participants. From the paired-samples t-test results between the writing pre-test score and the post-test score, it can be seen that the participants made progress in their writing skills after learning through the Weblog-based E-portfolio. The following section presents the results of the participants' opinions toward learning through the Weblog-based E-portfolio.

4.3 Results of the Participants' Opinions toward the Weblog-based E-portfolio

The questionnaire and the reflective journal were used to collect the data of the participants' opinions toward the Weblog-based E-portfolio. The following sections report the results obtained from the questionnaire and the reflective journal.

4.3.1 Results from the Questionnaire

The questionnaire was divided into two parts. The first part consisted of 6 questions about the participants' personal information such as age, gender, and field of study. The second part was the participants' opinions toward a Weblog-based E-portfolio. There were 18 questionnaire statements. The forty-five participants had to respond using a five point rating scale. The results of the two sections of the questionnaire are reported separately. The results of the first part are presented in Table 4.7.

Personal Information	Frequency (N=45)	Percentage (100%)
1. Gender		
- Male	14	31.1
- Female	31	68.9
2. Age		
- 19 years old	22	48.9
- 20 years old	13	28.9
- 21 years old	7	15.5
- More than 21 years old	3	6.7
3. Year of Study		
- Second year	35	77.8
- Third year	7	15.5
- Fourth year	3	6.7
4. Field of Study		
- Management Technology	-35	77.8
- Animal Production		
Technology	2	4.4
- Engineering	2	4:4
	8	17.8
5. Experience in Weblog		
- Yes		15.5
- No	38	84.5
6. Experience in Portfolio		
or E-portfolio		
- Yes	5	16, 11.1
- No	40	88.9
^o he	Sign I Sold	

 Table 4.7: Results of Part 1 – Personal Information

There were forty-five participants. Most of them were 19 years old (48.9%). The majority of the participants, thirty-five of them (77.8%), were the second year Management Technology students. With regard to the participants' experiences of Weblog before taking the lessons, thirty-eight participants (84.5%) had not been exposed to the Weblog at all. Moreover, with regard to the participants' experience of portfolio or E-portfolio before taking the lessons, forty of them (88.9%) did not have any experience.

The second part of the questionnaire consisted of 18questionnaire statements. A five-point Likert scale was used for measuring the participants' levels of opinions toward the Weblog-based E-portfolio. The Likert-scale responses were given values as 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. The criteria for the interpretation of the five-point rating scale are presented in Table 4.8.

 Table 4.8: The Criteria for the Interpretation of the Five-point Rating Scale

Statement	Ranges		
Strongly Agree	4.50 to 5.00		
Agree	3.50 to 4.49		
Undecided	2.50 to 3.49		
Disagree	1.50 to 2.49		
Strongly Disagree	1.00 to 1.49		

Table 4.9: Results Part 2	- Opinions toward	the Weblog-based E-portfolio

Statement	Ā	S.D.
1. The Weblog-based E-portfolio was useful for practicing	4.02	.722
writing inside of the classroom.		
2. The Weblog-based E-portfolio was useful for practicing	4.36	.679
writing outside of the classroom.		
3. The Weblog-based E-portfolio helped the participants to	4.22	.559
understand the stages of process writing better.		
4. Learning process writing through the Weblog-based E-	4.11	.775
portfolio helped the participants to improve the quality of		
their writing.		
5. It was not difficult for the participants to create and use the	4.16	.520
Weblog-based E-portfolio by themselves.		
6. The contents and exercises in the Weblog-based E-	4.18	.575
portfolio were easy to understand and not confusing.		
7. The Weblog-based E-portfolio helped the participants to	4.11	.611
acquire more information about the topic they were writing		
about.		

Statement	Ā	S.D.
8. The participants could search for other useful information	4.27	.653
for their writing through the Internet while they were writing		
through the Weblog-based E-portfolio, such as information		
about the topic that they were writing about or any other		
information.		
9. The Weblog-based E-portfolio could reduce writing	3.98	.656
anxiety.		
10. The participants were not afraid to ask the teacher if they	4.09	.556
didn't understand something about writing.		
11. Suggestions and comments from peers helped the	3.73	.687
participants to improve the high quality of writing.		
12. The participants had more chance to discuss or consult	4.00	.674
about writing problems with the teacher.		
13. The participants had more responsibility to follow their	3.91	.633
tasks assigned by the teacher.		
14. The participants had more time to learn, think, and	4.16	.672
practice their writing skills on their own.		
15. The participants enjoyed writing when they wrote	4.04	.520
through the Weblog-based E-portfolio.		
16. The participants were satisfied with their writing on the	4.13	.786
Weblog-based E-portfolio.		
17. The participants liked English writing more than ever,	4.07	.617
after they had practiced writing through the Weblog-based E-		
portfolio.		
18. After the participants had practiced writing through the	4.20	.625
Weblog-based E-portfolio, they felt that writing in English		
was not as difficult as they had thought previously.		
Total	4.10	0.640

 Table 4.9: Results Part 2 - Opinions toward the Weblog-based E-portfolio (Cont.)

The questionnaire statements were analyzed and calculated by using descriptive statistics. Table 4.9 presents the results of the second part of the questionnaire about the participants' opinions toward the use of the Weblog-based E-portfolio. Based on the questionnaire from statements 1-18, the results were divided into seven aspects.

The first aspect asked about the ubiquitous learning: statement 1 ($\bar{x} = 4.02$) "The Weblog-based E-portfolio was useful for practicing writing inside of the classroom", and statement 2 ($\bar{x} = 4.36$) "The Weblog-based E-portfolio was useful for practicing writing outside of the classroom".

The second aspect asked about the process writing approach: statement 3 (\bar{x} = 4.22) "The Weblog-based E-portfolio helped the participants to understand the stages of process writing better", and statement 4 (\bar{x} = 4.11) "Learning process writing through the Weblog-based E-portfolio helped the participants to improve the quality of their writing".

The third aspect asked about the Weblog-based E-portfolio and online learning: statement 5 ($\bar{x} = 4.16$) "It was not difficult for the participants to create and use the Weblog-based E-portfolio by themselves", statement 6 ($\bar{x} = 4.18$) "The contents and exercises in the Weblog-based E-portfolio were easy to understand and not confusing", statement 7 ($\bar{x} = 4.11$) "The Weblog-based E-portfolio helped the participants to acquire more information about the topic they were writing about", and statement 8 (\bar{x} = 4.27) "The participants could search for other useful information for their writing through the Internet while they were writing through the Weblog-based E-portfolio, such as information about the topic that they were writing about or any other information".

The fourth aspect asked about the anxiety in writing: statement 9 ($\bar{x} = 3.98$) "The Weblog-based E-portfolio could reduce writing anxiety", and statement 10 ($\bar{x} = 4.09$) "The participants were not afraid to ask the teacher if they didn't understand something about writing". The fifth aspect asked about the peers and teacher's feedback: statement 11 ($\bar{x} = 3.73$) "Suggestions and comments from peers helped the participants to improve the high quality of writing", and statement 12 ($\bar{x} = 4.00$) "The participants had more chance to discuss or consult about writing problems with the teacher".

The sixth aspect asked about the autonomous learning: statement 13 ($\bar{x} = 3.91$) "The participants had more responsibility to follow their tasks assigned by the teacher", and statement 14 ($\bar{x} = 4.16$) "The participants had more time to learn, think, and practice their writing skills on their own".

The seventh aspect explored about the satisfaction: statement 15 ($\bar{x} = 4.04$) "The participants enjoyed writing when they wrote through the Weblog-based E-portfolio", statement 16 ($\bar{x} = 4.13$) "The participants were satisfied with their writing on the Weblog-based E-portfolio", statement 17 ($\bar{x} = 4.07$) "The participants liked English writing more than ever, after they had practiced writing through the Weblog-based E-portfolio", and statement 18 ($\bar{x} = 4.20$) "After the participants had practiced writing in English was not as difficult as they had thought previously".

The participants overall mean of their opinions toward using the Weblog-based E-portfolio was 4.10. Therefore, the overall mean score ($\bar{x} = 4.10$) of the participants' opinions toward using the Weblog-based E-portfolio was interpreted as "agreed" from the criteria for the interpretation in Table 4.8.It can be concluded that the participants had positive opinions towards the Weblog-based E-portfolio.

4.3.2 Results from the Reflective Journal

This section reports the results obtained from forty-five participants from the reflective journal. They were asked to write their opinions toward using the Weblog-

based E-portfolio on their own Weblog-based E-portfolio after they finished each writing assignment (See complete questions and responses in Appendix P). The reflective journal was written in Thai. The guided questions were also in Thai to minimize any ambiguity or misinterpretation. The data analysis was completed qualitatively. The researcher translated and transcribed results from Thai to an English version. Then, the results were coded based on sharing similar points. The results of the reflective journal were divided into 3 sections: 1) the benefits of the Weblog-based E-portfolio, 2) the participants' preferences toward practicing the process writing through the Weblog-based E-portfolio, and 3) the suggestions about the Weblog-based E-portfolio.

4.3.2.1 The Benefits of the Weblog-based E-portfolio

Although the Weblog-based E-portfolio was a completely new concept for the participants, all of them had positive opinions toward learning English writing skills through the Weblog-based E-portfolio. One hundred percent of the participants agreed that it helped them to produce a higher quality of writing product. According to their opinions, learning English writing skills through Weblog-based E-portfolio was helpful for three reasons: it was convenient to learn and make contact with teacher or friends, it has useful information for writing, and the contents and exercises were interesting.

First, half of the participants (50%) wrote that the Weblog-based Eportfolio was convenient for learning writing by themselves anywhere and at any time they wanted. Because the Weblog-based E-portfolio was an online tool, they were able to take advantage of the various facilities of the Internet and technology. Some sample opinions of the participants are presented below. S16: "Yes, I think my writing has been improved by this course. In this course, technology is used, it is more convenient than using more traditional methods. I like to use the technology. I can learn the lessons by myself anywhere and anytime."

S28: "Yes. This is a learning method which uses new technology in the classroom. It is convenient to learn by myself anywhere after class which is good for me. If I have any problems, I can leave a message for the teacher directly. Moreover, my work can be shared with others."

S41: "Yes, the Weblog-based E-portfolio helps me a lot. I can access the lessons and exercises anywhere. I think that using technology in the writing classroom provides me with a good opportunity to practice my writing all the time."

Second, the participants (30%) stated that learning through the Weblogbased E-portfolio was helpful because there was useful information for writing. Useful information was available on both the Internet and the Weblog-based E-portfolio. The opinions were:

S2: "Yes, the Weblog-based E-portfolio can help me to write well. I can search the Internet for all the information that I want for my writing. When I finish my writing, I can check the spelling online."

S21: "Yes, it helps me. In my life, I don't have to write anything in English. However, after this course, I can write something in English using the knowledge provided in the lessons. I can construct a sentence or paragraph. I can also learn the meaning of many new words in this course."

S35: "Yes, writing through the Weblog-based E-portfolio helps me to write better. Online dictionaries, guided supplementary information and links to useful websites are provided for me on the Weblog-based E-portfolio."

Third, they (20%) were interested in the contents and exercises. The pictures, audios and videos from YouTube were put in all the contents. Many challenging exercises were provided. Here are some examples of the participants' opinions:

S13: "Yes, the Weblog-based E-portfolio lessons helps me write a good paragraph. In the lessons, there are many useful videos and audios. They are suitable for the younger generation. I learn how to write better from these videos."

S19: "Yes. The lessons are very attractive and interesting. They are wellorganized. When I have no idea know how to write, I can go to the lessons and read them again. I can make a good writing product by using the contents from the Weblogbased E-portfolio lessons."

S33: "Yes. There are many types of exercises, such as matching, multiple choice, etc. If I practice a lot, I will improve my skills. Practice makes perfect."

4.3.2.2 The Participants' Preferences toward the Process Writing

All of the participants also had positive opinions toward practicing process writing through the Weblog-based E-portfolio. One hundred percent of them mentioned that they liked practicing process writing through the Weblog-based Eportfolio. Practicing process writing through a Weblog-based E-portfolio was meaningful to them for two reasons: there were well-organized stages in the process writing and they received feedback from the teacher and their peers.

First, most participants (75%) wrote that they really liked the process writing because the 5-stages of the process writing helped them to make a wellorganized writing product. They produced a high quality writing product by following all the stages. They also wrote that they preferred to do the outline or mind-mapping to generate their ideas before writing. Some examples of their opinions are as follows:

S5: "I like the process writing. I always follow the stages of the process writing (Pre-writing, Drafting, Revising, Editing, and Publishing). I think my English writing skills have improved."

S12: "I like the stages in process writing especially the pre-writing stage. Good planning makes a great paper. So, I have to organize my ideas by making an outline. It works well. I have got all my ideas ready for writing my work."

S32: "I like process writing. I like the all the stages because they make me organize my writing properly."

Second, some participants (25%) liked the feedback and comments from their teacher and peers. The teacher and peer comments were made after the participants posted their first draft. The participants thought that the comments from both the teacher and their peers gave them some important suggestions for editing their draft. Some examples of their opinions are as follows:

S21: "Practicing process writing on the Weblog-based E-portfolio makes me more interested in writing. Teacher and peers also have an opportunity to comment on my writing. This is an interesting activity for editing my writing."

S23: "I like to learn process writing. I have the opportunity to see my friends writing. It is good. I can adapt my own writing. Moreover the comments from the teacher are very useful."

4.3.2.3 The Suggestions for the Weblog-based E-portfolio

The suggestions for practicing writing through the Weblog-based Eportfolio can be classified into three main suggestions: 1) more examples, contents, and exercises should be added, 2) more guided instructions were needed, and 3) the teacher should be aware of technical problems about the Internet or computer devices.

First, most of the participants (70%) suggested there should be more examples, contents and exercises in both lessons. They stated that the exercises, contents and examples were very helpful. So, they claimed that it would be better if more exercises, contents and examples were added to the lessons. Some examples of their opinions are:

S10: "I want the teacher to provide more examples in every section, especially the assignment section. Two or three more examples of paragraph writing will be very helpful."

S20: "My suggestion is that there should be more lessons/contents. It will be very helpful for the students who want to learn by themselves after this course."

S27: "I think everything is alright, but it will be better if the Weblogbased E-portfolio has more exercises with clear explanations."

Second, the participants (20%) required more guided instructions to learn writing through the Weblog-based E-portfolio. They stated that the instructions form the teacher were not enough. Some examples of their opinions are presented below.

S41: "I need more guided instructions to learn writing through the Weblog-based E-portfolio."

S14: "It will be better if the teacher put more information for guidance."

Third, some of the participants (10%) wrote that they had some technical problems with the Internet. Some participants stated that the Internet was very slow. Some of them did not have their own computer. The teacher should be aware of these problems. Examples of the participants' opinions are shown below.

S25: "I have not got the internet at my dormitory. Moreover, sometimes the internet service at the university is very bad."

S36: "*My* computer is broken. When I want to work, I need to go to the university and use its computer. It was difficult for me to do the assignments at home."

In conclusion, the results revealed that all of the participants had positive opinions toward using the Weblog-based E-portfolio. The results confirmed that the benefits of the Weblog-based E-portfolio can help them to produce a higher quality writing product. The participants also stated that they liked to practice process writing through the Weblog-based E-portfolio. Moreover, they mentioned that they were able to improve their English writing skills by doing the online exercises and assignments. However, some of them wrote that the teacher should be aware of technical problems about the Internet or computer devices.

4.4 Summary

The results of the study are presented in three sections: (1) the efficiency of the Weblog-based E-portfolio, (2) the learning achievement of the participants' English writing skills, and (3) the participants' opinions toward learning by using the Weblog-based E-portfolio.

First, the efficiency of the Weblog-based E-portfolio in the experimental phase reached the 80/80 standard criterion. Second, it helped the participants to improve their English writing skills. The results revealed that the mean score of the writing post-test was higher than the mean score of the writing pre-test. Third, the participants had positive opinions toward the Weblog-based E-portfolio.

CHAPTER 5

DISCUSSION AND CONCLUSION

In this chapter, the research results addressed in Chapter 4 are discussed and a conclusion is made. The discussion part is divided into two sections. First, the effect of the Weblog-based E-portfolio on the English writing skills. Second, the participants' opinions toward learning through the Weblog-based E-portfolio. The limitations of the study, the implications, and the recommendations for further studies are also presented.

5.1 Discussion

The results of this study showed that the Weblog-based E-portfolio constructed by the researcher was efficient based on the 80/80 standard criterion. The Weblog-based E-portfolio helped the participants to improve their English writing skills and promoted positive opinions toward online learning. The discussion about the effect of the Weblog-based E-portfolio on the English writing skills and the opinions toward learning through the Weblog-based E-portfolio are presented in the following sections.

5.1.1 Discussion about the Effect of the Weblog-based E-portfolio on the

English Writing Skills

The effect of the Weblog-based E-portfolio on the participants' English writing skills can be separated into 2 aspects: the development of the Weblog-based E-portfolio and the learning achievement of the participants' English writing skills.

5.1.1.1 The Development of the Weblog-based E-portfolio

Based on the results of the efficiency of the Weblog-based E-portfolio, the E1/E2 scores of lesson 1 and lesson 2 in the experimental phase were 82.52/82.22 and 81.63/81.39, respectively. The Weblog-based E-portfolio lessons were efficient based on the 80/80 standard criterion proposed by Brahmawong (2013). It was because the Weblog-based E-portfolio was examined in three steps of the tryout phase: the Individual Testing, the Small Group Testing and the Field Testing in order to develop the efficiency of the instrument. The results of the efficiency of the Weblog-based E-portfolio in the first step, the Individual Testing, did not meet 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 and exercises were revised again because neither E1 nor E2 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 from the Individual Testing and the Small Group Testing.

In the steps of the tryout phase, the researcher found various weaknesses which caused the efficiency of the Weblog-based E-portfolio to fall below the 80/80 standard criterion. The level of difficulty of the exercises, assignments, vocabulary and content were the major aspects which contributed to the failure in reaching the 80/80 standard criterion. The feedback from the participants led to several revisions of the Weblog-based E-portfolio lessons. After the revisions were made in terms of the level of difficulty, the E1/E2 scores were higher. The Weblog-based E-portfolio successfully reached the 80/80 standard criterion because several revisions were made in the aspects of exercises, assignments, vocabulary and content. In addition, language support in the form of online dictionaries was added during the three steps of the tryout phase to enable the participants to understand the lessons better. Several revisions to the three steps of the tryout phase explain why the efficiency of the Weblog-based E-portfolio improved and reached the 80/80 standard criterion.

5.1.1.2 The Learning Achievement of the English 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 participants' English writing skills improved after they learned how to write in English through the Weblog-based Eportfolio.

Multimedia Technology

The achievement of their writing skills may be due to the fact that the participants were encouraged to learn writing by using E-portfolio technology. The E-portfolio improved the participants' writing skills. The findings of Erice (2008) and Meyer et al. (2010) confirmed that the E-portfolio can develop students' writing skills. The E-portfolio uses electronic technology that allows the users of portfolio to 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 assignments about paragraph writing from the Weblog-based E-portfolio lessons. They received enough knowledge and information about 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. The use of multimedia such as text, audios, pictures and videos was the highlight for the students for using the Weblog-based E-portfolio. The use of multimedia has the potential to motivate the participants to learn.

Uthaikun (2008) also made a similar point that the post-test scores of the students in his experimental group were higher than the pre-test scores, because his students learned from the pictures, sound and videos which enhanced both students' motivation and comprehension. This is in agreement with Li's (2015) and Wang's (2015) studies which show that the learning outcomes of the learners improved after they learned and practiced the lessons using technology. The learners can prepare for class through the video lessons. The multimedia contexts helped the learners to comprehend the lessons easily and stimulated their motivation.

Zone of Proximal Development

Another reason that may account for participants' achievement in English writing skills was that they learned many topics and vocabulary items from the Weblogbased E-portfolio lessons posted by the teacher. Moreover, the teacher and their peers had important roles to play in this study. This can be explained by the Zone of Proximal Development (ZPD) theory proposed by Vygotsky (1978). Learners improve their abilities through guided information from the teacher or interaction with competent peers. Both teacher and peers provide the learners with scaffolding. Scaffolding is an effective learning support to provide comprehensible input to EFL learners. Lower level English learners can use scaffolding to develop their language learning skills (Yang & Chen, 2007).

In the Weblog-based E-portfolio lessons, the participants learned many topics with the guidance of the teacher and they used process writing to write their assignments with feedback from their peers and discussion with them. The instruction from the teacher was necessary for the training since the participants did not know much about the Weblog-based E-portfolio or process writing. When the participants understood what they had to do, they were able to learn and write by themselves with little support from scaffolding. They learned to actively construct knowledge at their own pace. Teacher or peers can assess the participants' E-portfolio then they can give their comments immediately. The Weblog-based E-portfolio provided the participants with the opportunity to develop their writing skills through social interaction. When they interacted with their peers or teacher, they received feedback and used it for revising their writing products. Ferris's (2003) study stated that when students pay attention to teacher feedback, it helped them to improve their writing. The participants might also have benefitted from the feedback as it focused their attention on grammatical problems or the meaning of the language.

In conclusion, the Weblog-based E-portfolio was successfully developed and implemented to reach the 80/80 standard. This showed that the lessons, exercises, and assignments proved to be effective for the teaching and learning of English writing skills. Moreover, the Weblog-based E-portfolio helped the participants to gain higher learning achievement in their writing performance and to improve their English writing skills.

5.1.2 Discussion about the Participant's Opinions toward Learning English Writing Skills through the Weblog-based E-portfolio

Both the results obtained from the questionnaire and the reflective journal revealed that the participants found the Weblog-based E-portfolio to be very appropriate and they had positive opinions toward learning through it. With regard to the participants' opinions, there were the opinions about the benefits and the suggestions toward learning English writing skills through the Weblog-based Eportfolio.

5.1.2.1 Benefits of using the Weblog-based E-portfolio

The opinions about the benefits of using the Weblog-based E-portfolio for learning English writing skills can be divided into 3 aspects: 1) the ubiquitous learning, 2) the useful feedback and comments, and 3) the autonomous learning.

The Ubiquitous Learning

The participants believed that the Weblog-based E-portfolio was ubiquitous for learning. It was useful for practicing writing both inside and outside of the classroom. They can learn whatever they want through the Weblog-based Eportfolio anywhere and at any time. Jonassen (1996) claimed that technology can give learners opportunities to work at any time which is different from the traditional teaching approach. Winter (2002) also stated that web-based instruction is a truly flexible method for learning. The responses from the reflective journal confirmed that the Weblog-based E-portfolio was a meaningful tool for learning writing because it was convenient for the participants to learn. They liked to learn by themselves after class. Hughes (2004) and Han (2008) also stated that the students could have more opportunities to study inside and outside the classroom by using technology to enhance their language learning. They can repeat the lessons several times. The responses from the participants were similar to those in Tumsaduak's (2014) study. She stated that learning through technology promotes positive attitudes, particularly those of students who have heavy demands on their time because they can access the lessons when it is convenient.

The Useful Feedback and Comments

The participants agreed that the feedback and comments from their teacher and peers helped them to improve the high quality of writing. The teacher and peer

comments were made after the participants posted their first draft. They could share and give their opinions freely to each other. They thought that the feedback and comments from both the teacher and their peers gave them some important suggestions to improve the high quality of writing. The participants' responses from the reflective journal confirmed that they liked the feedback and comments from their teacher and peers in the Revising stage of the process writing approach. They also agreed that learning process writing through the Weblog-based E-portfolio helped them to improve the quality of their writing. This could be because the lessons provided the participants with the opportunity to practice their writing skills using the process writing approach. The feedback system in the process writing approach is considered as one of its most significant benefits. Appropriate feedback to students can improve students' writing skills. Liu and Hansen (2005) stated that peer feedback helps students improve the quality of the writing as they can learn the good point from one another. It also promotes critical thinking when the students give feedback to their peers. The results of this study were similar to those in the studies of Liu and Hansen (2005) and Min (2006) which found that peer feedback was effective in writing revision.

The Autonomous Learning

The participant appreciated that the Weblog-based E-portfolio promoted learner autonomy. They had more responsibility to follow the writing tasks and they could learn, think, and practice their writing skills on their own. They were given an opportunity to take the exercises up to three times from which the highest scores were recorded. Moreover, they revealed that the Weblog-based E-portfolio helped them to acquire more information about the topic that they were writing about. The online contents and exercises on the Weblog-based E-portfolio lessons were based on studentcentered approach. They were able to search for other useful information for their writing through the Internet while they were writing on the Weblog-based E-portfolio. They were encouraged to learn the contents by using technology, as there were plenty of audios, videos and pictures. Warschauer (1996) stated that the use of technology and the computer gives the students more opportunity for controlling their learning. Therefore, the Weblog-based E-portfolio gave the participants of this study the opportunity to control their learning by enabling them to learn at their own pace and more independently.

5.1.2.2 Suggestions of using the Weblog-based E-portfolio

The participants commented that they had some technical problems with the Internet and computer devices. Some participants stated that the Internet was very slow. These problems affected the learning of the participants. They could not learn through the Weblog-based E-portfolio without the Internet connection. Somdee's study (2012) also found that the high speed Internet in some areas of the university didn't work well. She stated that the Internet connection had an effect on the learning process. Furthermore, the participants' responses from the reflective journal showed that some of them did not have their own computer. Winaitham (2012) suggested that the researcher should explore new technology devices that can facilitate the learners to use them for learning English. Therefore, the teachers of the online learning course should be aware of these problems. If the teachers plan to teach the students with online technology, they should make sure that all the students have the high speed Internet connection and the technology devices for learning.

In conclusion, the Weblog-based E-portfolio was a suitable tool for improving the English writing skills of Thai undergraduate students at Suranaree University of Technology. The participants developed their writing skills by practicing process writing through the use of a Weblog-based E-portfolio. This was very convenient for them as they were able to access the Weblog-based E-portfolio anywhere and at any time. As a result, the participants had positive opinions toward using the Weblog-based E-portfolio to improve their English writing skills.

5.2 Conclusion

The present study has been conducted in order to develop the Weblog-based Eportfolio to improve the English writing skills of Thai EFL undergraduate students at Suranaree University of Technology. The two main purposes of this study were: to investigate the effect of the Weblog-based E-portfolio on the English writing skills of Thai EFL undergraduate students before and after learning, and to explore Thai EFL undergraduate students' opinions toward learning through a Weblog-based E-portfolio to improve their English writing skills.

The Weblog-based E-portfolio was designed and constructed by the researcher. It was examined by the experts. Then, it was launched in the tryout phase and the experimental phase. The Weblog-based E-portfolio was examined and revised for efficiency to reach the 80/80 standard criterion in the three steps of the tryout phase with three students in the Individual Testing, six students in the Small Group Testing, and forty-five students in the Field Testing. The scores from both the exercises (E1) and assignments (E2) in two lessons of the Weblog-based E-portfolio were calculated with the 80/80 standard criterion. Then, it was implemented with the forty-five students who participated in the experimental phase. The participants in the experimental phase were a group of forty-five undergraduate students who studied the English IV course (203204) at Suranaree University of Technology, Nakhon Ratchasima, in the first trimester of the academic year 2016. All participants took a writing pre-test. Next, they learned the writing lessons and did the exercises and writing assignments, and they also wrote a reflective journal through the Weblog-based E-portfolio. Then, the participants were given the writing post-test. Three sets of the writing pre-test and post-test scores given by three raters were calculated using a statistical method for obtaining the mean scores and the p-value. Finally, a questionnaire was administered to the participants to explore their opinions toward learning through the Weblog-based E-portfolio.

The research instruments consisted of the Weblog-based E-portfolio, lesson plan, writing tests, scoring rubrics, questionnaire and reflective journal. The data obtained from the different instruments were analyzed by both a quantitative and qualitative data analysis.

The results of this study can be summarized as follows:

1. The Weblog-based E-portfolio was effective based on the 80/80 standard criterion. The scores from the process (E1) and the product (E2) in lesson 1 and lesson 2 were 82.52/82.22 and 81.63/81.39, respectively. Therefore, they were proved to be an appropriate method to improve the English writing skills of the participants.

2. The writing post-test results were significantly higher than the writing pretest results which shows that learning English writing through the Weblog-based Eportfolio improved the participants' writing skills. 3. The results obtained from the questionnaire ($\bar{x} = 4.10$) and reflective journal showed that the participants had positive opinions towards learning through the Weblog-based E-portfolio.

5.3 Implications of the Study

First, nowadays, it is largely accepted that technology enhanced language learning is popular in the EFL writing, as many previous studies have offered the evidence of the use of a Weblog and an E-portfolio in EFL writing classrooms. Writing instruction through the use of the E-portfolio not only helps the students to learn in class, but it also provides more opportunity for the students to learn outside the classroom. The present study sheds new light on the online learning through the Weblog-based E-portfolio in Thailand. The findings of this study clearly show that the Weblog-based E-portfolio has positive effects on the participants' writing achievement. The present study provides a detailed information of the development and efficiency of the Weblog-based E-portfolio. The 80/80 standard criterion proposed by Brahmawong (2013) is employed as the criteria to evaluate the efficiency of the lessons. This information is helpful to enrich the knowledge for development the online lessons.

Second, the results of this study provide an insight into EFL writing instruction by providing the teachers with valuable information about the process writing approach and the constructivism theory. The useful information about each stages of the process writing approach and the roles of teacher and peers in the constructivism theory are provided. The teachers can adapt the information and methodology of this study to help the students learn writing effectively. It may help the students become active learners, and encourage them to take responsibility for their own studies. Third, this study also provides several research instruments for the researchers. There are six research instruments: the Weblog-based E-portfolio, lesson plan, writing tests, questionnaire and reflective journal. All of the research instruments of this study are checked by the experts in English Language Teaching field. The researchers who are interested in technology in writing instruction and E-portfolio may want to pay particular attention to these research instruments.

5.4 Limitations of the Study

Although the results of this study showed that the Weblog-based E-portfolio can improve participants' English writing skills, there are some major limitations of this study which should be addressed.

First, the forty-five students who participated in the study had different English proficiency levels. Some of them were fast learners. However, there were also some slow learners. Some of the students stated that the lessons and exercises were difficult because they did not have sufficient background knowledge of English. They wanted more content about basic English. It was difficult for the researcher to serve all the needs of the group of participants with such various degrees of proficiency.

Second, the participants of this study are EFL university students who registered for the English IV course at Suranaree University of Technology, Nakhon Ratchasima. They are science-oriented students. They are non- English major students. Therefore, the results will not be generalizable to other types of students or broader contexts or fields of study, because the situation at SUT may not be the same as others.

Third, the time for conducting this study was limited. Some participants commented that the time for learning through the Weblog-based E-portfolio was not

enough. Since SUT uses a trimester system which lasts only 13 weeks, including the examinations, rather than the semester system used by other universities, there is little time available for conducting a study.

5.5 Recommendations for Further Study

The following are recommendations that might be taken into consideration for future studies in this area.

First, in order to further validate the effectiveness of using the Weblog-based Eportfolio to improve writing skills, it is recommended that any future studies should extend the period of time. Thus, more information and in-depth results will be obtained.

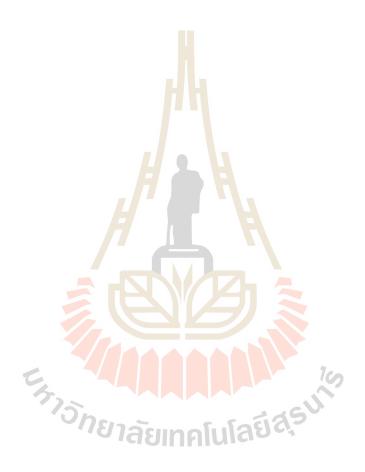
Second, this study was conducted with science-oriented participants. Any future studies should use the Weblog-based E-portfolio to improve the writing skills of participants in the other fields, such as the Humanities, Arts etc. Different results may be obtained from such studies.

Third, the Weblog-based E-portfolio in this study was effectively implemented for the teaching of writing skills. It is recommended that future researchers should conduct studies of other skills, such as speaking or listening. Since the E-portfolio is a technology tool for collecting online work, it can be stored not only in text but also in pictures, audios and videos. For example, the learners can post their voice recording through the E-portfolio in a course for the teaching of speaking.

Fourth, it is highly recommended that future studies should explore various types of technology tools, such as Facebook, Word Press, and other tools for creating the E-portfolio. There is a variety of new technology tools available which are easy to use. This would also encourage participants to practice more and to improve their skills.

5.6 Summary

This chapter discusses about the findings and summarizes the conclusions of the study. The implications and limitations of the study are explained. In addition, recommendations for further study are made.



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APPENDIX A

Lesson Plan

Course: English IV (203204)

Level: Undergraduate students, Suranaree University of Technology

Class size: 45 Students

Period: 10Hours + the Writing Tests

Instructor: Mr. Jirayu Kongsuebchart



Lesson Plan 1

Subject: English IV (203204)

Topic/Lesson: Training (Weblog-based E-portfolio, Reflective journal, Process

writing, Scoring rubrics)

Time & Duration: 2 hours

Objectives:

1) The students can create and use a Weblog to create an E-portfolio.

2) The students know how to write a reflective journal through the Weblog-based E-

portfolio.

3) The students have better understanding about the process writing

4) The students know the criteria in the scoring rubrics for their writing assessment

Teaching Procedures

Step 1: Warm up

1.1 Students are asked on how well they know about the Weblog and the E-portfolio.

1.2 Students are asked on what they know about the process writing and the writing assessment.

Step 2: Presentation and Learning

2.1 Students are introduced about the Weblog. Online example of E-portfolio onWeblog are presented to them.

2.2 Students learn about the process writing on the English IV's Weblog-based Eportfolio step by step.

2.3 Students read the information about the scoring rubrics for assessing their writing on the English IV's Weblog-based E-portfolio.

Step 3: Practice

3.1 Students do the exercises about process writing and scoring rubrics.

3.2 Students practice using Weblog as a tool for creating Weblog-based E-portfolio individually and teacher helps the students in this process. The manual of how to create the Weblog-based E-portfolio is provided for the students on the English IV's Weblog-based E-portfolio.

3.3 Students practice writing an outline and then post their first draft of personal information on their Weblog-based E-portfolio.

3.4 Students do the self-assessment to their first draft by checklist.

3.5 Teacher and peers give feedback to the first draft.

3.6 Students rewrite their personal information based on the assessment and feedback as a final draft.

3.7 Students learn and write reflective journal about their feeling towards this writing training on their Weblog-based E-portfolio.

Step 4: Production

Students present their own writing (personal information, reflective journal) on their Weblog-based E-portfolio.

Materials: Projector, Computers, the Internet, English IV's Weblog-based Eportfolio

Measurements & Evaluation:

1. The students can present their writing on their Weblog-based E-portfolio.

2. The students can do the exercises about process writing and scoring rubrics.

Lesson Plan 2

Subject: English IV (203204)

Topic/Lesson: Lesson 1 Sports and Fitness

Time & Duration: 3 hours

Objectives: 1. Students know the sentence and paragraph structures.

2. Students know how to write in process writing approach.

3. Students can write about sport and fitness.

Teaching Procedures:

Step 1: Warm up

1.1 Students are asked to match the name and the pictures of the world famous athletes on English IV's Weblog-based E-portfolio.

1.2 Students share their favorite athlete names with their peers on English IV's

Weblog-based E-portfolio.

Step 2: Learning and Practicing

2.1 Students learn about sentence structure and types of sentences on the English IV's Weblog-based E-portfolio.

2.2 Students learn about paragraph composition and structure on the English IV's Weblog-based E-portfolio.

2.3 Students do the online exercises about sentence and paragraph on the English IV's Weblog-based E-portfolio.

Step 3: Assignment Outline

3.1 Students read the lesson 1's writing assignment posted on the English IV's Weblog-based E-portfolio.

3.2 Students learn about the process writing on the English IV's Weblog-based Eportfolio step by step.

3.3 Students do the process of brainstorming, collecting data.

3.4 Students write the outline of the writing assignment from the guideline questions on their Weblog-based E-portfolio.

Step 4: First draft

4.1 Students write the first draft of the writing assignment from their outline.

4.2 Students post the first draft on their Weblog-based E-portfolio.

Step 5: Feedback

5.1 Students do the self-assessment to their first draft by the checklist provided.5.2 Peers give the feedback to the first draft through Weblog-based E-portfolio.

5.3 Teacher gives the feedback to the first draft through Weblog-based E-portfolio.

Step 6: Final draft

6.1 Students revise and write the final draft of the writing assignment based on the assessment and feedback from their peers and teacher.

6.2 Students check the grammar, structure, word choice, punctuation, capitalization, and spelling.

6.3 Students post the final draft on their Weblog-based E-portfolio.

Step 7: Score and Feedback

Students receive the online score and feedback of their final draft from the teacher.

Step 8: Writing reflection

Students are required to write the reflective journal by the guided questions through their Weblog-based E-portfolio.

Materials: Computers with Internet connection, Projector, and English IV's Weblog-

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based E-portfolio

Measurements & Evaluation:

- 1. Checking exercises
- 2. Assessing the writing assignment
- 3. Checking the reflective journal writing

Lesson Plan 3

Subject: English IV (203204)

Topic/Lesson: Lesson 2 Automotive Technology

Time & Duration: 3 hours

Objectives: 1. Students know summary/paraphrase and citation.

- 2. Students know how to write in process writing approach.
- 3. Students can write about automotive technology.

Teaching Procedures:

Step 1: Warm up

1.1 Students are asked to match the name and the pictures of the future vehicles on English IV's Weblog-based E-portfolio.

1.2 Students share their ideas about the future cars with their peers on English IV's Weblog-based E-portfolio.

Step 2: Learning and Practicing

2.1 Students learn about summary and paraphrase posted on the English IV's Weblogbased E-portfolio.

2.2 Students learn about in-text citation and reference list on the English IV's

Weblog-based E-portfolio.

2.3 Students do the online exercises about summary/paraphrase and in-text

citation/reference list on the English IV's Weblog-based E-portfolio.

Step 3: Assignment Outline

3.1 Students read the lesson 2's writing assignment posted on the English IV's Weblog-based E-portfolio.

3.2 Students learn about the process writing on the English IV's Weblog-based Eportfolio step by step.

3.3 Students do the process of brainstorming, collecting data.

3.4 Students write the outline of the writing assignment from the guideline questions on their Weblog-based E-portfolio.

Step 4: First draft

4.1 Students write the first draft of the writing assignment from their outline.

4.2 Students post the first draft on their Weblog-based E-portfolio.

Step 5: Feedback

5.1 Students do the self-assessment to their first draft by the checklist provided.5.2 Peers give the feedback to the first draft through Weblog-based E-portfolio.

5.3 Teacher gives the feedback to the first draft through Weblog-based E-portfolio.

Step 6: Final draft

6.1 Students revise and write the final draft of the writing assignment based on the assessment and feedback from their peers and teacher.

6.2 Students check the grammar, structure, word choice, punctuation, capitalization, and spelling.

6.3 Students post the final draft on their Weblog-based E-portfolio.

Step 7: Score and Feedback

Students receive the online score and feedback of their final draft from the teacher.

Step 8: Writing reflection

Students are required to write the reflective journal by the guided questions through their Weblog-based E-portfolio.

Materials: Computers with Internet connection, Projector, and English IV's Weblog-

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based E-portfolio

Measurements & Evaluation:

- 1. Checking exercises
- 2. Assessing the writing assignment
- 3. Checking the reflective journal writing

APPENDIX B

The Checklist Form of the Lesson Plan for the experts in English

Language Teaching Field

Instructions: Read each statement in the form, then put a check mark ($\sqrt{}$) which best

Statement	Check	Check mark (√)			
	Appropriate	Inappropriate			
Learning Objectives					
The lesson plan meets learning objectives.					
Procedure					
The procedures demonstrate and effective use of time, content and creativity.					
Materials/ Resources					
The lesson incorporates variety of materials and resources available to students.	10				
Guided Practice There are many activities, exercises and assignments that provide for practicing.	asui				
Technology Integration					
The technology applies to enhance learning.					
Assessment					
Assessments are clear and concise, reflecting the learning objectives.					
Organization and Presentation					
The lesson plan is well-organized, professional, and free of spelling and grammatical errors.					

describes your opinions about each statement in the spaces provided.

APPENDIX C

Writing Pre-test

Instruction: Imagine you are a famous car racer. You have a friend who wants to know about car racing. You have to introduce this sport that it is not dangerous as many people think it is. Answer the question why you are interested in car racing sport. Where do you like to race? Write a paragraph to describe at least 80 words.

Time: 60 minutes

Writing Post-test

Instruction: As you know car racing is one of the most dangerous sports. Imaging that you have a friend who loves car racing very much. He wants to be a car racer but you think it is not good for him. You want him to play another sport. What kind of sport are you going to introduce to him? Why do you want him to play it? Write a paragraph to describe at least 80 words.

Time: 60 minutes วายาลัยเทคโนโลยีสุรูบ์

APPENDIX D

Rubrics Scoring for Writing Assessment

Categories of Performance	Beginner (1)	Basic (2)	Intermediate (3)	Advanced (4)
Topic sentence/ Main idea	-No evidence of a topic sentence.- The sentence is incomplete and does not state the main idea.	 Topic sentence is present but poorly written. It is not entirely clear.	-Topic sentence is complete. - It is clearly stated.	- Topic sentence is very strong and clearly states the main idea.
Supporting sentences	 -Random ideas are difficult to follow. - Do not support the topic sentence. - Less than 3 sentences. 	 Limited details for getting attention in the topic. Short, choppy sentence that lack flow. Having at least 3 sentences. 	 Mostly related details Not all sentences are complete and focused. Contains 3 or more sentences. 	 All sentences are complete and support the topic sentence. Contains 3 or more sentences.
Concluding sentence	-There is no concluding sentence that connects to a topic sentence.	- The sentence is complete but does not sum up the paragraph.	- The sentence is complete and adequately sums up the paragraph.	- The sentence is complete and restates the topic sentence effectively.
Organization of Ideas	-Paragraph lacks a clear focus. Ideas in the paragraph are disorganized. - Confusing order of ideas	-A few ideas in the paragraph do not support the main idea or are out of place, causing a confusion of meaning.	- Ideas in the paragraph support the main idea, but could be organized more clearly.	- Well-organized with clear Topic, Body Conclusion. -Ideas flow in the paragraph and clearly support the main idea, creating meaning.
Grammar/Mechanics (Grammar, Punctuation, Capitalization, Spelling)	-Paragraph has more than 6 errors.	- Paragraph has 5-6 errors.	Paragraph has 3-4 errors.	- Paragraph has 0-2 errors.

(Adapted both the Rubric for Elementary Paragraph Writing from RCampus and a Rubric for a Well-Written Paragraph from the Saskatchewan Literacy Network

APPENDIX E

The Questionnaire of the Thai EFL Undergraduate Students' Opinions toward Learning through the Weblog-based E-portfolio (English version)

This questionnaire is designed to collect personal information and opinions of the Thai EFL undergraduate students toward learning through the Weblog-based E-portfolio for improving English writing skills. The questionnaire is divided into 2 parts.

Part 1: Personal information

Part 2: Opinions toward learning writing through the Weblog-based Eportfolio

Part 1: Personal information

Instruction: Please fill in your information the blanks provided, and put a check ($\sqrt{}$) in the spaces that is true to you.

- 1. Gender: () Male, () Female
- 2. How old are you?
- 3. What is your current year of study?
- 4. What is your Major?
- 5. Have you ever used Weblog before this course?

() 1. If Yes, please specify the purpose to use

- () 2. No.
- 6. Have you ever used Portfolio or E-portfolio before this course?

() 1. If Yes, please specify the purpose to use.....

() 2. No.

Part 2: Opinions toward learning writing in English II course through the Weblog-based E-portfolio.

Instruction: Read the statements and mark $\sqrt{}$ in the box provided according to the degree of agreement.

Statements	Degree of Agreement / Rating Scale					
	5	4	3	2	1	
1. The Weblog-based E-portfolio is useful						
for practicing writing inside of the						
classroom.						
2. The Weblog-based E-portfolio is useful						
for practicing writing outside of the						
classroom.						
3. The Weblog-based E-portfolio helps you						
understand the stages of process writing						
better.						
4. Learning process writing through the						
Weblog-based E-portfolio helps you						
improve the quality of your writing.						
5. It is not difficult for you to create and						
use the Weblog-based E-portfolio by						
yourself.						
6. The contents and exercises in Weblog-		7	6			
based E-portfolio are easy to understand						
and not confusing.		15V				
7. Weblog-based E-portfolio helps you	เลย					
acquire more information about the topic						
you write about.						
8. You can search for other useful						
information for your writing through the						
Internet while you are writing through the						
Weblog-based E-portfolio such as						
information about the topic that you are						
writing about or any other information.						
9. Weblog-based E-portfolio can reduce						
writing anxiety.						

1= Strongly Disagree/	2= Disagree/ 3= Undecided	/ 4= Agree/ 5= Strongly Agree

Statements	Degree of Agreement / Rating Scale					
	5	4	3	2	1	
10. You do not afraid to ask the teacher if						
you do not understand something about						
writing.						
11. Suggestions and comments from the						
peers help you improve the higher quality						
of writing.						
12. You have more chance to discuss or						
consult about writing problems with the						
teacher.						
13. You have more responsibility to follow						
your tasks assigned by the teacher.						
14. You have more time to learn, think,						
and practice your writing skills on your						
own.						
15. You enjoy writing when you write						
through the Weblog-based E-portfolio.						
16. You are satisfied with your writing on						
Weblog-based E-portfolio						
17. You like English writing more than	7					
ever, after you have practiced writing	- 1					
through the Weblog-based E-portfolio.	.					
18. After you have practiced writing						
through the Weblog-based E-portfolio, you		-				
feel that writing in English is not as		10	う			
difficult as you have thought previously.		U.S.				
Chen - c	Soil!	22				

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Other suggestions

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Thank you very much for your cooperation.

APPENDIX F

The Questionnaire of the Thai EFL Undergraduate Students' Opinions toward Learning through the Weblog-based E-portfolio (Thai version)

แบบสอบถามฉบับนี้ใช้สำหรับการเก็บข้อมูลส่วนตัวและความคิดเห็นของนักศึกษามหาวิทยาลัยไทยที่ ้ เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศที่มีต่อ<mark>การ</mark>เรียนผ่านบทเรียนแฟ้มสะสมผลงานอิเล็กทรอนิกส์โดยเว็บ บล็อก เพื่อเพิ่มทักษะการเขียนภาษาอังกฤษ แบบสอบถามประกอบไปด้วย 2 ส่วน ส่วนที่ 1: ข้อมูลส่วนตัว ้ส่วนที่ 2: ความคิดเห็นต่อเว็บบล็อกแฟ้มสะ<mark>สมผ</mark>ลงานอิเล<mark>็กทร</mark>อนิกส์

ส่วนที่ 1: ข้อมูลส่วนตัว

้ <mark>คำชี้แจง:</mark> โปรคเติมข้อมูลลงในช่องว่าง และ √หน้าคำตอบที่ท่านเลือก ในแต่ละคำถามตามความ เป็นจริง

1. เพศ: () ชาย () หญิง

- 2. คุณอายุเท่าไร:
- 3. เรียนอย่ชั้นปีอะไร
- 4. เรียนสาขาวิชาอะไร
- ันโลยีสร่ 5. คณเคยใช้บล็อกมาก่อนหน้านี้หรือไม่?
- () 1. ถ้าเคย โปรดระบุเหตุผลที่ท่านใช้
- () 2. ไม่เคยใช้
- 6. คุณเคยใช้แฟ้มสะสมผลงานหรือแฟ้มสะสมผลงานอิเล็กทรอนิกส์มาก่อนหน้านี้หรือไม่?
- () 1. ถ้าเลย โปรคระบุเหตุผลที่ท่านใช้.....
- () 2. ไม่เคยใช้

ส่วนที่ 2: ความคิดเห็นต่อการเรียนผ่านเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์

ดำชี้แจง: โปรดทำเกรื่องหมาย√ลงในช่องว่าด้านขวามือที่ตรงกับความกิดเห็นของท่านมากที่สุดตามกวามเป็นจริง เพื่อประ โยชน์ในการวิเคราะห์ข้อมูล โดยประมาณก่าของระดับกวามกิดเห็นด้วยดังนี้

1 = ไม่เห็นด้วยอย่างยิ่ง / 2 = ไม่เห็นด้วย / 3 = ไม่แน่ใจ / 4 = เห็นด้วย / 5 = เห็นด้วยอย่างยิ่ง

		ระดับ	มความคิ	ลเห็น	
	เห็น	เห็น	ไม่	ไม่	ไม่
ประเด็นความคิดเห็น	ด้วย	ด้วย	แน่ใจ	เห็น	เห็น
	อย่าง			ด้วย	ด้วย
	ຍິ່າ				อย่าง
					ยิ่ง
	5	4	3	2	1
1. เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิ <mark>กส์</mark> มีประโยช <mark>น์ต่อ</mark> การฝึก					
การเขียนในชั้นเรียน					
 2. เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์มีประโยชน์ในการฝึกฝน 					
ทักษะการเขียนนอกชั้นเรียน					
 เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ช่วยให้คุณเข้าใจขั้นตอน 					
การเขียนแบบเน้นกระบวนการดีขึ้น					
4. การเรียนการเขียนแบบเ <mark>น้นกระบ</mark> วนการในเว็บบล็อกแฟ้มสะสม					
ผลงานอิเล็กทรอนิกส์ช่วยให้ง <mark>านเขียนของคุณมีคุณภาพมากขึ้น</mark>	10	0			
 การสร้างและการใช้งานเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ 	2				
ด้วยตัวเองนั้นไม่ยาก	5				
6. เนื้อหาและแบบฝึกหัดในเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์					
เข้าใจง่ายไม่ทำให้คุณสับสน					
7.เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ช่วยเพิ่มข้อมูลเกี่ยวกับ					
หัวข้อที่จะเขียนให้คุณ					
yyy Ai aiy I a					
8. คุณสามารถค้นคว้าข้อมูลอื่นที่ต้องการต่องานเขียนของคุณจาก					
อินเตอร์เน็ตในขณะที่คุณกำลังเขียนลงบนเว็บบล็อกแฟ้มสะสมผลงาน					
อิเล็กทรอนิกส์ เช่นข้อมูลเกี่ยวกับหัวข้อที่เขียนหรือข้อมูลอื่นๆ					

		ระดับ	มความคิ	ดเห็น	
ประเด็นความคิดเห็น	เห็น	เห็น	ไม่	ไม่	ไม่
	ด้วย	ด้วย	แน่ใจ	เห็น	เห็น
	อย่าง			ด้วย	ด้วย
	้ยิ่ง				อย่าง
					ยิ่ง
	5	4	3	2	1
9. เว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์สามารถลดความวิตก					
กังวลในการเขียนภาษาอังกฤษ					
10. คุณรู้สึกไม่กลัวที่จะถามครูผู้สอนในสิ่งที่คุณไม่เข้าใจเกี่ยวกับการ					
เขียน					
11. คำแนะนำและข้อเสนอแนะจากเพื่อนของ <mark>คุ</mark> ณมีประ <mark>โ</mark> ขชน์ต่องาน					
เขียนของคุณทำให้มีคุณภาพสูงขึ้น					
12. คุณมีโอกาสปรึกษาครูผู้สอนเกี่ยวกับ <mark>ปัญ</mark> หาการเขียนเพิ่มมากขึ้น					
13. คุณมีความรับผิดชอบเพิ่มมาก <mark>ขึ้นใน</mark> การทำงานตามที่กรูผู้ส <mark>อ</mark> น					
มอบหมาย					
14. คุณมีเวลาในการคิด เรียนรู้และฝึ <mark>กฝนทักษะการเขียนด้วยตนเอ</mark> ง <u>_</u>					
เพิ่มมากขึ้น					
15. คุณสนุกสนานกับการ <mark>เขียนเมื่อ</mark> คุณเขียนลงบนเว็บบล็อกแฟ้มสะสม					
ผลงานอิเล็กทรอนิกส์	7.				
16. คุณพอใจกับงานเขียนของคุณบนเว็บ <mark>บล็อกแฟ้มสะสมผ</mark> ลงาน	2	2			
อิเล็กทรอนิกส์	5				
17. คุณชอบการเขียนภาษาอังกฤษมากขึ้นกว่าเดิมหลังจากที่คุณได้ฝึก	4				
การเขียนแบบลงบนเว็บบลี่อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์					
18. หลังจากที่คุณได้ฝึกการเขียนลงบนเว็บบล็อกแฟ้มสะสมผลงาน					
อิเล็กทรอนิกส์แล้ว คุณคิดว่าการเขียนนั้นไม่ยากอย่างที่เคยคิด					

ข้อเสนอแนะอื่นๆ

.....

ขอบคุณที่ให้ความร่วมมือในการตอบแบบสอบถาม

APPENDIX G

The Guided Questions of Reflective Journal (English version)

1. Did writing through the Weblog-based E-portfolio help you to produce a higher quality writing product? If yes, how? If not, why not?

2. Describe your feeling towards the practicing process writing through the Weblogbased E-portfolio. How do you like or dislike it?

3. What are your suggestions towards practicing writing through the Weblog-based E-portfolio?



APPENDIX H

The Guided Questions of Reflective Journal (Thai version)

 กุณกิดว่าการเขียนลงบนเว็บบล็อกแฟ้มสะสมผลงานอิเล็กทรอนิกส์ช่วยกุณสร้างงานเขียนที่มี กุณภาพขึ้นหรือไม่อย่างไร ถ้าช่วยช่วยอย่างไร ถ้าไม่ช่วย เพราะเหตุใด

ให้คุณอธิบายความรู้สึกต่อการฝึกเขียนแบบเน้นกระบวนการลงบนเว็บบล็อกแฟ้มสะสมผลงาน
 อิเล็กทรอนิกส์ว่าคุณชอบหรือไม่อย่างไร

 3. ให้คุณเขียนข้อเสนอแนะต่างๆต่อการฝึกการเขียนนอกชั้นเรียนโดยใช้เว็บบล็อกแฟ้มสะสม ผลงานอิเล็กทรอนิกส์



APPENDIX I

The Checklist Form of the Weblog-based E-portfolio for the experts

in English Language Teaching Field

Instructions: Read each statement in the form, then put a check mark ($\sqrt{}$) which best

describes your opinions about each statement in the spaces provided.

Statement	Check	mark (√)	Comments
	Appropriate	Inappropriate	
1. The contents in the Weblog-based E-portfolio			
are appropriate to be used in practicing writing.			
2. The instructions in the Weblog-based E-			
portfolio are appropriate.			
3. There are varieties of activities and exercises in			
the Weblog-based E-portfolio.			
4. The exercises and assignments are practical in			
the real practice of the writing.	100		
5. Pictures and videos in the Weblog-based E-			
portfolio match the content.	asu		
6. Text fonts and text colors motivate the students			
to learn.			
7. There are a variety of materials and resources			
available to students to gain more knowledge			
about what they do not know.			
8. In overall, the Weblog-based E-portfolio is			
clear and easy to understand for students.			

APPENDIX J

Self-assessment Checklist (English version)

Instructions: Read each statement in the form, then put a check mark ($\sqrt{}$) which best

describes your writing assignment about each statement in the spaces provided.

Statement	Check	mark ($$)
	Yes	No
1. The writing has at least 80 words.		
2. The writing contains Topic sentence, Supporting		
sentences and Concluding sentence.		
3. Topic sentence clearly stated.		
4. The writing has enough Supporting sentences to		
support the Topic sentence.		
5. Concluding sentence correspond to Topic sentence.		
6. I make the reader understand clearly by using		
picture, sound, or video.		
7. The spelling is correct.	1	
8. The sentences start with a capital letter /end with a		
period, question mark, or exclamation mark.	100	
9. The sentences have the appropriate connector words.	~	
10. I have checked my writing and it makes sense.	0	
11. The writing has at least 1 In-text citation and 1		
Reference list. (For assignment 2)		
12. In-text citation and Reference list are correct. (For		
assignment 2)		

APPENDIX K

Self-assessment Checklist (Thai version)

คำชี้แจง: โปรดอ่านข้อความในตารางแล้วทำเครื่องหมาย√ในคำตอบที่เป็นจริงตามในงานเขียนคุณ

ข้อความ	ทำเครื่องหมาย($$)		
	ใช่	ใม่	
1. ในงานเขียนของคุณมีจำนวนกำ อย่างน้อย 8 <mark>0 กำ</mark>			
 ในงานเขียนของคุณ มีประโยคใจความสำคัญ ประโยคเนื้อหา 			
สนับสนุน และ ประโยกสรุป			
 มีประโยกใจกวามสำคัญ ในงานเขียนที่ชัดเจน 			
4. ประโยคเนื้อหาสนับสนุนมีเพียง <mark>พอต่</mark> อการสนับสนุนประโย <mark>กใจ</mark> ความ			
สำคัญ			
5. ประโยกสรุป ของกุณมีความเหมาะสมและสอดกล้องกับประโยก			
ใจความสำคัญ			
6. กุณทำให้ผู้อ่านเข้าใจง่ายขึ้ <mark>นโดยใช้</mark> ภาพ เสียง หรือ วิดีโอ			
7. การสะกดกำในงานเขียนของ <mark>คุณถูกต้อง</mark>	10		
 8. ในงานเขียนของคุณขึ้นประ โยคด้วยตัวพิมพ์ใหญ่/ จบประ โยคด้วย 	S		
ฟูลสต๊อป เควสชั่นมาร์ค หรือ อื่นๆ วอยเทคโบโลยีล			
9. ประโยกในงานเขียนของกุณมีกำเชื่อมประโยกที่เหมาะสม			
10. คุณได้ตรวจทานงานเขียนของคุณแล้วว่าเหมาะสม			
11. ในงานเขียนของคุณมีอย่างน้อย 1 In-text citation และ 1 Reference			
list (เฉพาะงานเขียนบทที่ 2)			
12. In-text citation และ Reference list ในงานเขียนของคุณ ถูกต้องตาม			
รูปแบบ (เฉพาะงานเขียนบทที่ 2)			

APPENDIX L

The Guided Questions for Peer feedback (English version)

1) Does the writing contains topic, topic sentence, supporting sentence and concluding sentence?

Are the ideas related to the topic?

Are there enough details? If not, suggest him/her.

2) Are ideas and details arranged in an effective order and well-organized? If not, suggest him/her.

3) All the sentences are correct? (Spelling)

Are the sentences start with a capital letter/ end with a period, question mark, or exclamation mark?

Are the vocabulary appropriate? If not, suggest him/her.

4) Does this writing has both in-text citation and reference list? And correct? (For assignment2)

ะ รัว_{วั}กยาลัยเทคโนโลยีสุรุบาร

5) What do you like about this writing?

APPENDIX M

The Guided Questions for Peer feedback (Thai version)

 งานเขียนประกอบด้วย หัวข้อเรื่อง ประโยกใจกวามสำคัญ ประโยกสนับสนุน ประโยกสรุป หรือไม่, เนื้อหา สอดกล้องกับหัวข้อหรือไม่, มีเนื้อหาเพียงพอหรือไม่ (ถ้าไม่ให้แนะนำเพื่อน)

นื้อหาจัดเรียงอย่างเหมาะสม และเข้าใจง่ายหรือไม่ (ถ้าไม่มี ให้แนะนำเพื่อน)

การสะกดประโยกถูกต้องหรือไม่, ประโยกขึ้นต้นด้วยตัวใหญ่และมีเกรื่องหมายจบประโยกหรือไม่, กำศัพท์ที่
 ใช้เหมาะสมหรือไม่ (ถ้าไม่ ให้แนะนำเพื่อน)

 4) ในงานเขียนนี้มี การอ้างอิงในตัวเนื้อความและการอ้างอิงในตอนท้ายหรือไม่ (ถ้ามีถูกต้องหรือไม่ ถ้าไม่มีให้ แนะนำเพื่อน) (เฉพาะงานเขียนบทที่2)

5) คุณชอบอะไรในงานเขียนนี้

APPENDIX N

Evaluation of the Efficiency of the Weblog-based

E-portfolio Lessons

1. E1/E2 Scores from the Individual Testing

Lesson	Student	Exercise (15 pts.)			Assignment	E1	E2	
		Ex.1	Ex.2	Ex.3	Total	(20 pts.)		
1	S1	4	4	5	13	17.5	77.78	76.38
Sport/	S2	3	4	5	12	15		
Fitness	S3	2	F 4	4	10	13.33		
2	S1	3	4	5	12	15	75.56	73.62
Automotive	S2	3	5	4	12	15		
Technology	S3	3	4	3	10	14.17		

2. E1/E2 Scores from the Small-group Testing

Lesson	Student	Exercise (15 pts.)			Assignment	E1	E2	
		Ex.1	Ex.2	Ex.3	Total	(20 pts.)		
1	S1	5	4	5	14	17.5	78.89	78.47
Sport/	S2	5	5	3	13	17.5		
Fitness	S3	3	5	4	12	S 15		
	S4	4 G	84h	A 3 J		15		
	S5	4	3	4	11	15		
	S6	2	4	4	10	14.17		
2	S1	5	4	4	13	17.5	77.78	77.08
Automotive	S2	4	3	5	12	17.5		
Technology	S 3	3	4	5	12	15		
	S4	4	4	4	12	15		
	S5	4	3	4	11	15		
	S6	3	4	3	10	12.5		

Lesson Student Exercise (15 pts.) Assignment **E1 E2** Ex.1 Ex.2 Ex.3 Total (20 pts.) **S**1 17.5 81.63 81.11 Sport/ 17.5 S2 Fitness **S**3 **S**4 17.5 S5 **S**6 17.5 **S**7 17.5 17.5 **S**8 **S**9 17.5 S10 S11 17.5 S12 17.5 S13 S14 17.5 S15 17.5 S16 17.5 S17. 17.5 S18 17.5 S19 17.5 S20 S21 17.5 S22 17.5 S23 17.5 S24 S25 S26 12.5 S27 17.5 S28 S29 S30 12.5 17.5 S31 S32 S33 S34 17.5 S35 12.5 S36 S37 17.5 S38 17.5

3. E1/E2 Scores from the Field Testing

1	Student	E	xercise	(15 pts	.)	Assignment	
		Ex.1	Ex.2	Ex.3	Total	(20 pts.)	
	S39	4	4	4	12	12.5	
	S40	4	4	4	12	17.5	
	S41	5	4	3	12	15	
	S42	4	4	5	13	15	
	S43	4	3	4	11	17.5	
	S44	4	4	4	12	17.5	
	S45	5	4	4	13	15	

Lesson	Student	E	xercise	(15 pt	s.)	Assignment	E1	E2
		Ex.1	Ex.2	Ex.3	Total	(20 pts.)		
2	S1	5	3	4	12	17.5	80.59	80.28
Automotive	S2	3	5	3	11	15		
Technology	S3	5	5	4	14	17.5		
	S4	4	5	4	13	15		
	S5	3	3	5	11	17.5		
	S 6	5	3	3	11	17.5		
	S 7	5	5	4	-14	15		
	S 8	3	5	4	-12	15		
	S9	3	3	4	10	17.5		
	S10	5	5	4	14	15		
	S11	5	5	4	14	17.5		
	S12	5	3	3	11	15		
	S13	3	4	5	12	15		
	S14	5	5	4	14	15		
	S15	3	3	5	11	17.5		
	S16	5	5	5	15	15		
	S17.	3	3	4	10	15		
	S18	5	3	4	12	C 17.5		
	S19	85	5 5	4	214 0	20		
	S20	5	3	3	11	15		
	S21	3	4	5	12	17.5		
	S22	4	5	3	12	17.5		
	S23	5	3	5	13	15		
	S24	3	4	4	11	12.5		
	S25	5	5	3	13	15		
	S26	3	3	4	10	15		
	S27	5	3	3	11	12.5		
	S28	5	4	4	13	17.5		
	S29	3	3	5	11	15		
	S30	5	3	4	12	15		
	S31	3	5	3	11	17.5		
	S32	5	5	4	14	15		

Student	Ε	xercise	e (15 pt	s.)	Assignment	
	Ex.1	Ex.2	Ex.3	Total	(20 pts.)	
S 33	4	5	4	13	17.5	
S34	5	3	5	13	15	
S35	5	5	4	14	15	
S 36	5	3	3	11	15	
S 37	5	5	4	14	17.5	
S 38	3	5	5	13	17.5	
S39	3	4	4	11	15	
S40	4	5	3	12	15	
S41	3	3	4	10	15	
S42	3	4	3	10	17.5	
S43	5	3	3	11	15	
S44	3	5	-4	12	20	
S45	3	3	5	11	17.5	

4. E1/E2 Scores from the Experiment

Lesson	Student	E	xercise	(15 nts		Assignment	E1	E2
	Student	Ex.1	Ex.2	Ex.3	Total	(20 pts.)		
1	S1	4	5	4	13	15	82.52	82.22
Sport/	S2	4	3	4	11	17.5		
Fitness	S3	5	4	5	14	17.5		
	S4	4	4	5	13	20		
	S5	5	4	4	13	20		
	S6	4	4	3	_11	15		
	S 7	5	5	4	14	15		
	S 8	5	4	5	14	12.5		
	S9	4	3	5	12	17.5		
	S10	7417	-5	4	-13	17.5		
	S11	4	5	4	13	20		
	S12	3	4	4	11	17.5		
	S13	4	4	4	12	17.5		
	S14	4	5	4	13	15		
	S15	5	3	4	12	17.5		
	S16	5	5	4	14	15		
	S17.	4	3	4	11	17.5		
	S18	3	5	5	13	15		
	S19	4	4	4	12	15		
	S20	5	5	3	13	17.5		
	S21	5	3	4	12	15		
	S22	3	4	4	11	17.5		
	S23	5	5	5	15	15		
	S24	4	4	3	11	15		

Student	E	xercise	(15 pts	.)	Assignment
	Ex.1	Ex.2	Ex.3	Total	(20 pts.)
S25	3	15	4	12	20
S26	4	3	4	11	15
S27	3	5	4	12	12.5
S28	4	4	4	12	15
S29	3	3	5	11	17.5
S 30	4	5	4	13	15
S31	4	3	4	11	15
S32	5	4	5	14	17.5
S 33	4	4	5	13	15
S34	5	5	3	13	17.5
S35	4	5	3	12	20
S36	5	5	3	13	15
S37	4	5	4	13	15
S38	5	3	3	11	15
S39	4	3	4	11	12.5
S40	5	4	5	14	17.5
S41	4	3	4	11	20
S42	4	3	4	11	20
S43	3	4	5	12	15
S44	5	4	5	14	15
S45	5	3	4	12	17.5
				7.	

Lesson	Student	Ε	xercise	(15 pt	s.)	Assignment	E1	E2
		Ex.1	Ex.2	Ex.3	Total	(20 pts.)		
2	S1	5	5	4	14	12.5	81.63	81.39
Automotive	S2	5	3	4	12	17.5		
Technology	S 3	4	3	4	-11	15		
	S 4	5	5	5	15	15		
	S5	5	3	5	13	17.5		
	S 6	3	5	4	12	20		
	S7	5	5	3	13	12.5		
	S 8	4	4	4	12	15		
	S 9	5	3	5	13	15		
	S10	5	4	3	12	12.5		
	S11	4	3	4	11	17.5		
	S12	3	5	5	13	20		
	S13	3	5	4	12	15		
	S14	3	5	4	12	15		
	S15	5	4	3	12	17.5		
	S16	5	3	3	11	15		
	S17.	4	5	4	13	17.5		
	S18	5	5	4	14	15		

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Student	E	xercise	e (15 pts	S.)	Assignment
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							-
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S19	5	3	4	12	17.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S20	5	3	4	12	20
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S21	3	3	5	11	17.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S22	3	5	4	12	20
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S23	5	3	4	12	17.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-	S24	5	3	3	11	17.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S25	5	5	5	15	17.5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S26	3	3	4	10	15
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		S27	3	5	4	12	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	S28	3	3	5	11	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	S29	5	5	4	14	17.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	S30	5	4	3	12	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		S31	3	5	3	11	17.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	S32	3	4	4	11	17.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		S33	3	3	5	11	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ī	S34	5	5	4	14	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		S35	5	- 4	4	13	17.5
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		S36	3	5	3	11	15
S39 5 3 4 12 15 S40 4 5 3 12 15 S41 5 5 4 14 17.5 S42 3 5 5 13 20 S43 3 4 4 11 15 S44 5 3 4 12 17.5		S37	3	5	5	13	15
S40 4 5 3 12 15 S41 5 5 4 14 17.5 S42 3 5 5 13 20 S43 3 4 4 11 15 S44 5 3 4 12 17.5		S38	3	5	4	12	15
S41 5 5 4 14 17.5 S42 3 5 5 13 20 S43 3 4 4 11 15 S44 5 3 4 12 17.5		S39	5	3	- 4	12	15
S42 3 5 5 13 20 S43 3 4 4 11 15 S44 5 3 4 12 17.5		S40	4	5	3	12	15
S43 3 4 4 11 15 S44 5 3 4 12 17.5		S41	5	5	4	14	17.5
S44 5 3 4 12 17.5		S42	3	5	5	13	20
		S43	3	4	4	11	15
S45 5 3 4 12 15		S44	5	3	4	12	17.5
		S45	5	3	4	12	15

ระระจักษาลัยเทคโนโลยีสุรุ่มใ

APPENDIX O

Writing Pre-test and Post-test Scores Results

	Pre-test and	Post-test scor	es - Rater A	
Student	Pre	-test	Post	-test
Number	20 Points	%	20 Points	%
S1	10	50.00	12.5	62.50
S2	12.5	62.50	17.5	87.50
S3	7.5	3 7.50	17.5	87.50
S4	10	5 0.00	15	75.00
S5	10	50.00	12.5	62.50
S6	12.5	62.50	17.5	87.50
S7	10	50.00	15	75.00
S8	7.5	37.50	12.5	62.50
S9	5	25.00	10	50.00
S10	7.5	37.50	12.5	62.50
S11	10	50.00	15	75.00
S12	12.5 _	62.50	12.5	62.50
S13	7.5	37.50	12.5	62.50
S14	12.5	62.50	15	75.00
S15	_10	50.00	15	75.00
S16	12.5	62.50	17.5	87.50
S17	10	50.00	15	75.00
S18	10	50.00	12.5	62.50
S19	12.5	62.50	12.5	62.50
S20	12.5	62.50	150	75.00
S21	15	75.00	20	100.00
S22	10	50.00	12.5	62.50
S23	12.5	62.50	15	75.00
S24	15	75.00	15	75.00
S25	10	50.00	15	75.00
S26	10	50.00	17.5	87.50
S27	12.5	62.50	17.5	87.50
S28	7.5	37.50	12.5	62.50
S29	12.5	62.50	20	100.00
S30	10	50.00	17.5	87.50
S31	7.5	37.50	12.5	62.50
S32	7.5	37.50	12.5	62.50
S33	10	50.00	15	75.00
S34	15	75.00	17.5	87.50
S35	12.5	62.50	20	100.00

Student	Pre	-test	Post	-test
Number	20 Points	%	20 Points	%
S36	7.5	37.50	12.5	62.50
S37	10	50.00	15	75.00
S38	12.5	62.50	15	75.00
S39	7.5	37.50	12.5	62.50
S40	10	50.00	15	75.00
S41	10	50.00	12.5	62.50
S42	10	50.00	15	75.00
S43	10	50.00	12.5	62.50
S44	15	75.00	15	75.00
S45	12.5	62.50	17.5	87.50
Overall	10.56	52.78	14.83	74.16
Average				



	Pre-test and Post-test scores - Rater B								
Student	Pre-	-test	Post	-test					
Number	20 Points	%	20 Points	%					
S1	10	50.00	12.5	62.50					
S2	12.5	62.50	17.5	87.50					
S 3	10	50.00	15	75.00					
S4	10	50.00	15	75.00					
S 5	10	50.00	12.5	62.50					
S6	12.5	62.50	17.5	87.50					
S7 C	10	50.00	15 9	75.00					
S8	7.5	37.50	12.5	62.50					
S9	05	25.00	12.5	62.50					
S10	7.5	37.50	12.5	62.50					
S11	10	50.00	15	75.00					
S12	12.5	62.50	12.5	62.50					
S13	7.5	37.50	12.5	62.50					
S14	10	50.00	15	75.00					
S15	10	50.00	15	75.00					
S16	12.5	62.50	17.5	87.50					
S17	10	50.00	15	75.00					
S18	10	50.00	10	50.00					
S19	12.5	62.50	12.5	62.50					
S20	12.5	62.50	15	75.00					
S21	15	75.00	20	100.00					
S22	12.5	62.50	12.5	62.50					
S23	12.5	62.50	15	75.00					

Student	Pre	·test	Post	t-test
Number	20 Points	%	20 Points	%
S24	12.5	62.50	15	75.00
S25	10	50.00	15	75.00
S26	12.5	62.50	20	100.00
S27	12.5	62.50	17.5	87.50
S28	7.5	37.50	12.5	62.50
S29	12.5	62.50	20	100.00
S30	10	50.00	17.5	87.50
S31	7.5	37.50	12.5	62.50
S32	10	50.00	12.5	62.50
S33	12.5	62.50	15	75.00
S34	15	75.00	17.5	87.50
S35	12.5	62.50	20	100.00
S36	10	50.00	12.5	62.50
S37	12.5	62.50	15	75.00
S38	12.5	62.50	17.5	87.50
S39	7.5	37.50	15	75.00
S40	12.5	62.50	15	75.00
S41	10	50.00	12.5	62.50
S42	12.5	62.50	15	75.00
S43	12.5	62.50	15	75.00
S44	15	75.00	15	75.00
S45	12.5	62.50	20	100.00
Overall	11.00	55.00	15.06	75.29
Average				

Pre-test and Post-test scores - Rater C

Student	Pre-	test	Post	-test
Number	20 Points		20 Points	%
S1	10	50.00	15	75.00
S2	12.5	62.50	17.5	87.50
S3	10	50.00	17.5	87.50
S4	10	50.00	15	75.00
S 5	12.5	62.50	12.5	62.50
S6	12.5	62.50	17.5	87.50
S7	10	50.00	15	75.00
S8	10	50.00	12.5	62.50
S9	5	25.00	10	50.00
S10	7.5	37.50	12.5	62.50
S11	10	50.00	17.5	87.50

Student	Pre-test		Post-test	
Number	20 Points	%	20 Points	%
S12	12.5	62.50	12.5	62.50
S13	10	50.00	12.5	62.50
S14	12.5	62.50	15	75.00
S15	12.5	62.50	15	75.00
S16	12.5	62.50	17.5	87.50
S17	12.5	62.50	15	75.00
S18	12.5	62.50	10	50.00
S19	12.5	62.50	15	75.00
S20	12.5	62.50	15	75.00
S21	15	75.00	20	100.00
S22	12.5	62.50	12.5	62.50
S23	12.5	62.50	15	75.00
S24	12.5	62.50	15	75.00
S25	10	50.00	15	75.00
S26	12.5	62. <mark>50</mark>	20	100.00
S27	12.5	62.50	20	100.00
S28	7.5	37.50	12.5	62.50
S29	15	75.00	20	100.00
S30	10	50.00	15	75.00
S31	7.5	37.50	12.5	62.50
S32	10	50.00	12.5	62.50
S33	12.5	62.50	15	75.00
S34	15	75.00	17.5	87.50
S35	12.5	62.50	20	100.00
S36	10	50.00	12.5	62.50
S37	1012	50.00	15	75.00
S38	12.5	62.50	15	75.00
S39	7.5	37.50	17.5	87.50
S40	12.5	62.50	15	75.00
S41	10	50.00	12.5	62.50
S42	10	50.00	15	75.00
S43	12.5	62.50	15	75.00
S44	12.5	62.50	15	75.00
S45	12.5	62.50	17.5	87.50
Overall	11.27	56.39	15.17	75.83
Average				

APPENDIX P

Reflective Journal Responses

1. Did writing through the Weblog-based E-portfolio help you to produce a higher

quality writing product? If yes, how? If not, why not?

Student	Response
S 1	Yes. Writing on the Weblog-based E-portfolio helps me to write better.
	I can search for informationabout writing from the internet.
S2	Yes, the Weblog-based E-portfolio can help me to write well. I can
	search the Internet for all the information that I want for my writing.
	When I finish my writing, I can check the spelling online.
S3	Yes, my writing has improved through using the Weblog-based E-
	portfolio. I know how to write properly from the knowledge I have
	acquired in both lessons.
S4	Yes, it can help me to write a good quality writing product. These are
	good online lessons. It is very convenient for learning outside the
	classroom.
S5	Yes. It helps me a lot. Before this course, I knew nothing about writing.
	Now, I know a lot about writing, such as how to create a sentence, paragraph, etc.
S6	Yes, previously, I could not write a paragraph in English. Now, the
	Weblog-based E-portfolio helps me to produce a good paragraph. The
	Weblog-based E-portfolio provides me with the information and
	supplementary tools.
S7	Yes, writing through the Weblog-based E-portfolio helps me to produce
	good work. It helps me search for the information on the Internet. I can
	write on many topics, if I have the Internet to search for the
	information.

Student	Response
S 8	Yes, writing through the Weblog-based E-portfolio can produce a good
	quality writing product. It provides me with a lot of useful information.
	I can learn by myself. I can learn or do the exercises when I have a time
	at home. So, I can improve my writing skills using this tool.
S9	Yes, learning writing through the Weblog-based E-portfolio can help
	me write well. I can find almost everything on the Weblog-based E-
	portfolio. It motivates me to learn at any time.
S10	Yes. My writing is good, because I can practice many times with the
	various exercises in the Weblog-based E-portfolio at my dormitory.
S11	Yes. It helps me a lot. I can get in touch with the teacher on the
	Weblog-based E-portfolio. I can post a comment or leave a message to
	him online.
S12	Yes, the Weblog-based E-portfolio can help me to produce better
	writing. I think writing on it is better than writing on paper. It has
	many text fonts. The fonts are readable. However, some handwriting is
	difficult to read.
S13	Yes, the Weblog-based E-portfolio lessons helps me write a good
	paragraph. In the lessons, there are many useful videos and audios.
	They are suitable for the younger generation. I learn how to write better
	from these videos.
S14	Yes. It helps me a lot. I know the key concepts, the composition of a
	paragraph, how to summarize, and how to make a citation. The contents
	are easily comprehensible. The teacher put multimedia things, such as
	YouTube videos, clipart picture, and sound clip in the contents.
S15	Yes, it helps me with a lot of things. In the Weblog-based E-portfolio,
	there are several types of exercises. I think practice makes perfect. The
	exercises helps me to think. I learn a lot from the exercises. I can use
	this knowledge for my writing in real life.

Student	Response
S16	Yes, I think my writing has been improved by this course. In this
	course, technology is used, it is more convenient than using more
	traditional methods. I like to use the technology. I can learn the lessons
	by myself anywhere and anytime.
S17.	Yes. The Weblog-based E-portfolio is a very good tool to learn writing.
	I can learn the lessons' contents at home. When I have any problems, I
	can post online questions to the teacher.
S18	Yes, the Weblog-based E-portfolio helps me produce write better. I can
	use the Video on YouTube to make my readers understand what I
	mean. I can write or revise my work at any time. I can also discuss any
	problems with my teacher.
S19	Yes. The lessons are very attractive and interesting. They are well-
	organized. When I have no idea know how to write, I can go to the
	lessons and read them again. I can make a good writing product by
	using the contents from the Weblog-based E-portfolio lessons.
S20	Yes. It is a good choice for practicing writing in English. I can use the
	online dictionary. I can find a lot of things to help me on the Internet.
S21	Yes, it helps me. In my life, I don't have to write anything in English.
	However, after this course, I can write something in English using the
	knowledge provided in the lessons. I can construct a sentence or
	paragraph. I can also learn the meaning of many new words in this course.
S22	Yes. I think my writing has improved with using the Weblog-based E-
	portfolio. I like the contents and exercises sections. They are useful and
	I can access them anywhere and anytime.
S23	Yes, it helps me to improve the quality of my writing. Technology
	motivates me to learn. I can learn writing whenever I want to learn. It is
	convenient.

Student	Response
S24	Yes. I like to learn new vocabulary and there are so many new words. I
	can search or translate the meaning of new words with the online
	dictionary in the Weblog-based E-portfolio.
S25	Yes. It is useful. I can learn the lessons or write the assignments
	whenever I want. It's convenient. I think it is better than learning by
	using paper.
S26	Yes. It is a very interesting tool for writing. I have a chance to learn
	how to improve my Engli <mark>sh</mark> writing skills by myself outside the
	classroom.
S27	Yes, I can understand the lessons and vocabulary on the Weblog-based
	E-portfolio. Various items of information about writing are posted in
	the Weblog-based E-portfolio. Moreover, the Internet is the most
	important thing. I can find the information and pictures on the internet.
S28	Yes. This is a learning method which uses new technology in the
	classroom. It is convenient to learn by myself anywhere after class
	which is good for me. If I have any problems, I can leave a message for
	the teacher directly. Moreover, my work can be shared with others.
S29	Yes, because I can practice writing through the use of technology. I can
	learn or write anytime and anywhere. Students like doing things online.
S30	Yes. Online writing is a new learning method for me. It motivates me to
	learn and write more than with learning from books. I can write or read
	the lessons anywhere that I have found on the Internet. It isn't boring. I
	can decorate my Weblog with many beautiful themes and pictures.
S 31	Yes. It makes me confident to write. I feel more confident to write in
	English after using the Weblog-based E-portfolio. I can search for
	information from the Internet to support my ideas.
S32	Yes, it helps me. The information on the Weblog-based E-portfolio is
	easy to understand. I really enjoy learning. I can use Google, YouTube,
	and Wikipedia for my writing.

Student	Response
S33	Yes. There are many types of exercises, such as matching, multiple
	choice, etc. If I practice a lot, I will improve my skills. Practice makes
	perfect.
S34	Yes. I have more opportunity to learn how to write. When I have a
	problem, I can contact the teacher anytime.
S35	Yes, writing through the Weblog-based E-portfolio helps me to write
	better. Online dictionaries, guided supplementary information and links
	to useful websites are provided for me on the Weblog-based E-
	portfolio.
\$36	Writing with the Weblog-based E-portfolio can help me improve my
	writing. In the lessons, there are several exercises and assignments.
	They help me improve my writing skills. So, I can write well.
S37	Yes, it can help me to write well. Because I can practice many times on
	the Weblog-based E-portfolio.
S38	Yes. My skills have improved by using the information given me. I can
	learn by myself. I can do the exercises many times. My friends and the
	teacher can share their comments on my work.
S39	Yes. It is very convenient to learn about writing anywhere and anytime.
	I love it.
S40	Yes. I can use the information from the Internet to help me with my
	writing. Automotive and a second seco
S41	Yes, the Weblog-based E-portfolio helps me a lot. I can access the
	lessons and exercises anywhere. I think that using technology in the
	writing classroom provides me with a good opportunity to practice my
	writing all the time.
S42	Yes, the Weblog-based E-portfolio is very useful for improving my
	English writing. I do a lot of the online exercises. I always do the
	exercises. I think it helps me to improve my skills.

Student	Response
S43	Yes, because I can practice writing by using technology. I can learn or
	write anytime and anywhere. I can write quickly and I can erase it when
	I want. I like doing things online.
S44	Yes. I know a lot about writing now, for example, how to create a
	sentence, paragraph, and a summary. I can learn all these things
	wherever I can receive an Internet signal.
S45	Writing using the Weblog-based E-portfolio helps me to produce good
	work. It helps me to practice writing at anytime. I love to work in the
	early morning. I like using technology in the classroom.

2. Describe your feeling towards the practicing process writing through the Weblog-

based E-portfolio. How do you like or dislike it?

Student	Response
S1	I like writing process on the Weblog-based E-portfolio lesson. I really
	like the 5 stages in the process writing. It can make me produce a good
	paper at the end.
S2	Process writing is a very good method. I like it. There are several stages
	in learning to write. I like the way that we do the outline first, then we
	can write a first draft.
S3	I like the process writing. It makes my writing better. I can write
	correctly with the help of comments from the teacher and my friends.
	We can share our ideas with each other.
S4	I like this method. I like to practice process writing. It has five
	important stages. I always follow them.
S5	I like the process writing. I always follow the stages of the process
	writing (Pre-writing, Drafting, Revising, Editing, and Publishing). I
	think my English writing skills have improved.

Student	Response
S 6	I like process writing, because it provides a clear method for me. So, I
	know what I'm going to do. My work is now very well-organized.
S7	I really like process writing. I enjoy it. I have to write very carefully
	because my friends and people on the Internet can read my work and
	give their comments.
S8	I like practicing process writing using the Weblog-based E-portfolio, it.
	In the editing process, I am now more aware of how to correct my
	writing.
S9	I like process writing. All the stages in process writing make my
	writing better.
S10	I think I like process writing. I practiced many things in this course,
	such as how to make an outline, first draft, self-assessment, friend
	comment, editing and so on. My writing skills have improved.
S11	I like the process writing approach. I like all the stages. All of them are
	important in helping me write well.
S12	I like the stages in process writing especially the pre-writing stage.
	Good planning makes a great paper. So, I have to organize my ideas by
	making an outline. It works well. I have got all my ideas ready for
	writing my work.
S13	I like to learn process writing. Because the 5-stages of process writing
	help me to improve my writing skills.
S14	I have a positive feeling toward process writing. I know about the
	process writing from this course. I think it takes more time. However,
	my writing is now well-organized as a result.
S15	I like process writing because there are many stages to help me write
	well. For example, I have to think about the topic to make the outline or
	mind mapping before making a draft.
S16	I like process writing because it can help me write well. The stages are
	easy to understand and follow. I know what I should do first, and what
	should I do next.

S17 I like the editing stage in the process writing. It helps me to develop an awareness of what corrections I should make. S18 I like process writing. It provides immediate feedback from my friends and the teacher. I am heading in the right direction. S19 I like process writing. After this course, I know that I have to make an outline before writing. A first draft and a second draft are needed. Process writing is quite useful. S20 I like to practice process writing, because I have to understand the topic clearly that I have to write about. Then, I can do the outline, first draft, or second draft. I can use process writing in my daily life. S21 Practicing process writing. This is an interesting activity for editing my writing S22 I really like process writing. It can help me write better. S23 I like to learn process writing. I have the opportunity to see my friends writing. It is good, I can adapt my own writing. Moreover the comments from the teacher are very useful. S24 I like process writing. I practiced process writing using the Weblog-based E-portfolio, for example, I wrote an outline, first draft, self-assessment, peer/ teacher comments, editing and final draft. My writing skills have improved. S25 I like process writing. I love to do 2 or more drafts. I think 2 drafts are better than only one draft.	Student	Response
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		better than only one draft.
S27 I like process writing. It is a good thing. It makes my writing better.	S27	I like process writing. It is a good thing. It makes my writing better.
S28 I like process writing, because I have to divide my writing into 5 stages:	S28	I like process writing, because I have to divide my writing into 5 stages:
1) Pre-writing 2) Drafting 3) Revising 4) Editing 5) Publishing. My		1) Pre-writing 2) Drafting 3) Revising 4) Editing 5) Publishing. My
writing products are well-organized.		writing products are well-organized.

Student	Response
S29	I like learning to write by the process writing method. In process
	writing, I have a clear direction from the first stage to the fifth stage.
	My work is well-organized
S30	I like process writing using the Weblog-based E-portfolio. The teacher
	gives me some comments for every writing assignment. They are very
	useful. I know the weak points that I need to improve. So, I revise my
	writing based on the comments.
S31	I like it. It indicates the development of my writing at each stage. After
	the fifth stage, I can produce good writing.
S32	I like process writing. I like the all the stages because they make me
	organize my writing properly.
S33	I like process writing. Receiving comments is most important for me.
	When I give comments on my friends' writing, I can see their good
	points. Then I try to correct my writing based on my friends' good
	points.
S34	I like process writing. I know how to write better from the 5 stages in
	process writing. Before I write a first draft, I have to do the outline, etc.
S35	I like process writing. I feel excited when I see the teacher's and my
	friends' comments. All the comments are good. They help me to
	improve my writing.
S36	I like it. It makes my work well-organized.
S37	I like process writing. There are 5 stages. I know what I will do next. I
	love to follow the process writing method.
S38	I like to learn process writing online. Of course, process writing makes
	me write much better.
S39	I like it. I learn process writing from the Weblog-based E-portfolio
	lesson. I try to follow the process writing method. My writing is much
	better after following it.
S40	I like every stage in process writing. Every stage is important. It helps
	me to write much better.

Student	Response
S41	I like it. I need to have more awareness how to make corrections,
	because my friends can read my work. They can share their ideas with
	me.
S42	I like it. I think it develops a relationship between teacher and student.
S43	Before this course, I thought that English writing was very difficult. But
	the Weblog-based E-portfolio in this course provided me with process
	writing techniques for paragraph writing. It was very good.
S44	I like process writing on the Weblog-based E-portfolio. I know what
	I'm going to do. It makes my writing better.
S45	I like the process writing approach. I like to see my friends' comments.
	We can share our ideas with each other. My writing is better using this
	method.

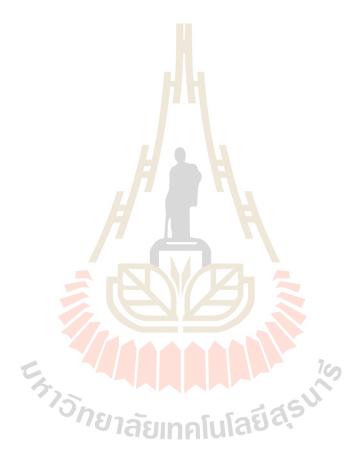
3. What are your suggestions towards practicing writing through the Weblog-based E-portfolio?

Student	Response
S1	There should be more examples in the weblog-based E-portfolio
	lessons.
S2	The teacher's explanation is too short. It is not enough for me.
S3	Learning through technology is a good thing, but the teacher should add
	more lessons. It will be better.
S4	It will be better if the Weblog-based E-portfolio has more challenging
	exercises.
S5	There should be more examples for the students. They need more
	examples for studying by themselves outside the class.
S6	I want the teacher to write more lessons. I want to learn more at home.
S7	The classroom time is limited. I need more instruction for doing
	exercises and assignments.

Student	Response			
S8	Overall, the Weblog-based E-portfolio is very good. If the teacher adds			
	more examples of how to write a paragraph, it will be easier to			
	understand.			
S9	Using technology in the classroom is a good idea. Most of the students			
	love it. My suggestion is that there should be more contents or more			
	lessons. It will be useful for the students who want to learn outside the			
	classroom.			
S10	I want the teacher to provide more examples in every section,			
	especially the assignment section. Two or three more examples of			
	paragraph writing will be very helpful.			
S11	It will be better if the teacher explain how to do everything.			
S12	The low Internet sig <mark>nal</mark> is my problem.			
S13	I need more examples in every section of the lessons for reading			
	outside the classroom.			
S14	It will be better if the teacher put more information for guidance.			
S15	Examples are needed in every section of both lessons.			
S16	There should be more exercises in the lessons. The exercises will			
	motivate the students to learn.			
S17	2 hours in class per week will be great! I want to learn with the teacher!			
S18	Various exercises should be added.			
S19	I need more guided instruction.			
S20	My suggestion is that there should be more lessons/contents. It will be			
	very helpful for the students who want to learn by themselves after this			
	course.			
S21	The Wi-Fi at my dorm doesn't work sometimes. So, I need to go to the			
	university and find a place that has Wi-Fi.			
S22	I want more writing exercises.			
S23	I need lessons about language structure or grammar. I want to know			
	about the tenses, prepositions, conjunctions, etc.			

S24I want the developer of the Weblog-based E-portfolio to put more details in both lessons. The students will understand it better.S25I have not got the internet at my dormitory. Moreover, sometimes the internet service at the university is very bad.S26It is quite a useful website. There should be 2-3 examples in each topic for the people who want to learn at home.S27I think everything is alright, but it will be better if the Weblog-based E- portfolio has more exercises with clear explanations.S28One hour a week is not enough. Two hours a week will be better.S29The problem is some functions of Blogger.com don't work well on iPad. The teacher should fix this problem.S30I want you to add more details and examples in both lessons. Now, they are not enough for me.S31I need more details in most of the contents.S32The teacher should add more examples. The students can read them at home. They will understand the lessons better.S33More exercises may encourage students to study.S34There should be more exercises.S35I want more examples in the lessons.S36My computer is broken. When I want to work, I need to go to the university and use its computer. It was difficult for me to do the assignment at home.S37I want more exercises.S38If the teacher added more examples of writing paragraphs, it will be easier to understand.S395 lessons would be better. The students will learn more about how to write in English.S40It is already good. I can only suggest that there are more lessons.	Student	Response	
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S40It is already good. I can only suggest that there are more lessons.	S39	5 lessons would be better. The students will learn more about how to	
		write in English.	
S41 I need more guided instructions to learn writing through the Weblog-	S40	It is already good. I can only suggest that there are more lessons.	
	S41	I need more guided instructions to learn writing through the Weblog-	
based E-portfolio.		based E-portfolio.	

Student	Response
S42	The teacher should add some contents about active and passive tenses.
S43	Sometimes, I have a problem with the Internet.
S44	I need more guided instruction to learn writing.
S45	More challenging exercises should be put in the Weblog-based E- portfolio lessons.



APPENDIX Q

Examples of the Weblog-based E-portfolio Lessons

1. Outlook of the Weblog-based E-portfolio lessons

- The first page of the Weblog-based E-portfolio lessons.

Home Lesson1	Warm Up	Lesson1-Sentence	Lesson1-Paragraph	Lesso	on1-Assignment
Lesson2-Warm Up	Lesson2-	Summary/Paraphrase	Lesson2-Citation/Refer	ence	Lesson2-Assignment
Training part	-	วันอังคารที่ 14 พฤศจิกายา	มพ.ศ. 2560		
1. READ THIS FIRST	-	Lessons Desci	ription		
2. Process Writing	_				
3. Rubrics			essons' Desc	ripti	on
4. How to create Weblo portfolio	g E-	Distance Street			10000
•	~				
Supplementary mate	erials	-		Hel	10!
1. Self-assessment				~	
2. Friend's Comment		end are consider		Contraction of the second	
3. Reflective Journal					
4. How to make Outline		Hi, everyone			
5. Friends' Address	8				
	100 C	TATe will leave also	ut WRITING for 2 le		

- Lesson description was provided for the participants.

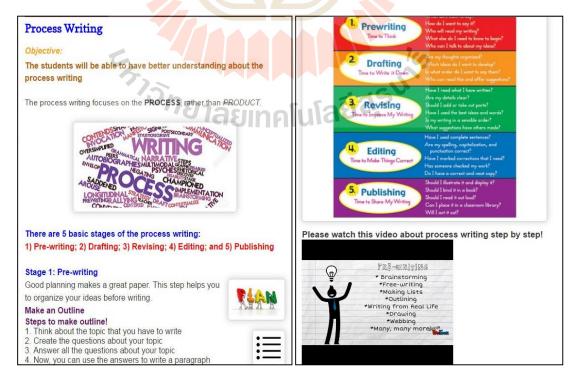
3. Reflective Journal	
4. How to make Outline	Hi, everyone!
5. Friends' Address	
- Uha	We will learn about WRITING for 2 lessons. You have to learn and do the warm up, the exercises, and the
More information	assignments of 2 lessons on the menu bar above.
Dictionary	The following outline is the lessons' description in each lesson.
Dictionary+Pronunciation	
Google	Lesson 1
YouTube	- Warm up
SUT	Sentence
Gmail	Paragraph
Blogger	Assignment
Translate	Lesson 2
Translate	Warm up
เลือกภาษา 🔻	Summary/Paraphrase
ขับเคลื่อนโดย Google แปลคาษา	Citation/Reference
	Assignment
Calendar	
วันหยุดในไทย	*Before you learn 2 lessons, you need to do The training first
วันนี้ 🚺 🕨 พฤศจิกายน 201	
<u>อา. จ. อ. พ. พฤ. ศ. ส.</u> 30 311 พ. 2 3 4 5	
6 7 8 9 10 11 12 13 14 15 16 17 18 19	I
20 21 22 23 24 25 26 27 28 29 30 1 5 2 3	
แสดงกิจกรรมใน	To Write
โซนเวลา: ครุงเทพ Googleปฏิทิน	
Teacher	

2. The Training Section

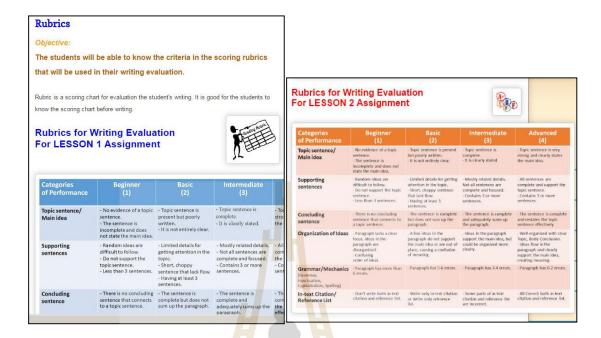
There was a training for the participants about the process writing step by step, the scoring rubrics for writing assessment and how to construct and use the Weblog-based E-portfolio.



- Process writing



- Scoring Rubrics for Writing Assessment

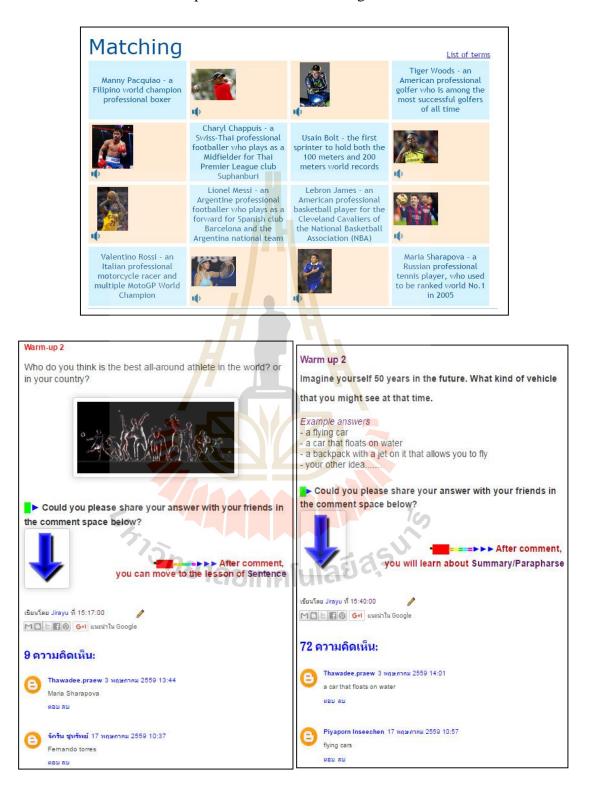


- Manual of How to create the Weblog-based E-portfolio



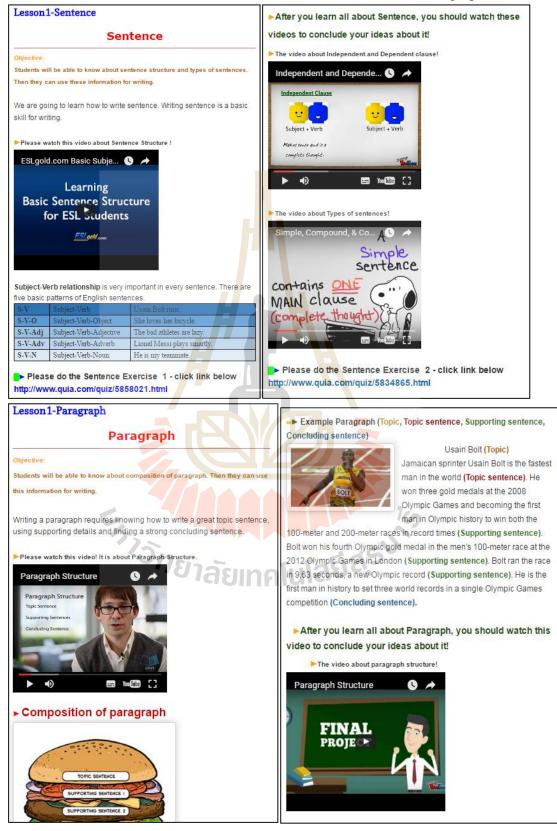
3. Warm-up Activities

There were various warm-up activities before learning in the lessons.



4. Content in Lesson 1

Content in lesson 1 was divided into two sections: Sentence and Paragraph



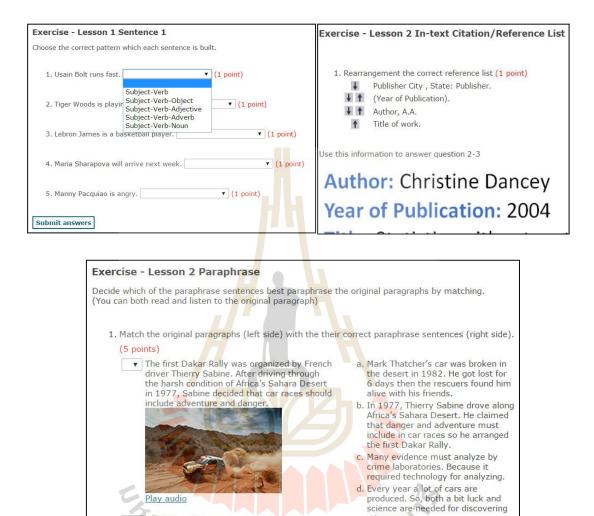
5. Content in Lesson 2

Content in lesson 2 was divided into two main sections: Summary/Paraphrase and Intext citation/Reference list



6. Exercises

There were various types of the exercises such as matching, re-ordering, fill-in, multiple choices and etc.



crime car.

of the driver.

e. There is an explosion of car under a New York City building. It destroyed

many things including the evidence

Play audio

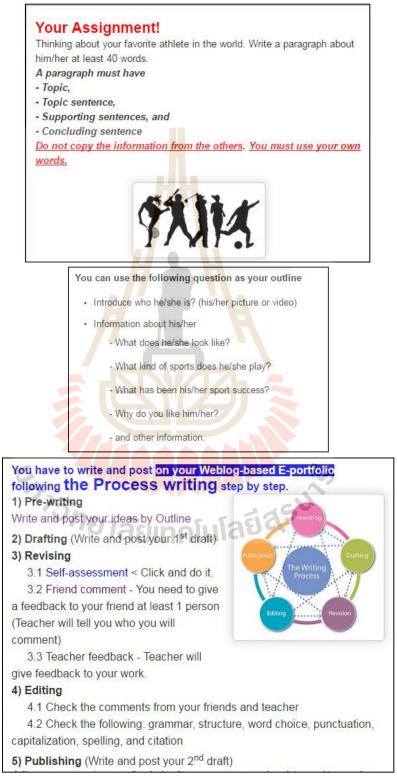
alive.

In 1982, a driver named Mark Thatcher

disappeared in Sahara after his car broke down. Six days later, a search team found him and his two teammates. They were still

7. Assignments

There was one writing assignment in each lesson. The participant were required to write following the process writing step by step.



8. Supplementary

There were supplementary materials provided for the participants

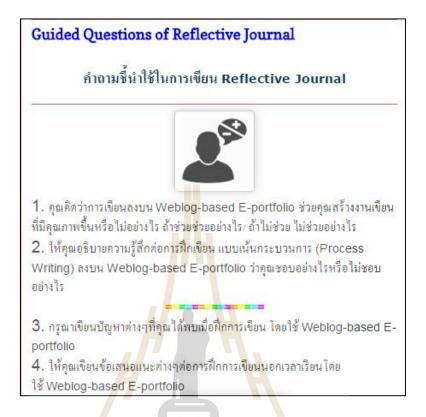
- Self-assessment

Self-assessment Checklist		
แบบประเมินงานเขียนตนเ	01	
Self-Assessmen Checklist		
คำขี้แจง: โปรดอ่านข้อความในตารางแล้วทำเครื่องหมาย ในงานเขียนของคุณ คุณสามารถทำใค้ในลิงค์ค้านล่างคา งานเขียนบทที่ 1 http://www.quia.com/sv งานเขียนบทที่ 2 http://www.quia.com/sv	มบทเรียน /739494	.html
		หมาย (√)
ข้อความ	ทาแทวอง ให่	ามาย (\) ไม่
1. ในงานเขียนของคณมีจำนวนคำ อย่างน้อย so คำ		
2. ในงานเขียนของคุณมีประโยคโตความสำคัญ (Topic sentence) ประโยคเนื้อหาสนับสนุน (Supporting sentences) และ ประโยคสรูป (Concluding sentence)		
SSGE DAS SOUSIAD CONCIUMINE SEMIGICE		

- Guided Questions of Peer Feedback



- Guided Questions of Reflective Journal



- URL of their peer (Link to their peer Weblog-based E-portfolio)

Friends' URL	
English IV cours	e students' Weblog-based E-portfolio address
Click on your friend's s	
1. B5870042	
2. B5870110	
3. B5872022	ลัยเทคโนโลยีสุรุ่น
4. B5872107	aunolulaus
5. B5872114	Commune
6. B5872152	
7. B5872169	
8. B5872183	
9. B5872190	
10. B5872206	
11. B5872237	
12. B5872244	
13. B5872312	
14. B5872428	
15. B5872442	
16. B5872480	
17. B5872510	
18. B5872565	
19. B5872619	
20. B5872633	
21 B5872640	

- Online dictionary



APPENDIX R

Examples of the Participants' Weblog-based E-portfolio

1. Outline

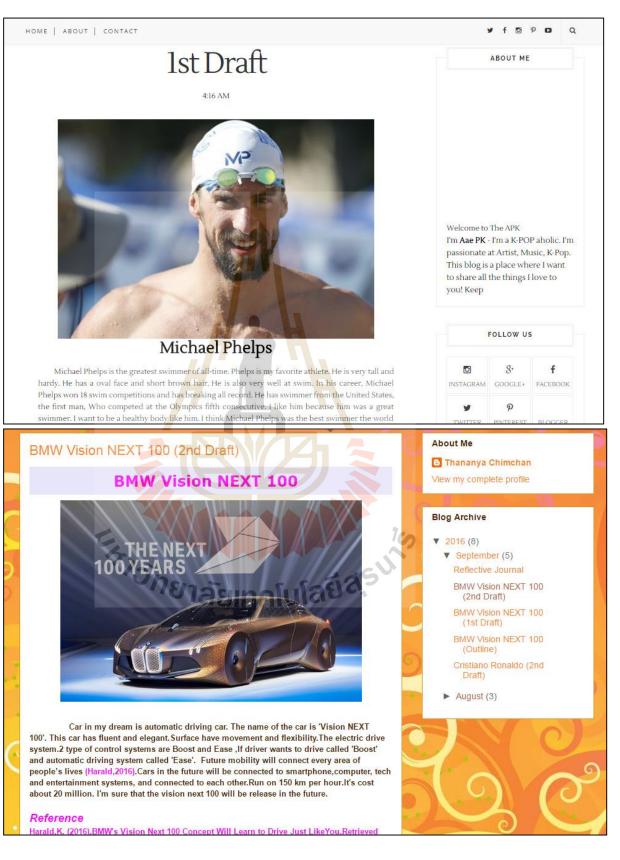
The participants posted the outline on their Weblog-based E-portfolio in the Prewriting stage

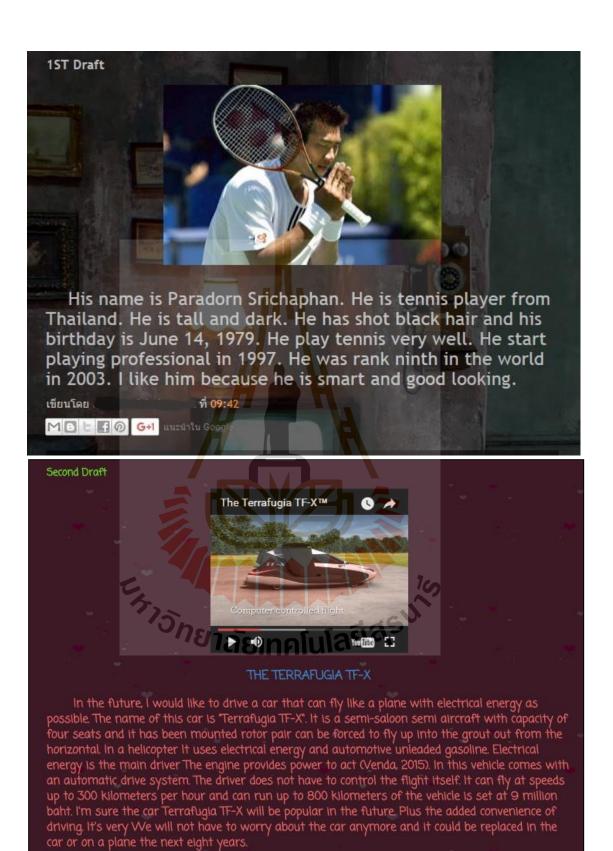




What kind of fuel does it use?

2. 1st Draft and 2nd Draft





Reference

Venda(2015).THE TERRAFUGIA TF-X ™ Auto fly descent exceptionally flight soon. Retrieved from http://www.http://www.xn-12c1bij4d1a0fza6gi5c.com

First Draft

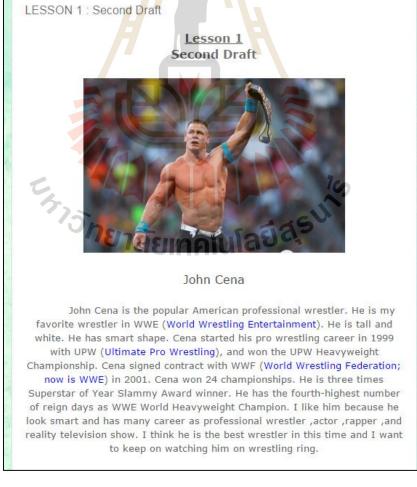
"Flying Car"

In the future, I would like to drive vehicle innovation. The name of this car is "Flying Car". It has four wheels, two wings and the wings can folded. This car used gasoline for the movement. It can run 185 kilometers per hour in the air and can run 105 kilometers per hour on the road. A two-seat plane, brace of 8 meters, but then folded wings width of approximately 2.3 meters to a maximum weight of about 650 kilograms (Denchai, 2011). This car will be sold around 7.5 million baht. I think Flying Car will be available in the next 10 years.

Reference

Denchai, M. (2011). Transition Roadable Aircraft. Retrieved from http://www.hilight.kapook.com/view/60601.





3. Peer and Teacher Feedback

Peers and teacher gave some comments to the 1st draft in the Revising stage

-	Jewiz Wolfgirl				
10	1.ประโยดสรุปยังไม่เพียงพอ				
	2.Reference ควรเขียนศาว่า Retrieved from ก่อนแล้วค่อยตามด้วยสิงค์เว็บ				
	3.ชอบการเขียนของเพื่อนคนนี้เพราะ มีข้อมูลที่หน้าสนใจอ่านง่าย มีรูปภาพประกอบสวยงาม				
	ທອນ				
0					
/.	TUNG FRIENDLY				
	-ใม่มี topic topic sentence, concluding ยังไม่ชัดเจน				
10.00	-Sources revealed that the reason is because Apple do BMW i3 body is small.				
	น่าจะเป็น Sources revealed b <mark>eca</mark> use BMW i3 body is small.				
	- And also made of Carbon fiber น่าจะเปลี่ยน of เป็น from				
	-Reference list หลัง ค.ศ.เติมจุด.หลังวงเล็บด้วยนะคะ -โดยรวมเขียนดีค่ะ เนื้อหาชัดเจน				
	ดอน				
	NO.20				
A	Jirayu				
۲	 -แก้ตามคอมเม้นของเพื่อนนะครับ เพื่อนเม้นได้ถูกต้องเลย 				
	-ข้อมูลและภาษาของ <mark>เรา ยั</mark> งไม่ค่อยเป็นค่ าพูดด้ วเราเองเท่าไร ไปปรับแก้นะครับ เอาข้อมูล				
	จาก outline มาใส่จะได้เป็นศาพูดเราเอง พวก รูปทรง ราคา ความเร็ว และอื่นๆ				
	ตอบ ลบ				
0	Wannaporn Boonyotha				
	Hannaborn Doonyoula				
Θ	1. เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป				
Θ	 1.เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยดสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 				
Θ	1.เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยดสรุป				
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 • •<	 1. เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2. เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3. ในเนื้อหายังไม่ได้เขียนการอ้างอิงในด้วเนื้อความ ดอบ Donlaya Klongkhamkiang 1. ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง 2. เนื้อหาจัดรียงได้เหมาะสม 				
	 เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี ในเนื้อหายังไม่ได้เขียนการอ้างอิงในดัวเนื้อความ ดอบ Donlaya Klongkhamkiang 1.ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง ใน้อหาจัดรียงได้เหมาะสม 				
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	 เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี ในเนื้อหายังไม่ได้เขียนการอ้างอิงในดัวเนื้อความ ดอบ Donlaya Klongkhamkiang 1.ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง ใน้อหาจัดรียงได้เหมาะสม 				
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	 เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี ในเนื้อหายังไม่ได้เขียนการอ่างอิงในด้วเนื้อความ ดอบ Donlaya Klongkhamkiang ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง เนื้อหาจัดรียงได้เหมาะสม ประโยคสรุปงานเขียนยังไม่ชัดเจน 				
	 เนื้อหาสอดคล่องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป เนื้อหาจัดเรียงได้เหมาะสมเข้าไจง่ายดี ในเนื้อหายังไม่ได้เขียนการอ่างอิงในด้วเนื้อความ ดอบ Donlaya Klongkhamkiang 1.ข้อมูลงานงานเขียนสอดคล่องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ชัดเจน ๑ป คำตอบ				
	 1.เนื้อหาสอดคล่องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3.ในเนื้อหายังไม่ได้เขียนการอ่างอิงในดัวเนื้อความ ๑อบ Donlaya Klongkhamkiang 1.ข่อมูลงานงานเขียนสอดคล่องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ชัดเจน คม คำตอบ Chanikan ขอบคุณค่า				
	 เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยดสรุป เนื้อหาอังไม่ได้เพิ่มาะสมเข้าโรงายดี ในเนื้อหายังไม่ได้เพียนการอ้างอิงไนด้วเนื้อความ ดอบ Donlaya Klongkhamkiang บ้อมสูงานงานเขียนสอดคล้องกับหัวเรื่อง เนื้อหาจัดรียงได้เหมาะสม ประโยดสรุปงานเขียนยังไม่ชัดเจน ดอบ Ainabu Classific Control (Control (C				
	 1.เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาอังใช้ไข้ได้เพิ่มาะสมเข้าโรงวัยดี 3.ในเนื้อหายังไม่ได้เพิ่มแก่กรอ้างอิงในด้วยนี้อดวาม ดอบ Donlaya Klongkhamkiang 1.ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ชัดเลน ดอบ ค่าตอบ 				
	 1.เนื้อหาสอดคล่องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3. ในเนื้อหายังไม่ได้เขียนการอ่างอิงในด้วเมื่อความ ๑อบ Donlaya Klongkhamkiang 1.ข่อมูลงานงานเขียนสอดคล่องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ขัดเจน ๑อบ ๑๐บ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐๐ ๑๐ ๓๐ 				
	 1.เนื้อหาสอดคล่องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3.ในเนื้อหายังไม่ได้เขียนการอ่างอิงในดัวเนื้อความ ๑อบ Donlaya Klongkhamkiang 1.ข่อมูลงานงานเขียนสอดคล่องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ขัดเจน ๑๗ ๑๗ Chanikan ขอบคุณค่า ๑๐บ Jirayu -ข้อมูลดรบถ้ามดี แต่ทำพารากราฟให้มี Topic sentence และ Concluding sentence ที่ขัดเจนด์วยนะ 				
	 1.เนื้อหาสอดคล้องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3.ในเนื้อหายังไม่ได้เขียนการอ่างอิงในด้วเนื้อความ คอบ Donlaya Klongkhamkiang 1.ข้อมูลงานงานเขียนสอดคล้องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ชัดเจน คม ค่าตอบ Difference Difference Main and an analysis Difference Dif				
	 1.เนื้อหาสอดคล่องกับหัวเรื่องดี แต่ยังไม่มีประโยคสรุป 2.เนื้อหาจัดเรียงได้เหมาะสมเข้าใจง่ายดี 3.ในเนื้อหายังไม่ได้เขียนการอ่างอิงในด้วเนื้อความ ๑อบ Donlaya Klongkhamkiang 1.ข่อมูลงานงานเขียนสอดคล่องกับหัวเรื่อง 2.เนื้อหาจัดรียงได้เหมาะสม 3.ประโยคสรุปงานเขียนยังไม่ขัดเจน ๑๗ ๑๗ Chanikan ขอบคุณค่า ๑๐บ Jirayu -ข้อมูลดรบถ้ามดี แต่ทำพารากราฟให้มี Topic sentence และ Concluding sentence ที่ขัดเจนด์วยนะ 				



4. Reflective Journal

-The participants were required to write their opinions in the spaces on their own Weblog-based E-portfolio after they had finished each writing assignment

Reflective Journal (ความคิดเห็น) 1. คณคิดว่าการเขียนลงบน Weblog-based E-portfolio ช่วยคณสร้างงานเขียนที่มี **ค**ณภาพขึ้นหรือไม่อย่างไร <u>ตอบ</u> การเขียนผ่านช่วยสร้างงานเขียนที่ดีขึ้นค่ะ ในคลาสมีการนำเทคโนโลยีมาใช้ในการส อน หนลิดว่ามันสะดวกสบายมากขึ้นกว่าการเรียนแบบปกติ ส่วนตัวแล้วชอบใช้เทคโนโลยี หนูสามารถอ่านหรือทำแบบฝึกหัดได้ทุกที่ ทุกเวลา สะดวกมาก 2. ให้คุณอธิบายความรู้สึกต่อการฝึกเขียน แบบเน้นกระบวนการ (Process Writing) ลง บน Weblog-based E-portfolio ว่าค<mark>ุณชอ</mark>บอย่างไรหรือไม่ชอบ อย่างไร ์ ตอบ ชอบการเขียนแบบเน้นกระบวนการมากค่ะ กระบวนการทั้ง 5 ช่วยให้งานเขียนออก มาได้ดี ทักษะการเขียนก็ดีขึ้น 3. กรุณาเขียนปัญหาต่างๆที่คุณได้พบเมื่อฝึกการเขียน โดยใช้ Weblog-based E-portfolio <u>ตอบ</u> ไม่มีปัญหาการใช้งานค่ะ 4. ให้คุณเขียนข้อเสนอแนะต่างๆต่อการฝึกการเขียนนอกเวลาเรียนโดยใช้ Weblogbased E-portfolio ตอบ อยากให้มีแบบฝึกหัดเพิ่มขึ้นมากกว่านี้อีกหน่อยค่ะ **Reflective Journal** 1. คุณคิดว่าก<mark>ารเขียนลงบน Weblog-based</mark> E-portfolio ช่วยคุณสร้างงานเขียนที่มี กุณภาพขึ้นหรือไม่อย่างไร ถ้าช่วยช่วยอย่างไร/ ถ้าไม่ช่วย ไม่ช่วยอย่างไร ผมคิดว่า การเขียนบน สามารถช่วยพัฒนางานเขียนของผม ได้ ผมสามารถค้นหาข้อมลทางอินเตอร์เน็ตในส่วนที่ผมไม่ร้ หรือว่าต้องการรู้เพิ่มได้ สามารถใช้ดิกชั้นนารี และการตรวจ การสะกดคำต่างๆ 2. ให้คณอธิบายความรัสกต่อการฝึกเขียน แบบเน้นกระบวนการ (Process Writing) ลง บน Weblog-based E-portfolio ว่าคุณชอบอย่างไรหรือไม่ชอบ อย่างไร การเขียนแบบเน้นกระบวนการผมชอบที่มีการแก้ไขโดยให้ เพื่อนและครคอมเม้นต์งานได้ เป็นสิ่งที่น่าสนใจในการได้ ความคิดเห็นของผ้อื่น มันช่วยในการแก้ไขงานของผมมาก กรุณาเขียนปัญหาต่างๆที่คุณได้พบเมื่อฝึกการเขียน โดยใช้ Weblog-based E-portfolio การเรียนและทำแบบฝึกหัดต่างๆ ต้องทำในสถานที่ ที่มี อินเตอร์เน็ต บางที ที่หอของผมเน็ตไม่ค่อยดี จึงเป็นปัญหา 4. ให้คุณเขียนข้อเสนอแนะต่างๆต่อการฝึกการเขียนนอกเวลาเรียนโดยใช้ Weblog-based E-portfolio ้อยากให้มีหลายๆบทมากกว่านี้ ผมจะได้สามารถนำไปฝึกนอก เวลาได้มากกว่านี้ครับ

APPENDIX S

List of Experts

Name	Position	Instrument Examined
Dr. Suksan	• Lecturer at School of	- The Weblog-based E-
Supasetseree	Foreign Languages,	portfolio
	Suranaree University of	- Lesson plan
	Technology	- Writing tests
	•Unit Supervisor of the	- Questionnaire
	Foreign Languages Resource	- Reflective journal guided
	Unit (FLRU), Suranaree	questions
	University of Technology	- Scoring Rubrics (Rater)
Asst.Prof.Dr.	Lecturer at English Program,	- Questionnaire
Saisunee	Faculty of Humanities and	- Reflective journal guided
Termsinsuk	Social Sciences,	questions
	Nakhonratchasima Rajabhat	
	University	
Dr. Thinan	Lecturer at Department of	- Questionnaire
Nakaprasit	Western Languages, Faculty	-Reflective journal guided
	of Humanities and Social	questions
	Sciences, Burapha University	700
Dr. Dhirawit	Lecturer at School of Foreign	- The Weblog-based E-
Pinyonatthagarn	Languages, Suranaree	portfolio
	University of Technology	- Lesson plan
		- Writing tests
Mr. Thanaset	Lecturer at English Program,	- The Weblog-based E-
Chavangklang	Faculty of Humanities and	portfolio
	Social Sciences,	- Lesson plan
	Nakhonratchasima Rajabhat	- Writing tests
	University	
Mr. Nguyen Duy	Lecturer at Faculty of Liberal	- Scoring Rubrics (Rater)
Linh	Arts, Ubon Ratchathani	
	University	

CURRICULUM VITAE

Mr. Jirayu Kongsuebchart was born on November14, 1989 in Nakhon Ratchasima. He received a Bachelor of Arts in English with first-class honors in 2012 from Burapha University, Thailand.

In 2013, he enrolled in the M.A. program of English Language Studies at the School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology, Thailand. His research interests cover the areas of Technology Enhanced Language Learning (TELL) and teaching EFL writing.

