การจัดการเรียนรู้แบบโครงงานเพื่อพัฒนาทักษะการเขียนบรรยายขั้นตอนในภาษาอังกฤษของนักศึกษา
Use of Project-Based Learning Approach to Improve Students' Descriptive Process Writing Skills

ศุภรา บาเลนไทนน์[1]
Supara Ballantyne

Abstract

Writing is one of the most important skills in English language learning. However, a large number of Thai students have encountered a great deal of difficulties in English language writing. Thus, such writing problems of students need to be handled immediately. This research aimed to investigate the following: 1) the effects of the Project-Based Learning approach (PBL) on students' writing performance and 2) the students' attitudes towards the application of PBL approach in an English writing class. The sample group included 30 thirdyear students majoring in Food Technology from the Faculty of Technology, Khon Kaen University, selected by using the simple random sampling technique. The research instruments used to collect the data were lesson plan, pre-test & post-test, teacher's observation notes, and a Likert scale questionnaire on student's attitudes towards the PBL approach. For quantitative results, students' pre-test and post-test scores were analyzed by using the dependent t-test, while the questionnaire was analyzed by using percentages, mean, and standard deviation. In terms of the qualitative results, the data retrieved from the open-ended

[1] อาจารย์ประจำสถาบันภาษา มหาวิทยาลัยขอนแก่น
Lecturer, Khon Kaen University Language Institute

questions in the questionnaire and the teacher's notes were analyzed using descriptive analysis. The results revealed that the PBL approach helped to improve the students' descriptive processes writing skills dramatically with the significant level of 0.01. In addition, the students showed positive attitudes toward the PBL approach with an average score of 4.19. In the PBL classroom, the students had opportunities to practice writing skills and as a result the students' writing skills have been successfullydeveloped. Students' cooperative skills and their motivation were also enhanced through this instructional approach. Recommendations for further research are also discussed.

Keywords: Descriptive processes writing, English writing skills, Project-Based Learning (PBL)

บทคัดย่อ

ทักษะการเขียนเป็นทักษะที่มีความสำคัญในการเรียนภาษาอังกฤษ อย่างไรก็ตาม นักเรียนไทยได้เผชิญกับอุปสรรคด้านทักษะการเขียนภาษาอังกฤษเป็นอย่างมาก ดังนั้น ปัญหาการเขียนภาษาอังกฤษของนักเรียนจึงควรที่จะได้รับการแก้ไขอย่างเร่งด่วน

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษา 1) ผลการจัดการเรียนรู้แบบโครงงานเพื่อพัฒนาทักษะการเขียนบรรยายขั้นตอนในภาษาอังกฤษของผู้เรียน และ 2) ทัศนคติของผู้เรียนต่อการจัดการเรียนรู้แบบโครงงานในชั้นเรียนทักษะการเขียนภาษาอังกฤษ กลุ่มตัวอย่างในการวิจัยครั้งนี้ คือ นักศึกษาชั้นปีที่ 3 สาขาเทคโนโลยีการอาหาร คณะเทคโนโลยี มหาวิทยาลัยขอนแก่น จำนวน 30 คน โดยใช้การสุ่มตัวอย่างแบบง่าย เครื่องมือที่ใช้ในการวิจัย ได้แก่ แผนการจัดการเรียนรู้แบบโครงงาน แบบทดสอบก่อน-หลังการจัดการเรียนรู้แบบโครงงาน แบบสังเกตพฤติกรรมในการทำกิจกรรมโครงงานของนักศึกษา และแบบสอบถามความคิดเห็นของนักศึกษาต่อการจัดการเรียนรู้แบบโครงงาน ซึ่งเป็นมาตราส่วนประเมินค่าตามแนวทางของลิเคอร์ท (Likert Scale) ในด้านข้อมูลเชิงปริมาณ คะแนนจากแบบทดสอบก่อน-หลังการจัดการเรียนรู้ของผู้เรียนได้ถูกนำมาวิเคราะห์โดยใช้สถิติการทดสอบที สถิติที่ใช้ในการวิเคราะห์ข้อมูลจากแบบสอบถาม

ได้แก่ ค่าร้อยละ ค่าเฉลี่ย และค่าเบี่ยงเบนมาตรฐาน ในด้านข้อมูลเชิงคุณภาพ การวิเคราะห์
เชิงพรรณาได้นำมาใช้วิเคราะห์ข้อมูลจากคำถามปลายเปิดในแบบสอบถามและข้อมูลจาก
แบบสังเกตพฤติกรรมผู้เรียน ผลการวิจัยพบว่า การจัดการเรียนรู้แบบโครงงานสามารถพัฒนา
ความสามารถในการเขียนบรรยายขั้นตอนในภาษาอังกฤษของนักศึกษาให้สูงขึ้นอย่างมีนัยสำคัญ
ทางสถิติที่ระดับ 0.01 นอกจากนี้ผลการวิจัยยังแสดงให้เห็นว่านักศึกษามีทัศนคติที่ดีต่อ
การจัดการเรียนรู้แบบโครงงานด้วยค่าเฉลี่ย 4.19 การจัดการเรียนรู้แบบโครงงานเปิดโอกาส
ให้ผู้เรียนได้ฝึกฝนทักษะการเขียนส่งผลให้ทักษะการเขียนของผู้เรียนพัฒนาขึ้น นอกจากนี้ ทักษะ
การทำงานร่วมกับผู้อื่นและแรงจูงใจของผู้เรียนยังได้รับการพัฒนาขึ้นจากการจัดการเรียนรู้
แบบโครงงาน งานวิจัยนี้ยังได้เสนอแนวทางในการต่อยอดงานวิจัยในอนาคตไว้อีกด้วย

คำสำคัญ: การเขียนบรรยายขั้นตอน ทักษะการเขียนภาษาอังกฤษ การจัดการเรียนรู้แบบ
โครงงาน (PBL)

1. Introduction

English is an important language, especially in the present globalized
society, because English serves as an important medium for international and
multi-cultural communication. Due to the rapid growth in Science and Technology,
including communication, English is an essential device for the development of
the countries in this changing world (Yodkhanha, 2009).

Currently, Thailand has become a member of the ASEAN community and
English has been used as an official language for communication among the
member countries. Thus, English has become important for the Thai people. The
Thai government is aware of this issue. The Office of the Higher Education
Commission has set education policies and strategic plans in preparing for the
ASEAN community. According to the long-term framework for higher education
for 15 years (2008-2022), one of Thailand educational strategies to prepare for
the ASEAN community is to develop English language competency in Thai

students until they can use English for work (Office of the Higher Education Commission, Ministry of Education, 2007). The ASEAN community makes it necessary for Thai students to learn English because more people from other member countries will come to work and live in Thailand, and English will be needed for intercommunication among them. English has an influence in the lives of Thai people. Therefore, preparing English skills for the population is essential so that citizens can be able to communicate and to acquire knowledge, as well as to cooperate and to build relationships with other countries in the ASAEN community.

With respect to the ASEAN community, English skills are essential for Thai students. Although English language has been a compulsory subject in the Thai school's curriculums at all levels, the English proficiency level of Thai students is still very unsatisfactory. The reports on the Ordinary National Educational Test revealed that the average mean score was below 50%. The 2010 score of the English subject was lower than that in 2009 (Office of the National Education Commission 2010: online). The English skills, particularly writing skills, are very limited. In addition, many teachers and students have agreed that writing is the most difficult and complicated skill to teach and learn. As a result, English writing ability among Thai students is still far from satisfactory (Watcharapunyawong & Usaha, 2013). Haines (1989) mentioned that the skill of writing is a difficult skill for both teachers and students. Teachers pay only a little attention to the writing process, and this is the most significant factor that has led to a lack of success in teaching writing. As a result, students do not receive sufficient support from teachers. Rerganan (2012) added that in writing class, teachers normally assign writing topic to students without giving them any guidance, and furthermore, they expect the students to be able to do it on their own. Therefore, in a students' written work, mistakes are commonly found. Because of these difficulties, the student's achievements in English writing were found to be

extremely low. Consequently, teachers need to foster an effective teaching approach that can encourage students to participate in class activities. In order that students can learn to write correctly, these activities should promote learners' English writing ability through hands-on experience. The characteristics of activities mentioned are consistent with the project-based learning approach, and therefore, this instructional practice should be implemented in the classroom.

The project-based learning approach is a student-centered instructional approach that has been utilized for many decades (Office of the Higher Education Commission, Ministry of Education, 2007; Srikrai, 2008). At present, a large number of educators in different fields, including English, have widely applied PBL in their classrooms. PBL is seen as a systematic and meaningful teaching approach because learners are able to integrate their language knowledge with other disciplines. Also, PBL encourages learners to work in small groups with hands-on experience in a meaningful context, so it increases their motivation and interest (Fried-Booth, 2002). In general, the steps of PBL have been developed based on the preceding studies of (Markham, et al., 2003; Stanley, 2000; and Stoller, 1997) are summarized as follows: 1) Starting the Project; 2) Developing the Project; 3) Reporting to the Class; and 4) Assessing the Project.

The first step is starting the Project. There are three activities involve in this process. At the beginning, the students need to select a topic that is of interest to them and determine its relevance for them. To do this, the teacher provides guiding questions so that students have an idea of what to do. Then, the students plan the project outline and design the method. Another activity, that students do, is to assign responsibilities to each group member. It has been suggested that the project should be challenging and motivating (Blumenfeld, et al, 1991) in such a manner that the learners can develop and have the flexibility to work at their own. At the same time, within the group, team members can offer advice and assistance (Simpson, 2011). This is an important feature since it contributes to a successful outcome.

The next step is developing the project. The main activity of this step involves the project is undertaken by the students in a small group. The benefit of this stage is that the students are provided opportunities to have direct experience in planning, searching for information, and gathering information. In general, the steps occurring throughout the project are monitored by the teacher to make sure that students comprehend the problems and apply the skills and concepts that are needed to complete the project.

The following step is reporting to the class. The first activity in this process is that students present and receive feedback from other students on the progress of the project. After that, the improvements of the project are being made.

Assessing the project is the final step. There are two activities in this step. At first, the students present their work, and then the teacher evaluates student's final product individually by checking content and language.

In teaching writing skills, the steps of writing should be taught together with content and language use since they will help the students to understand the writing process and the contents, as well as to be able to correctly use the language which are the main objectives of teaching writing. Although different teaching approaches have been implemented in writing classroom, there were no significant increases in students' writing performance. As a result, PBL has been applied in the current study since it corresponds to the objectives of writing skills in which the teaching goals are clearly set and the classroom activities motivate students to learn, understand, and to be able to integrate their learning in to the project work. In addition, the descriptive process writing was chosen as the main focus of the research since it has mostly been used in scientific papers. Hence, it is essential for the students, who are studying in scientific fields including the Food Technology program, to have the ability to produce descriptive process writing. Therefore, this research study has been

conducted to investigate how PBL may be implemented in a writing classroom to help improve students' descriptive process writing skills and how students feel when learning through the PBL approach. The hope of the researcher is that the results from this study can be used as a pathway to effectively improve the methodologies of teaching English writing skills in the future.

2. Methodology

2.1 Research Questions and Hypothesis

2.1.1 Research Questions

In an attempt to develop students' writing skills and to investigate their attitude towards project-based learning, this study has been guided by the two following research questions:

Does the PBL approach help to improve the students' descriptive process writing skills?

What are the students' attitudes towards project-based learning?

2.2 Research Design and Methodology

2.2.1 Participants

The participants of this study consisted of 30 third year undergraduate students majoring in Food Technology from the Faculty of Technology, Khon Kaen University. These students enrolled in the English for Professional Communications course (050109) during the first semester of the 2014 academic year. The simple random sampling technique was utilized to select the sample group for the study.

2.2.2 The Design of the Course

The current study was conducted through the English for Professional Communications courses (050109). The general aims of this course were that the students are able to communicate in English language. They are

expected to understand English structures so as to use grammar to express the content correctly. Therefore, the focus of the lessons was on how to conduct descriptive process writing on the topic of "food processing". The target contents of the lessons are shown in Table 1.

Table 1: The Target Contents of the Lessons

Topic	Language Focus	Objectives
1. Grammar	- Present Simple and Past Simple in Active & Passive Forms - Sequencing Transition Words, such as First of all, To start with, To begin, Followed by, Next, Then, After that, Lastly, Finally	- Students are able to use the correct verb forms and tenses. - Students are able to use sequencing transition words between and within paragraphs flow easily.
2. The Structure of Descriptive Process Writing	- Introduction - Body Paragraphs - Concluding Paragraph	- Students are able to write background information, definition of the process, and to write the thesis statement to include the purpose and the main idea of the essay. - Students are able to write topic sentence, supporting sentences, and give examples of each supporting sentence. - Students are able to paraphrase the thesis sentence and summarize the main steps of the process.

2.2.3 Research Procedure

The research was carried out during the first semester of the 2014 academic year, starting from August 18th to September 26th. The total time used for the experiment was 21 hours. There are three major steps in the teaching activities. The first step is Pre-teaching. In this step, the teacher explains the process of PBL to the students so that they see the clear picture of this teaching approach and understand the objectives of the implementation. The

next step is the implementation process. The students work on their project until it is completed and assessed by the teacher. The last step is Post-teaching. In this crucial step, the students have to generate their knowledge from the lessons and do the Post-test in order to evaluate their performance. Research procedure, including time scale and activities can be seen in Table 2.

Table 2: Research Procedure

Weeks	Activities
1	1. The teacher explained PBL to the class. 2. The students did pre-test on descriptive process writing.
2 - 6	1. PBL lessons' implementation: students developed their project 2. The students presented their project to the class and got feedback for further development. 3. The project was evaluated.
7	1. The students did post-test and completed the questionnaire.

2.2.3.1 The Implementation of PBL Lessons

The lessons were taught using the steps of PBL mentioned earlier. The steps of implementing PBL with its details are shown in Table 3.

Table 3: The Steps of PBL and Details of Classroom Activities

The Steps of Implementing PBL	Classroom Activities
1. Starting the Project	1. The teacher explained PBL to the class. 2. The students did the descriptive process writing pre-test. 3. The students were divided into groups of five and the topic was chosen according to their interest. Then the project's outline was planned.
2. Developing the Project	1. Members of the groups gathered information about their topic and shared their ideas to the group. 2. Students individually wrote about the process by using grammar and transition words which had been taught in class. 3. The teacher provided a guideline with which members of the groups could analyze their work.
3. Reporting to the Class	1. Each group chose one piece of writing and presented it to the class. 2. Other students gave feedback by using the guideline mentioned above. By following the guideline, students were able to give comments and suggestions for further improvement.
4. Assessing the Project	1. Each student submitted their final product which was evaluated by the teacher using a process essay rubric. A holistic rubric which assesses the overall writing outcome is used in this study. There are three components in the rubric: content, organization, and mechanics. 2. The students did the post-test and completed the questionnaire.

2.2.4 Data Collection & Analysis

In order to answer the research questions, the instruments used included lesson plans based on the PBL approach and a pre-test and post-test on descriptive process writing. In the pre-test and post-test, the students were asked to write descriptive process writing on the topic of "A process of making chocolate". In the test paper, pictures related to each step were provided. The criterion used for marking the test is the process essay rubric which consisted of three components: content, organization, and mechanics. Teacher observation

notes were also used for observing the students while participating in the PBL lessons. A Likert-rating scale questionnaire was used to collect data related to students' attitudes towards the PBL lessons. Data was analyzed by using both quantitative and qualitative methods.

1. Quantitative Data

The scores from the pre-test and post-test were gathered as the quantitative data and were analyzed by using the dependent t-test. The data collected from the questionnaire were evaluated separately by totaling the answers per rating scales and then calculating the average scores. From the respondents' answers to each of the questions, the data was statistically analyzed by percentages, means, and standard deviations.

2. Qualitative Data

The qualitative information was gathered from the open-ended questions in the questionnaire and teacher's observation notes. The overall details of Data Collection and Data Analysis are shown in Table 4.

Table 4: Data Collection and Data Analysis

Research tools	Data	Data analysis	Statistics
1. Pre-test and post-test on descriptive processes writing	- Pre-test and post-test scores	- Analysis of quantitative data by comparing pre-test and post-test scores	- Dependent t-test
2. Observation form	- Students' participation in PBL	- Analysis of qualitative data from observation form	- Descriptive Analysis
3. Questionnaire	- Students' attitudes towards PBL	- Analysis of quantitative data from the questionnaire	- Mean, Percentage - Standard Deviation

3. Results

In this section, the results related to 3.1) the use of project-based learning approach to improve descriptive process writing skills and 3.2) the students' attitudes towards PBL implementation will be presented in order to answer the research questions.

3.1 Use of Project-based Learning Approach to Improve Descriptive Process Writing Skills

To answer this question, the pre-test and post-test of descriptive process writing were analyzed. The results, retrieved from the comparison of students' pre-test and post-test scores by utilizing the Dependent t-test, are shown in Table 5.

Table 5: Students' Pre-test and Post-test Scores

	N	$\overline{\text{x}}$	SD	t
Pre-test	30	4.78	0.84	
Post-test	30	6	0.87	13.71

From Table 5, it can be clearly seen that the descriptive processes writing skills of the sample group were significantly improved at the significance level of 0.01. In addition, the students' pre-test and post-test scores were also presented individually as shown in Figure 1.
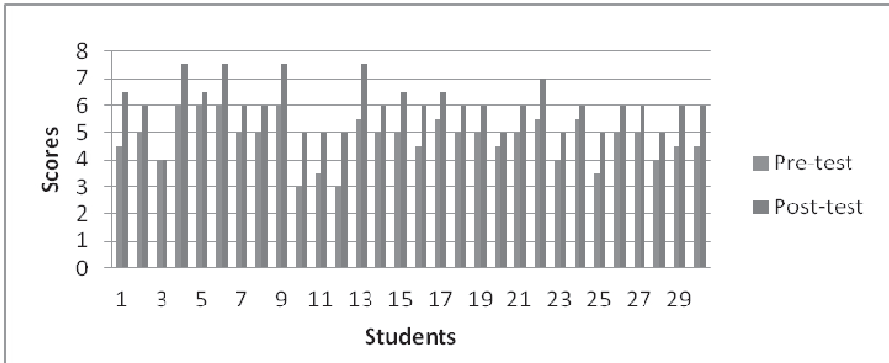
Figure 1: Students' Pre-test and Post–test Scores

It can be seen in figure 1 that students' post-test scores are higher than their pre-test scores in all items. The average mean scores for the pre-test and post-test were 4.78 and 6.00, respectively.

3.2 The Students' Attitudes towards PBL Implementation

To gather data involving students' attitudes towards PBL, a Likert rating scale questionnaire was used. The data from the questionnaire were analyzed both quantitatively and qualitatively.

In terms of quantitative data, the results indicated that PBL had a significant effect on the students' attitudes towards PBL as shown in Table 6.

Table 6: Students' Attitudes toward the Use of PBL in Teaching and Learning

	Items	$\overline{X}$	Level of Agreement
1.	Students have opportunities to practice descriptive process writing skills.	4.60	Strongly agree
2.	Students understand the contents clearly through PBL approach.	4.87	Agree
3.	Students are promoted to discover their own learning styles.	3.90	Agree
4.	Students have ownership of their learning.	3.90	Agree
5.	Students choose the topic of descriptive process writing based on their interests.	4.03	Agree
6.	Students have an opportunity to evaluate their work.	3.97	Agree
7.	Students have an opportunity to develop cooperative skills through writing project.	4.57	Strongly Agree
8.	Students have an opportunity to practice research skills, such as gathering information so as to do the descriptive process writing project.	3.93	Agree
9.	Students have an opportunity to build up relationships with one another while doing the project.	4.53	Strongly agree
10.	Students have an opportunity to build a relationship with the teacher.	3.80	Agree
11.	Students find pleasure in learning descriptive process writing through PBL.	4.13	Agree
12.	Students connect the descriptive process writing experience with their real-life situation.	4.17	Agree
13	Students are able to apply descriptive process writing skills in the real world.	4.17	Agree
14	Students are happy and participate well in descriptive process writing activities.	4.53	Strongly agree
15	Students' creativity and expression are motivated through PBL.	4.53	Strongly agree
16	Students practice leadership skills through descriptive process writing project.	3.73	Agree
17	Students are more self-confident with the use of the PBL approach in writing class.	3.77	Agree
18	Students have an opportunity to exchange knowledge and learn to accept different ideas through descriptive process writing project.	4.30	Agree
19	Students are proud of their descriptive process writing project.	4.10	Agree
20	Students are satisfied with the use of the PBL approach in writing class.	4.20	Agree
	Average score ($\overline{X}$)	4.19	Strongly agree

Table 6 shows that as an overall result, the students were satisfied with the use of the PBL approach in English class. Therefore, they showed positive attitudes towards the PBL approach with an average score of 4.19. Students had clearly understood the contents through the PBL approach because they had had an opportunity to practice their writing skills, as well as to use cooperative skills with the average score of 4.87 and 4.57, respectively. The PBL approach helped the students establish interaction among themselves while working on the project. Furthermore, with the average mean score of 4.53, the students were happy and participated well in classroom activities and their creativity and expression were more motivated through PBL since they had been able to select the topic of their interest. Conversely, the data showed that when students had to use English, their level of confidence was quite low and they had not been given many opportunities to practice leadership skills with the average scores of 3.77 and 3.73, respectively.

Regarding the qualitative data, the results were retrieved from the open-ended questions in the questionnaire in terms of the following: 1) the students' writing performance & other skills, 2) the relationship among students, and 3) other suggestions. Most students mentioned that their descriptive writing skills, as well as their cooperative skills, were improved through the PBL approach. Since they had had opportunities to work in small groups, the students had been given opportunities to share their ideas and had helped each other to complete the project. Also the students were more motivated in learning because they were given opportunities to choose the topic of their interest. Thus, the students had been satisfied with the use of the PBL approach in writing class.

4. Discussion

According to the current study, PBL was implemented in the English for Professionals course to develop students' descriptive processes writing skills. The research revealed results free from doubt. The study corresponded with relevant studies as follows:

4.1 The findings from students' pre-test and post-test scores and the questionnaire revealed that the students' descriptive processes writing skills had developed after participating in the PBL instruction. These results correspond with the findings from previous studies, such as Rerganan (2012) who concluded that the students' English writing abilities were significantly developed after implementing PBL as a teaching approach. In addition, the findings in this study are similar with the findings of Coffin (2013), Simpson (2011), and Em-ot (2010), which revealed that PBL is an effective instructional approach that can help improve students' English skills. However, since this classroom was small in size, the approach had been easily and successfully implemented. Hence, the implementation of PBL in a large classroom setting should be taken into consideration for further implementation in order to find out the effectiveness of PBL as compared with the small size classroom.

4.2 With respect to students' attitudes towards the PBL approach, the students were asked to complete the questionnaire after the implementation had been completed. The results showed that the students agreed that PBL is a meaningful approach since they had been able to apply the knowledge of writing skills to their major course. The results are consistent with the findings of Stoller (2006) and Baş (2011) whose results proved that PBL makes learning more meaningful for students. Moreover, students have opportunities to develop cooperative skills through writing projects using PBL. Sunaratn (2013) also confirmed that students' cooperative skills were notably observed. PBL

fosters cooperation rather than competitiveness, since it provides opportunities for students to work in groups (Beckett & Slater, 2005). They were able to exchange knowledge and build good relationships among themselves. Another aspect is that under the PBL approach, the contents and activities in class had been presented according to the students' interests so that they could be more motivated during the teaching and learning activities. The results also support the findings of Sirithararatn (2007) and Srikrai (2008) who indicate that the PBL approach is interesting and pleasurable because it provides opportunities for students to pursue their own interests. The students enjoyed the class and found this teaching approach interesting and beneficial for them. As a result, the students expressed a highly positive attitude towards the PBL approach.

5. Conclusion and Suggestions for Further Research

5.1 Conclusion

In the current study, PBL has been revealed as an effective instructional approach. In PBL classes, specific language points are introduced and as a result the students are not overwhelmed with grammar and structures. The students are able to focus on practicing their writing skills. Moreover, students' cooperative skills are also developed because they have opportunities to work in small groups and exchange information to achieve their goals. Meanwhile the teacher facilitates the students learning and monitors their progress towards their goals. PBL also creates an enjoyable and motivating classroom environment because the projects had been designed according to students' interests and the students had taken responsibility for their own learning. Furthermore, they had had opportunities to work at their own pace to complete the project.

It is hoped that this paper can be a guidepost which can lead to more effective implementation of PBL in English writing skills classrooms. Moreover, students, teachers, and researchers can benefit from this study. Students will be able to understand the steps of the descriptive process writing. Since PBL is an effective teaching approach, teachers can also take advantage by implementing this approach in the English writing classrooms. Lastly, researchers can take the study of PBL as an empirical evidence for effective pedagogical methodology in teaching Descriptive Process Writing.

5.2 Suggestions for Further Research

1. Another interesting topic to be examined would be the impact of PBL in a large classroom setting: students' writing competency and cooperative skills.

2. In order to improve the approach of teaching writing and attain a greater proficiency in writing skills, it would be worthwhile to make a comparative study between PBL and other teaching approaches.

3. To increase the effectiveness of the project, undertaken by the learners, the project assessment criteria should be standardized for this learning approach.

Acknowledgements

References

Baş, G. (2011). Investigating the Effect of Project-based Learning on Students' Academic Achievement and Attitudes towards English Lesson. *The Online Journal of New Horizons In Education, 1*(4).

Beckett, G.H. & Slater, T. (2005). The project framework: A tool for language, content, and skills integration. *ELT Journal, 59*(2), 108-116. doi: 10.1093/eltj/cci024

Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. Educational psychologist, 26(3-4), 369-398.

Coffin, P. (2013). The Impact of the Implementation of the Project-Based Learning for EFL Interdisciplinary Study in a Local Thai Context. *The 4th International Research Symposium on Problem-Based Learning*.

Em-Ot, P. (2010). The Use of Project Work in Developing Communicative English Language Abilities of Mattayom Suksa IV Students of Rayongwittayakom School. (Master Thesis, Srinakharinwirot University, Bangkok, Thailand). Retrieved from http://www.slideshare.net/pannutchaya/piyabut-e

Fried-Booth, D. (2002). *Project Work*. Oxford: Oxford University Press.

Haines, S. (1989). *Project for the EFL Classroom*. Hong Kong: Thomas Nelson and Sons

Markham, T., Mergendoller, J., Larmer, J., & Ravitz, J. (2003). *Project Based Learning Handbook*. Canada: Buck Institute for Education.

Office of the Higher Education Commission, Ministry of Education. (2007). *The 2nd 15-Year Long Range Plan for Higher Education (2008 - 2202)*. Bangkok: Chulalongkorn University Printing House

Office of the National Education Commission. (2010). *National Education Act B.E 2542 (1999) and Amendments (Third National Education Act. B.E. 2553 (2010).* Bangkok: Office of the Prime Minister

Rerganan, P. (2012). *A study on effectiveness of the project based learning to develop English-Writing skill for Mathayom 1 students of Patumwan Demonstration School* .(Master's Thesis in Education in Teaching English as a Foreign Language, Srinakharinwirot u University). Retrieved from http:// it.hu.swu.ac.th/hu/updoc/Piyada_R_NoRestriction.pdf

Simpson, J. (2011). *Integrating project-based learning in an English language tourism classroom in a Thai university institute*. (Doctoral Thesis, Catholic university, Australia). Retrieved from *dlibrary.acu.edu.au/digitaltheses/ public/adt...29062011/02whole.pdf*

Siritararatn, N. (2007). *A Development of the English oral Communication course using the Project-based Learning Approach to enhance English oral com- munication ability of Kasetsart University students*. (Doctoral dissertation, Chulalongkorn University, Bangkok, Thailand). Retrieved from http://tdc. thailis.or.th/tdc//browse.php?option=show&browse_type=title&title- id=115659&query=Project%20based%20English&s_mode=word&d_field=&d_ start=0000-00-00&d_end=2557-0620&limit_lang=&limited_lang_ code=&order=&order_by=&order_type=&result_id=20&maxid=33

Srikrai, P. S. (2008). Project-based learning in an EFL classroom. *Humanities and Social Sciences,* 25, 85-111.

Stanley, D. (2000). *Project Based Learning- 6C's of Motivation*. Retrieved http://www.coe.uga.edu/epltt/LessonPlans/LPPJL4DStanley.htm

Stoller, F. L. (1997). Project work: A means to promote language content. *Forum, 35*(4), 2-18. Retrieved from http://eca.state.gov/forum/vols/vol35/no4/ p2.htm

Stoller, F. L. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In Beckett, G., H. & P. C. Miller (Eds.), *Project-Based Second and Foreign Language education: Past, Present, and Future* (pp. 19-40). Greenwich, Connecticut: Information Age Publishing

Sunaratn, T. (2013). Development of English Oral Communication for Marketing Course Using the Project-Based. *The New English Teacher*, *7*(2).

Watcharapunyawong, S., & Usaha, S. (2013). Thai EFL students' writing errors in different text types: The interference of the first language. *English Language Teaching*, *6*(1), 67.

Yodkhandha, S. (2009). *Development of English Writing Skills of Second Year Student, Sripratum University by Using Dictation Exercises*. Research report on Teaching and learning Development. Faculty of Liberal Arts, Sripatum University. Retrieved from:http://www.spu.ac.th/tlcfiles/2013/10/%E0%B8 %AD.%E0%B8%AA%E0%B8%B8%E0%B8%99%E0%B8%B4%E0%B8%95%E 0%B8%A2%E0%B9%8C-%E0%B8%81%E0%B8%B2%E0%B8%A3 %E0%B8% 9E%E0%B8%B1%E0%B8%92%E0%B8%99%E0%B8%B2%E0%B8%81%E0% B8%B2%E0%B8%A3%E0%B9%80%E0%B8%82%E0%B8%B5%E0%B8%A2% E0%B8%99%E0%B8%A0%E0%B8%B2%E0%B8%A9%E0%B8%B2%E0%B8% AD%E0%B8%B1%E0%B8%87%E0%B8%81%E0%B8%A4%E0%B8%A9.pdf