

The Effects of Project-Based Writing Instruction on Writing Ability of Thai EFL Undergraduate Students

ผลของการสอนการเขียนโดยใช้โครงงานที่มีต่อความสามารถทางการเขียนของนักศึกษาไทยระดับปริญญาตรีที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

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Abstract

This study aimed to investigate the effects of project-based writing instruction on writing ability of Thai EFL undergraduate students and explore the attitudes of Thai EFL undergraduate students towards project-based writing instruction. This study employed a one-group, pre-test post-test design to collect both quantitative and qualitative data. The sample of the study was 24 first-year undergraduate students at a public university in Bangkok in the first semester of the academic year 2019. Three research instruments were created to elicit data including a writing ability pre-test and post-test, an attitude questionnaire, and a semi-structured interview protocol. The findings revealed that after the implementation of project-based writing instruction, the students' writing ability increased with statistical significance and they had positive attitudes towards project-based writing instruction. Based on such findings, it could be concluded that project-based writing instruction could be effectively implemented to enhance writing ability of Thai EFL undergraduate students.

Keywords: project-based learning, writing instruction, writing ability, EFL students

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาผลของการสอนการเขียนโดยใช้โครงงานที่มีต่อความสามารถทางการเขียนของนักศึกษาไทยระดับปริญญาตรีที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ และสำรวจทัศนคติของนักศึกษาไทยระดับปริญญาตรีที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศต่อการสอนการเขียนโดยใช้โครงงาน งานวิจัยชิ้นนี้เป็นงานวิจัยแบบกลุ่มทดลองกลุ่มเดียว วัดผลก่อนและหลังการทดลองโดยเก็บข้อมูลทั้งเชิงปริมาณและเชิงคุณภาพ กลุ่มตัวอย่างคือนักศึกษาปริญญาตรีชั้นปีที่ 1 จำนวน 24 คนที่กำลังศึกษาในภาคการศึกษาที่ 1 ปีการศึกษา 2562 ณ มหาวิทยาลัยแห่งหนึ่งในกรุงเทพมหานคร เครื่องมือวิจัยที่ใช้ได้แก่ แบบทดสอบความสามารถทางการเขียนก่อนและหลังการเรียนแบบสอบถามทัศนคติ และแบบสัมภาษณ์แบบกึ่งโครงสร้าง ผลการวิจัยพบว่าความสามารถทางการเขียนของนักศึกษาเพิ่มขึ้นอย่างมีนัยสำคัญทางสถิติหลังจากการทดลองการสอนการเขียนโดยใช้โครงงาน และนักศึกษามีทัศนคติเชิงบวกต่อการสอนการเขียนโดยใช้โครงงาน จากผลการวิจัยดังกล่าวสามารถสรุปได้ว่าการสอนการเขียนโดยใช้โครงงานเป็นวิธีการสอนที่มีประสิทธิภาพวิธีหนึ่งซึ่งสามารถนำไปใช้ในการพัฒนาความสามารถทางการเขียนของนักศึกษาไทยระดับปริญญาตรีที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศได้

คำสำคัญ: การสอนการเขียนแบบใช้โครงงานเป็นฐาน, ความสามารถทางการเขียน, ผู้เรียนที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

Introduction

In the 21st century, English language skills play an important role in all aspects of people's lives. Graham and Perin (2007) posited that one of the language skills critical in the school and workplace is writing. It is a tool for learning subject matters to express opinions in essays, reports, research papers, and examinations and for professionals to communicate with others through e-mails, reports, and presentations. However, the English writing skill is considered the most problematic skill for EFL students to master (Watcharapunyawong & Usaha, 2013; Benchachinda, 2012).

There are different reasons why writing skill is not easy to develop. For example, the traditional grammar translation method focusing on rote memorization used to teach writing may make it difficult for language learners to apply their knowledge of writing to complete new tasks in other areas (Mala, 2017). Also, learners may lack knowledge of how to generate ideas, how to improve paragraph unity, and how to use correctly use the language including word choice, grammar, and mechanics (Seensangworn & Chaya, 2017), and some may be unfamiliar with writing conventions of different text types in English (Richards, 2015). With the differences in textual patterns, sentence structures, background knowledge towards topics, patterns of cohesion, and word choices, language learners may have a hard time trying to accomplish a writing task, thus forcing them to rely on their first language to process English writing (Watcharapunyawong & Usaha, 2013).

To overcome all problems, project-based learning (PBL), which is based on the theory of social constructivism supporting students to construct knowledge through interaction with other people (Beckett & Miller, 2006), is a promising method to foster students' writing ability. The benefits of implementing PBL have been reported in the literature. Firstly, it improves language skills, writing and others alike. Secondly, while working in groups to accomplish the goal of a project, students have a chance to develop other crucial skills such as collaboration,

creativity, critical thinking, and communication (Sumarni, 2015). Thirdly, the product for each project is a real-world task which can range from lower-level projects to higher-level projects (Buck Institute for Education, 2019).

In the context of EFL, several studies have established the effectiveness of PBL in terms of its positive impacts on language learning process. Aghayani and Hajmohammadi (2019), to begin with, revealed that PBL enhances students' writing ability through the environment of collaborative learning. Affandi and Sukyadi (2016) found that PBL helped students improve writing ability, think contextually, develop their critical thinking skills, work in groups effectively, and foster their autonomous learning. Furthermore, Newprasit and Seepho (2015) indicated that PBL is beneficial for students as it makes them simultaneously improve their language proficiency and working skills such as teamwork, decision-making, and problem-solving skills. Last but not least, most students tend to have positive attitudes towards PBL (Wongdaeng & Hajihama, 2018; Newprasit & Seepho, 2015).

In light of the related literature review, the present study aimed at investigating the implementation of project-based writing instruction to determine if this method can be effectively implemented to enhance language learners' writing ability.

Objectives of the Study

1. To investigate the effects of project-based writing instruction on writing ability of Thai EFL undergraduate students
2. To explore the attitudes of Thai EFL undergraduate students towards project-based writing instruction

Research Methodology

Participants

The population in this study was 962 Thai EFL undergraduate students, both male and female, who ranged in age from 18 to 20 years old and who were first-year student at a public university in Bangkok, Thailand. The study sample consisted of 24 students who constituted an intact group assigned to the researcher who taught a course entitled "EN131 Basic Writing" in the first semester of the academic year 2019.

Research Instruments

There were three instruments in this study as follows:

1. A pre-test and post-test of writing ability

A pre-test and post-test of writing ability was implemented to assess students' ability to write four text types, namely 1) a procedural paragraph, 2) a descriptive paragraph, 3) a narrative paragraph, and 4) a persuasive paragraph. The test was constructed based on the concept of language ability (Bachman & Palmer, 1996). Students were required to write each text type in 150-200 words. The total scores of writing ability were 20 points rated from five criteria: content, organization, word choice, grammatical accuracy, and mechanics adapted from the criteria of Weigle (2002). This test was validated by three experts in language teaching and testing using the Item-Objective Congruence (IOC) value. The overall IOC value was 0.67 indicating that this test was acceptable.

2. An attitude questionnaire

An attitude questionnaire was distributed to investigate students' attitude towards the use of project-based writing instruction. This questionnaire was developed based on the instructional model of project-Based writing instruction and a previous study carried out by Siritaratn (2007). The questionnaire consisted of 30 items arranged in a five-point Likert scale of '5' strongly agree, '4' agree, '3' neutral, '2' disagree, and '1' strongly disagree. There were five parts in the attitude questionnaire exploring the improvement of students' writing ability (items 1-2), students' satisfactions with the three stages of PWI including planning, developing, and evaluating the project (items 3-23), and the perceived advantages and disadvantages of working on a project (items 24-30). This questionnaire was validated by three experts using the Item-Objective Congruence (IOC) value. The overall IOC value was 1.00 indicating that this questionnaire was highly acceptable.

3. A semi-structured interview protocol

A semi-structured interview protocol was employed to gain in-depth data to further support the attitude questionnaire. The questions included in the semi-structured interview protocol were adapted from Poonpon (2017). There were six questions regarding students' overall attitudes towards PWI (item 1), students' attitudes towards their writing ability after the use of PWI (item 2), students' attitudes towards the three stages of teaching (items 3-5), and students' attitudes towards advantages and disadvantages of working on a project (item 6). These interviews were conducted with nine students with the highest, moderate, and lowest scores in the class (three students from each group). The Thai language was used to enable students to overcome language barriers to ensure richness of the data. All questions of the semi-structured interview protocol were validated by three experts using the Item-Objective Congruence (IOC) value. The overall IOC value was 1.00 indicating that the questions of the semi-structured interview protocol were highly acceptable.

Data Collection

The data were collected for 15 weeks at a public university in Bangkok. The steps involved in data collection are presented in Table 1 below.

Table 1: The steps involved in the 15-week data collection

Week	Details
Week 1	<ul style="list-style-type: none"> ➤ A pre-writing test of the procedural paragraph and the descriptive paragraph was administered to students. ➤ Students were given an orientation about the course and explained about the PWI (Project-based writing instruction) model.
Week 2 -14	<ul style="list-style-type: none"> ➤ Students studied four units in the semester. Each unit took three weeks to finish. The details were as follows: <ul style="list-style-type: none"> - In weeks 2-4, students studied writing a procedural paragraph and completed tasks as well as a mini-project (creating a brochure). - In weeks 5-7, students studied writing a descriptive paragraph and completed tasks as well as a mini-project (creating a booklet).

Week	Details
	<ul style="list-style-type: none"> - In week 8, it was a mid-term examination. - In weeks 9-11, students studied writing a narrative paragraph and completed tasks as well as a mini-project (creating a poster). - In weeks 12-14, students studied writing a persuasive paragraph and completed tasks as well as a mini-project (creating a review). ➤ In each unit, students followed the three stages of PWI: planning the project, developing the project, and evaluating the project. ➤ In each unit, there was a student-teacher conference to discuss the mini-project and any problems they may have.
Week 7	➤ A post-writing test of the procedural paragraph and the descriptive paragraph was administered to students.
Week 9	➤ A pre-writing test of the narrative paragraph and the persuasive paragraph was administered to students.
Week 15	<ul style="list-style-type: none"> ➤ Students presented their final project based on the question “What will you do if you want to promote Thailand among foreigners?” ➤ A post-writing test of the narrative paragraph and the persuasive paragraph was administered to students. ➤ An attitude questionnaire was distributed to students. ➤ A semi-structured interview protocol was conducted.

Data Analysis

In this study, a mixed-research method was employed. Regarding quantitative data, the pre-test and the post-test scores of writing ability were analyzed using the paired-sample *t*-test, while data elicited with an attitude questionnaire was analyzed using descriptive statistics of means and standard deviations. As for qualitative data obtained with a semi-structured interview protocol, content analysis was used in the analysis.

Conceptual Framework

In the present study, a framework named Project-Based Writing Instruction or PWI is developed. To design PWI, three frameworks of project-based learning (Busciglio, 2016; Stoller, 2012; Fried & Booth, 1986) have been synthesized and finally presented in three main stages. Firstly, the planning stage encourages students and teacher to determine the final outcomes. Then, the instructor drives questions to have students come up with the ideas and teaches related contents and language. Secondly, the developing stage requires students to collect information, analyze information, and develop the project. Lastly, the evaluating stage allows students to present and evaluate the project and write a reflection to record what they have learned. As regards writing instruction, there are five main stages of writing process: prewriting, drafting, revising, editing,

and publishing synthesized from the concepts proposed by (Ferris and Hedgcock, 2014, Williams, 2003, and Watkins-Goffman and Berkowitz, 1990). In addition, two strategies are included. The first one is IMSCI standing for inquiry, modeling, shared writing, collaborative writing, and independent writing proposed by Read (2010). This strategy emphasizes scaffolding which is a concept of working in the zone of proximal development (ZPD) indicating what students can or cannot do, and what they can attain independently or with the help of peer and the instructor (Vygotsky, 1978). The second strategy is metacognitive strategy (MTS) comprising the stages of planning, monitoring, and evaluating designed by Mu (2005). These two strategies have been combined in the model to support writing process and to enable students to critically think about their writing. The framework is shown in Figure 1.

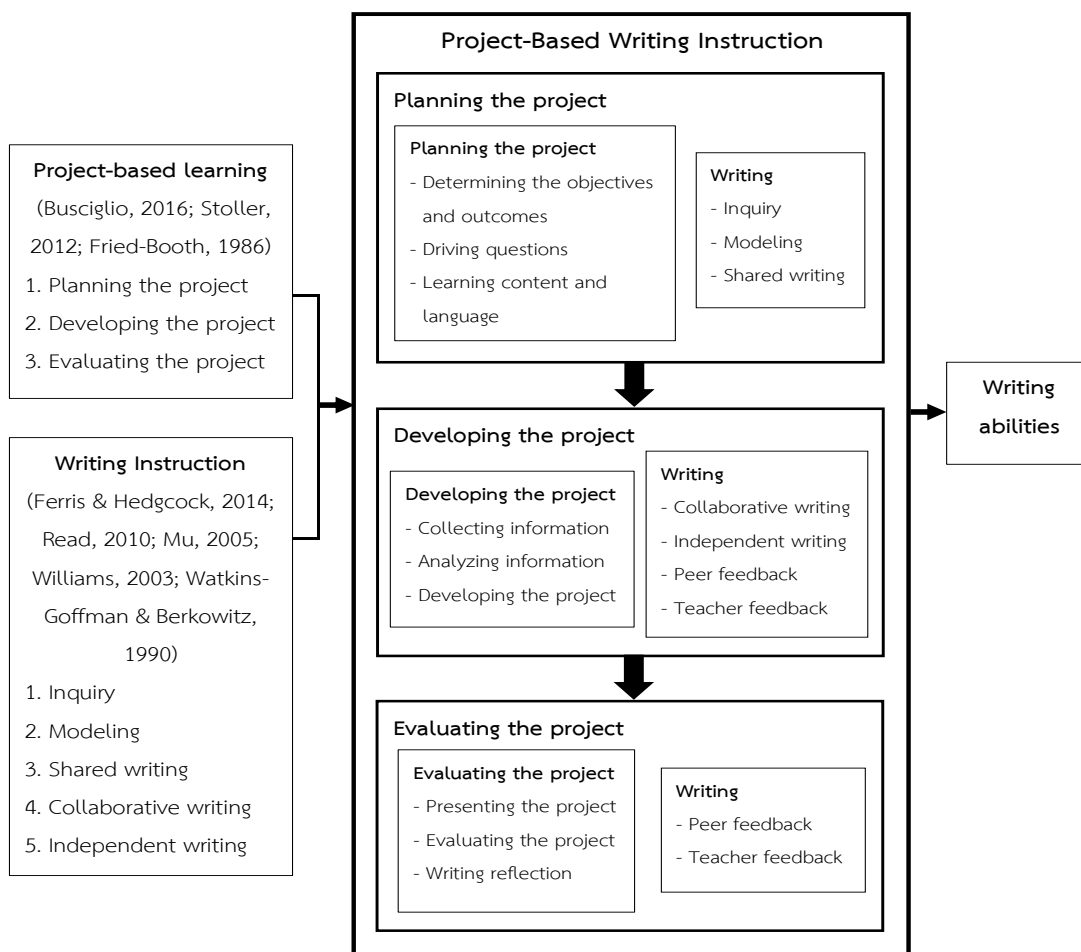


Figure 1: The Framework of Project-Based Writing Instruction (PWI)

(Busciglio, 2016; Ferris & Hedgcock, 2014; Stoller, 2012; Read, 2010; Mu, 2005; Williams, 2003; Watkins-Goffman & Berkowitz, 1990; Fried-Booth, 1986)

Results

This section presents the results after implementing project-based writing instruction (PWI).

1. The effects of project-based writing instruction on students' writing ability

The post-test mean scores of all text types of writing were higher than the pre-test mean scores with statistical significance at 0.00 level as shown in Table 2.

Therefore, it could be assumed that the use of PWI enabled students to improve their writing ability.

Table 2: The pre-test and post-test mean scores of overall and each text type of writing

Text type	Pretest		Posttest		t	Sig.
	Mean	S.D.	Mean	S.D.		
Writing a procedural paragraph	6.58	2.30	12.18	2.20	9.27	0.000
Writing a descriptive paragraph	7.60	1.96	13.54	1.93	12.22	0.000
Writing a narrative paragraph	8.75	2.48	13.62	1.91	7.67	0.000
Writing a persuasive paragraph	8.45	1.91	14.31	1.64	14.05	0.000
Overall scores	31.39	5.95	53.66	4.92	17.01	0.000

* $p < 0.05$; $n = 24$

2. Attitudes towards project-based writing instruction (PWI)

Data were collected using the 30-item attitude questionnaire and six semi-structured interview questions to investigate students' attitudes towards PWI, including, the writing stages involved and advantages and disadvantages of working on a project. The results revealed that students had positive attitudes towards PWI as presented below.

2.1 Results from the attitude questionnaire

Descriptive statistics of mean and standard deviation indicated that on the overall students had positive attitudes toward project-based writing instruction (mean = 4.24; S.D. = 0.64). Students agreed that all stages of PWI could help them develop their writing ability. Also, they agreed that working on a project had both advantages and disadvantages. The results are demonstrated in Table 3.

Table 3: Students' attitudes towards project-based writing instruction (PWI)

Parts	Questionnaire items	Mean	S.D.
Part 1	Items 1-2: Students' attitudes towards their writing ability after the use of PWI	4.35	0.63
Part 2	Items 3-6: Students' attitudes towards the stage of planning the project	4.15	0.60
Part 3	Items 7-13: Students' attitudes towards the stage of developing the project	4.33	0.60
Part 4	Items 14-23: Students' attitudes towards the stage of evaluating the project	4.29	0.67
Part 5	Items 24-30: Students' attitudes towards advantages and disadvantages of working on a project	4.08	0.71
Total		4.24	0.64

2.2 Results from the semi-structured interview protocol

Qualitative data obtained from the semi-structured interview protocol were divided into four categories as follows:

2.2.1 Students' overall attitudes towards PWI

Overall, all students were satisfied with PWI. They believed that it was systematic and the objectives were clearly identified, and this enabled students to set the goals and more easily reach them, as can be seen in the following excerpt:

“Personally, I was OK with PWI since I saw what I had to do each week clearly in the course syllabus. I understood that we would learn the content and get a scenario to solve the problem in the first week. Then we would come back to meet our friends to discuss more about the scenario and help one another edit our writing and come up with the presentation in the second week. Lastly, we would give a presentation and show our product to the class. With these clear stages, it could help me prepare myself to learn.” (Student #4)

Furthermore, students were able to transform themselves to active agents while working on a project, as one of them described:

“I thought that doing project work was not boring. It was another way to present our writing in many types of products such as a booklet or brochure, which was more meaningful and interesting than sending only A4 paper to teacher. I could solve the problems and use my creativity fully.” (Student #5)

2.2.2 Students' attitudes towards their writing ability after the use of PWI

The results from the interviews showed that after the use of PWI, students' writing ability in terms of content, organization, word choice, grammatical accuracy, and mechanics could be improved. The most developed topics were content and organization as illustrated in the following excerpt:

“Oh, at the beginning of the course, I remembered that I did not know anything when I took the pre-test. I wrote all I wanted or all I could come up with. I did not know how to start or how to end the paragraph. In other words, I just guessed the answers. After the course, I felt that I was able to identify types of paragraphs. I also realized what I should write in a paragraph. I planned before writing. I knew there should be the topic sentence, supporting sentences, and conclusion to get a complete paragraph.” (Student #3)

2.2.3 Students' attitudes towards the three stages of teaching

The results from the interviews revealed that students were satisfied with the three stages of teaching: planning the project, developing the project, and evaluating the project. Students mentioned that the stage of “developing the project” helped them write better the most since this stage required them to read the given scenario carefully to subsequently create their writing, presentation, and product. From this stage of teaching, students reported the benefits of receiving peer and teacher feedback as presented in the following excerpts:

“In addition to teacher feedback, I thought peer feedback helped me too. In my group, my friends and I would ask why they wrote like this. We would discuss and come to the conclusion.” (Students #9)

In addition, students mentioned the advantages of writing independently as follows:

“When I wrote on my own, it really helped me improve my writing because I could get hands-on experience and apply what the instructor had taught me into my writing.” (Students #1)

2.2.4 Students’ attitudes towards advantages and disadvantages of working on a project.

The results revealed that students realized there were various benefits they could reap while working collaboratively on a project, as exemplified below:

“I learned to work with others as a team. When we started working, we divided tasks based on our expertise. We shared everything we found and always helped one another. I thought I was lucky that my group never quarreled when working. Probably, we selected to work on what we could do the best, so we hardly had any problems to work together and felt fun.” (Students #9)

Moreover, working on a project could increase students’ responsibility as one of them described:

“I thought that I was more responsible because all assignments had deadlines. I could not act like a high-school student who could submit homework late. Also, I felt that when my friends made an appointment, I must join them to discuss each project so that we could help one another complete it.” (Students #2)

However, students revealed that at the beginning of the course, doing a project made them stressed because they were not familiar with the new style of teaching. One of them shared their experience below:

“I thought there were a lot of assignments that I needed to do when I learned this subject. I felt that I could not manage myself well to complete all of them. I was stressed. Help me, please. Three weeks per unit was too short. I needed more time. However, this was my feeling at the beginning of the course.” (Student #3)

Moreover, working on a project was time-consuming for some students:

“It was difficult for us to make an appointment, discuss the project, and work together. Moreover, sometimes when we met, we could not come up with any ideas. We were blank. So, it took a lot of time to complete the assigned project.” (Student #8)

Discussion and Conclusions

This study was conducted to assess the effect of project-based writing instruction (PWI) on students’ writing ability and attitudes. The discussion is based on two aspects: 1) the use of PWI to promote students’ writing ability and 2) students’ positive attitudes towards PWI.

1. The use of PWI to promote students’ writing ability

The results showed that the implementation of PWI had significant impacts on students’ writing ability. These results were consistent with the previous studies conducted by Aghayani and Hajmohammadi (2019), Affandi and Sukyadi (2016), and Newprasit and Seepho (2015). All of these studies investigated the effectiveness of PBL in the language classroom. They found that using the project-based learning approach can

enhance students' writing ability. Nevertheless, the results of this study seemed to be in contrast to a previous study conducted by Thitivesa (2014) who investigated the effects of project-based learning on students' writing ability in terms of mechanics, usage, and sentence formation in a content-based class at Rajabhat University and found that while working on project work, students had an opportunity to expose the texts, which helped them improve practicing mechanics and usage the most. Yet students had less improvement on sentence formation because writing in English requires the process of thinking about topic organization, linguistic features, word choice, and text types simultaneously. However, this current study found that students could construct their paragraphs well and develop their skills to write content and organize paragraphs the most.

Plausible explanations for these positive results could come from the theory of social constructivism which believes that language learners can develop through construction of knowledge while interacting with friends and the teacher (Beckett & Miller, 2006). When students worked together following the three stages of PWI, the learning process took place through sharing ideas, searching for information, giving feedback to friends' writing, and solving problems. In the environment of collaborative learning like this, students' language skills and other skills such as creativity, critical thinking, and communication could also be enhanced (Sumarni, 2015), and students may feel that they have become better at other skills that help make them complete the assigned tasks more easily.

2. Students' positive attitudes towards PWI

Based on both quantitative and qualitative findings, students had positive attitudes towards PWI. In this study, it seems that scaffolding was a key factor which influenced students' progress in English writing ability. When students understood the process of learning such as what they needed to do each week and had peer together with the instructor on a stand-by for help, they felt empowered and paid more attention to making an effort to reach the writing goals. Along the way, students could gradually develop their writing ability. These results were consistent with previous studies undertaken by Hovardas *et al.* (2014) and Van de Pol *et al.* (2010) demonstrating that scaffolding from peer and teachers plays a significant role to support students' learning. In contrast, Barr and Chinwonno (2016) found that peer scaffolding was not as important as teacher scaffolding, and such discrepancy needs further investigation. Furthermore, the interview results suggested that students became more active. Considering the PWI stage, each activity and each stage were well designed based on the key elements of project-based learning proposed by Buck Institute for Education (2019) so as to urge students to learn actively. That is to say, when students received challenging scenarios that were real-world tasks, they had to think and come up with their products and presentation, and this could create the sense of ownership in students. Then, they had freedom to question, seek information, create, revise, and present their work to the audience, after which they had the opportunity to reflect on what they had done and learned. Through this process, students may also experience the feeling of fun as well. Such results were in congruence with those reported by Wongdaeng and Hajihama (2018) that students had positive attitudes towards PBL since the project work enabled them to work actively with enjoyment with their friends.

With reference to students' attitudes towards advantages and disadvantages of working on a project, the results indicated that students perceived that PWI increased students' collaborative learning and responsibilities. This result was similar to the study of Newprasit and Seepho (2015) which found that students had positive attitudes toward the implementation of project-based learning since it not only increased English language competency in listening, speaking, reading, and writing, but it also improved the environment of working in groups, which in turn fostered their responsibilities. However, PWI was also found to be disadvantageous for some students because it was stressful and time-consuming, which was similar to what was previously reported in a study of Siritaratn (2007). As pointed out by Ballantyne (2016), teachers should take into consideration how to design PWI with a flexible timeline. Also, they should design lesson plans carefully with sufficient explanation and guidance to minimize stress on part of students.

In conclusion, the use of project-based writing instruction (PWI) demonstrated a noticeable development of students' writing ability. Moreover, students were satisfied with the implementation of PWI. Therefore, language teachers are recommended to integrate project-based learning in their instruction in order to enhance students' writing ability. In so doing, they may find other benefits of PWI such as collaborative learning skills, learning responsibilities, communication, creativity, and critical thinking as perceived by the students in the present study.

Suggestions

This study shed light on the implementation of project-based learning to develop students' writing ability. For further studies, it is suggested that PBL could be implemented with different sample groups and different ages such as international students and non-English major students; different English courses; or different settings. Instructors could adjust the topics and activities based on students' interests.

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