Perceptions of Project-Based Learning on Promoting 21st Century Skills and Learning Motivation in a Thai EFL setting

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Abstract

With the impact of globalization and advanced digital technology, the ways students learn have changed remarkably through the decades. Therefore, the skills that students today should acquire from schools are not limited merely to the subject knowledge. Learners need to be equipped with the skills of the era commonly known as the 21st century skills. To address such need, this research project was conducted to implement Project-Based Learning (PBL) with a group of EFL learners at the Demonstration School of Prince of Songkla University. Two main purposes were to examine students' levels of motivation to learn English through PBL and to investigate the learner's perception of the impact of the PBL on improving their 21st century skills, namely, collaboration and communication. Findings from the survey suggested that PBL is perceived to be effective in promoting the

learner's motivation to learn English. Furthermore, PBL can enhance the target 21st century skills which are essential for the learners to succeed in learning as well as for work in the current age. Therefore, PBL is suitable for the participating language learners and can be worth-implementing in other EFL classrooms in Thai high schools.

Keywords: Project-based learning, 21st century skills, English Language Teaching, English as a Foreign Language

1. Introduction

Over the past few decades, our lives have been substantially changed especially in terms of communication. This is because the world has been more globalized and digitized (Brown, Lauder & Ashton, 2008). Citizens or students in this age need to be aware of the changes and equip themselves with the skills required for a more challenging life in the current era. As a consequence, the teaching and learning of the English Language, which have been playing a vital role in education as well as in career path, constantly adapts in a way that can foster the skills for learning and working in this age which are widely referred to as the 21st century skills.

The Project-Based Learning (PBL) is a teaching method which sets an aim for the students to complete a long-term project and learn the target content while performing the embedded tasks. The PBL approach is effective for promoting the 21st century skills in that it allows the learners to search for and analyze information, discuss

and give feedbacks with peers and collaborate with their team with a shared aim to accomplish a project (Boss, 2012; Mergendoller, Markham, Ravitz & Larmer, 2006). Problem-solving and multiple attempts to improve the project enable students to exercise their analytical and critical thinking. Furthermore, the ability to use technology could provide more options to enhance their projects.

PBL is interdisciplinary by nature as it allows for learners to use knowledge and skills from various disciplines to complete a project. Some forms of PBL have been applied in medical schools, schools of business, architecture, law, engineering, education (Thomas, 2000) as well as in English. For the current study, the major focus was on applying PBL to a group of Thai EFL learners at the Demonstration School of Prince of Songkla University to investigate the student's perceptions on the effects of PBL instruction on promoting their 21st Century skills as well as on their motivation for learning English.

As previously mentioned, the notion of 21st century skills cover a multifaceted range of areas. For the practicality sake of the present study, the 21st century skills focused were *communication* and *collaboration* skills. A group of 30 grade-10 students who enrolled in the course E 31102 were purposively recruited as participants of the study to shed more light on the following research objectives and questions.

1.1 Research Objectives

1. To examine the motivation levels towards learning English through the PBL among grade the 10 EFL learners at the Demonstration School of Prince of Songkla University

2. To investigate the student's perception towards the effects of the PBL on promoting the target 21 century skills among the grade 10 EFL learners at the Demonstration School of Prince of Songkla University

1.2 Research Questions

1. What are effects of PBL on promoting learning motivations as perceived by the grade 10 EFL learners at the Demonstration School of Prince of Songkla University?

2. What are the students' perception towards the effects of PBL on promoting the 21st century skills, namely communication and collaboration, of the grade 10 EFL learners at the Demonstration School of Prince of Songkla University?

2. Theoretical Backgrounds

2.1 What is PBL?

Project-based learning (PBL), as its name suggests, generally refers to an instructional approach that organizes learning activities around projects. According to the Buck Institute for Education (BIE), advocating PBL throughout the decade, PBL classrooms differ from the traditional classrooms considerably as they are not characterized by the focus on

isolated, content-based, teacher-centered lessons. Indeed, learning in PBL environment places an emphasis on authentic learner-centered activities with long-term goals to motivate learners to gather and analyze information and discuss it while collaborating with peers to pursue a project (Solomon, 2003; Thomas, 2000). Students can have some autonomy to work collaboratively with their peers over considerable amount of time conducting their projects under the supervision and facilitation of their teachers to produce authentic products or presentations. Strong collaboration and working skills would help them create practical and useful projects.

Projects that are meant in the PBL approach are intricate tasks that make students engaged in planning and designing, problem-solving, decision-making, investigative and creative activities. PBL activities usually include collecting information, interviewing experts about the topic, doing some experiments, analyzing data, and reporting the findings (Katz & Chard, 1992). Such activities are enabled in PBL because students are actively involved in the knowledge-seeking process in authentic situations.

According to Thomas (2000 pp. 3-4), PBL has five key characteristics as follow.
- Projects related to the curriculum Students learn the target contents through the projects which are linked to the curriculum.
- A driving question related to target content Questions, problems or topics that the students need to work

on must "drive" or lead the students to the target contents.

- Constructive investigation Projects must allow students to investigate the topic or problem in order to build up new knowledge or skills related to the target content. This is possible through inquiry, planning, exploring, decision-making, problem-solving, and reporting the findings.
- Autonomy PBL projects should allow considerable amount of time for students to work on their own. Students are responsible for completing their projects under the supervision of their teacher.
- Real-life application Projects must incorporate topics, tasks, products or performances that the students can encounter or use in real life situations.

2.2 Project-Based Learning and Its Counterparts

From the previous explanations of PBL, some readers might wonder if tasks in PBL are similar to the ones found in task-based learning (TBL) documents. The tasks in these two pedagogical approaches, which may share some features, differ fundamentally in terms of length and applicational aims. In TBL, tasks are predominantly used as classroom activities in each lesson with an aim to encourage students to learn the target content in an engaging-manner. TBL has been used considerably in language learning. According to Nunan (2004 p.4), tasks in language setting are classroom works that involves students in the process of making meanings and understanding from the task and working on it through having interactions with peers in

the target language. It should be noted that tasks in TBL aim to engage and facilitate the students in learning the target knowledge or language topic of a particular lesson. Meanwhile, in PBL, a series of tasks are completed in order to accomplish a bigger project which runs over a period of time. Thus, tasks in different PBL lessons seem to interact and complement each other to cater for the long-term goal.

The acronym PBL can refer to both project-based learning and problem-based learning. Therefore, it is important to distinguish between the two terms. Even though the two terms may share some features about their attempts to encourage the students to be active learners, there are distinctive features which make one different from the other.

Generally, the goal of project-based learning is the outcome, the product or performances derived from the problem-solving process. In contrast, the focus of problem-based learning is particularly on the problem solving process itself (Moss & Van Duzer, 1998). In addition, in problem-based learning, a problem serves as the stimulus for learning by trying to solve the problem. Meanwhile, for the project approach, the project is used to provoke students into attempting to understand the problem, collect more information about the problem, and to collaborate effectively to learn from group discussion in order to complete a project.

2.3 Benefits of Effective PBL

The PBL as a pedagogical approach has been reported to have substantial benefits to students provided that the PBL instruction is planned and administered effectively. Thus, this part of the article will discuss characteristics of good PBL design, followed by the benefits of this approach.

To design and run projects effectively, there are key elements to take into account. The seven elements for a good project below are adapted from Larmer and Mergendoller (2010).

1. Raising awareness for the topic. Teacher should introduce the project in a way that can activate student's 'need to know' (p.1) the content. This can be done by using exciting tools such as pictures, videos or outdoor activities to arouse students' curiosity about the topic or using any other techniques to stimulate their interest.

2. A Driving Question. This is a question that highlights the core of the project and sets the target or purpose to accomplish. A good driving question can engage students in the project.

3. Student Voice and Choice: Projects which allow students to have their voice and make their choice to some extent will be more meaningful to them. For example, students choose their own topics under the driving questions.

4. 21st Century Skills. Projects should promote students to develop some 21st century skills such as critical thinking, communication, collaboration and the use of technology.

5. Deep inquiry. The deep inquiry in PBL doesn't simply mean students find out relevant information about the topic and present it to others. It includes a long process seeking background information, finding possible solution to the challenge, testing their assumptions, and refining their inquiry for better findings.

6. Feedback and Revision. It's import that that students can receive feedback for the first draft or the first model of their work from peers or teachers or even experts from outside. Then, students revise their work. This prepares them for the real-world work where revision is not unusual.

7. Final Product. The final product can be a product, a presentation or a campaign for something. This product should not be presented to only the teacher but to a wider audience such as peers, students in other courses, parents, general public or via social media.

Projects with the mentioned essential elements have various benefits to the students. The obvious benefits of

PBL are discussed, but not limited to the followings. First, its nature provides opportunities for students to develop important skills of the era such as problem-solving, communicating and collaborating. Secondly, it keeps students in an engaging environment (Railsback, 2002) while promoting learner's autonomy to take an active role in their own learning. Additionally, many studies have shown that it improves attitudes towards learning and that is very important if learning is to take place (Bass, 2011).

The PBL approach to teaching is now not new to the field of teaching a foreign language and has been considered as an effective method to drive receptive learners towards becoming active players in the learning process. However, research on PBL method with a focus on Thai EFL learners haven't yet been of ample quantity especially in secondary school level. This drove the researchers to carry out this present study to look into the students' perception of effects of PBL on the 21st Century Skills and learning motivation of Thai EFL learners at a selected high school.

2.4 21 Century Skills

The Partnership for 21st Century Skills (P21) has formed a comprehensive framework to illustrate different types of skills important for study life and work in the current era. These so-called 21st century skills cover a range of knowledge and skills for learning and innovation such as critical thinking, collaboration, communication and creativity. It also concerns information and technology skills such media literacy and ICT literacy. A more detailed

framework of these skills can be found in Partnership for 21st Century Learning (2015).

For the present study, the target 21st century skills in focus are communication and collaboration. The Partnership for 21st Century Skills (2009, p.4) elaborated the meanings of these two broad skills.

Communication skills

- The ability to express thoughts and ideas effectively through verbal, nonverbal and written communication in different contexts

- The ability to understand as well as to appropriately infer values, attitudes and purposes of what they listen to

- The ability to use media and technology to receive information appropriately and communicate for a range of purposes and environments

Collaboration skills

- The ability to work efficiently and respectfully with others who are from different backgrounds

- The flexibility and open-mindedness to negotiate with teammates to accomplish a shared goal

- The responsibility to contribute to the work and are respectful for the contributions of other team members.

Communication and collaboration skills were selected for the study because the project approach directed students to work together. It encouraged students to collaborate with their group members. In addition, students need to communicate with the teacher and peers while implementing the assigned tasks. These two skills, similar to other 21st century skills, are important skills in the current age where strong communication and collaboration skills are deemed as essential for making an organizational progress.

2.5 Previous Studies Related to PBL

A large number of researchers who advocate the learner-centered approach to teaching have been introduced to several teaching methods such as communicative language teaching (CLT), task-based learning (TBL), problem-based learning and Project-based learning. For the PBL in particular, the method has been adopted and tested in various contexts such as in Moss & Van Duzer (1998), Poonpon (2011), Ravitz, Hixson, English, & Mergendoller (2012), Srikrai (2008), Bas (2011), Talat & Chaudhry (2014). Details of some previous studies relevant to the present one are presented below.

Srikrai (2008) conducted another study on project-based learning in an EFL Thai classroom. She instructed the students to work on the interview with NEST project. NEST in her study referred to native English-speaking teachers. The participants were students who took English as their minor subjects. Then, she interviewed with students and NEST about the project. From the findings, she reported

that the students perceived the projects as valuable and beneficial as it allowed them to learn about different cultures by conversing with the NEST. Also, students were more motivated to practice and use English.

Baş (2011) studied the effects of project-based learning on students' academic achievement and attitudes towards English lesson. The participants were 60 grade-10 students in a high school in Nigde, Turkey. The pre-test post-test design was utilized to obtain data and the PBL was used as a treatment in the experimental group. The results showed that the attitude scores of the experiment group and the control group were significantly different. Moreover, it was revealed that project-based learning was more effective in positively developing the students' academic achievement. Therefore, Baş concluded that the students who were educated by project-based learning had higher academic achievement and attitude levels towards the lesson than the students in the text-based instruction.

Poonpon (2011), conducted a Thai study on enhancing English skills through project-based learning. Forty-seven undergraduate students who were the participants worked in groups to complete an interdisciplinary-based project. Then, a semi-structured interview was used to elicit students' opinions about the project and how the project may enhance their English skills. The findings suggested that the students perceived that their reading, writing, and speaking skills, as well as vocabulary knowledge were improved because such skills were employed in integration while they worked on their project.

In this study, the project-based learning was implemented with a group of 30 grade-10 learners of English at the Demonstration School of Prince of Songkla University. The school is located in the southernmost area of Thailand where there are not many foreign teachers available due to violence news reported in the media. At this school, there was only one foreign teacher of English. Thus, the students didn't have much opportunity to converse in English. Therefore, the researchers applied the PBL approach in the classroom in the hope to encourage an increased use of English while completing projects. The main objectives of the study were to examine their attitudes towards learning English through the PBL method as well as to investigate the perceived effects of the PBL method on promoting the target 21 century skills among the grade 10 EFL learners at the Demonstration School of Prince of Songkla University.

3. Research Methodology

3.1 Participants

In the present study, a group of 30 Thai EFL learners were purposively recruited from grade 10 students at the Demonstration School of Prince of Songkla University. The students enrolled in the course E 31102 English which was taught by the researcher in the second semester of the 2017 academic year. From the pretest of the course, the English proficiency of the participants is generally intermediate and pre-intermediate.

The sample size of the present study is believed to be adequate for statistical analysis. As Nunan and Bailey (2009, p. 129) suggested, if the data is to be analyzed quantitatively, the number of subjects should be at least thirty and the more the better. Thus, the data from the participants can lend itself to be analyzed both qualitatively and quantitatively.

3.2 Intervention and Data Collection Instruments

3.2.1. Intervention: Project-Based Learning Design

A. Project: Chapter Leader

Duration: 6 weeks (starting from week 3 to midterm exam) **Group members:** 6
**Products:** Leading discussions, explanation-aid kits
Target language focus: Reading comprehension

The project is a preliminary project which helped to familiarize students with the project-based atmosphere before embarking on a more intense project later in the semester. In this project, the students were divided into groups of 6 numbers. Each group was assigned three chapters from the Oxford's short story titled Treasure Island. In groups, students read and tried to comprehend the chapters together with their group members and discussed their understanding with the teacher before each member would lead the discussions about the chapters with their peers who were assigned to read other different chapters. Each week, a group of leaders would lead the class. The

project started in the third week and spanned over six weeks until the midterm exam. The procedures of this activity are shown in Figure 1.

Figure 1: Procedures of Chapter Leaders Project
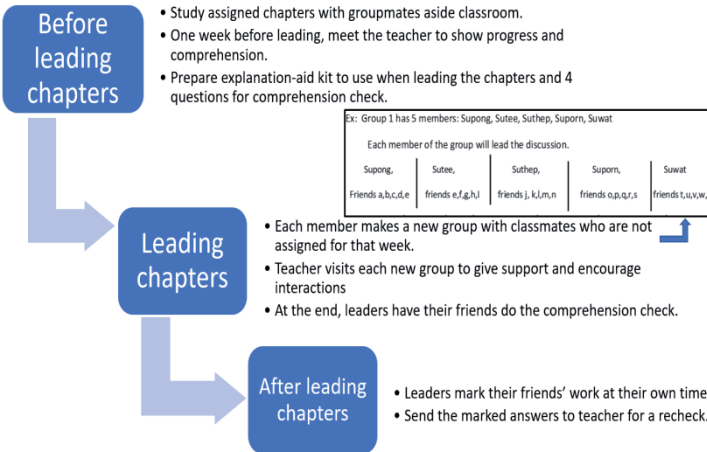
It could be noticed from the activity details above that this project allows space and opportunities for students to collaborate with their group members in trying to understand the chapters, preparing comprehension checks questions and discussion-aid materials. It also promotes students' use of English when they discuss with the teacher outside the classroom in an informal way and inside the classroom when they lead the discussion.

B. Cool Teen Project: Good Values and Thai Society

Duration: 6 weeks (after midterm exam)
Group members: 5
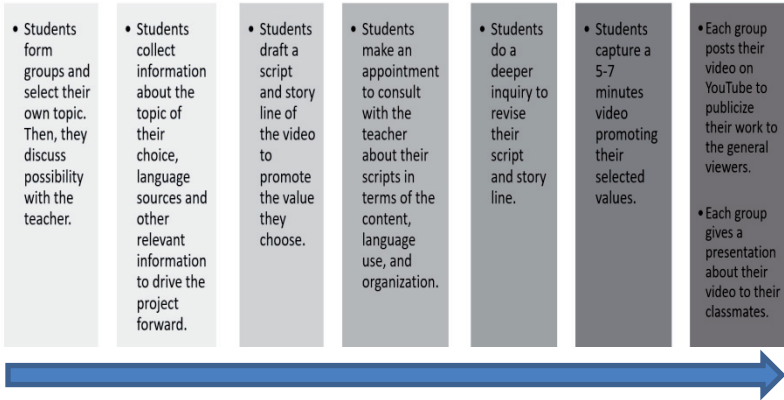**Products:** Project presentation, documentary video on YouTube
Target language focus:
- Ability to understand reading materials in daily life
- Ability to express their ideas effectively

This is a bigger and more demanding project launched in the third week after the midterm and lasted for 6 weeks towards the end of the semester. In this project, students worked in groups of five to create a documentary video to promote good core values in Thai society. The values for them to propagate were about education, family, relationship with friends, goals of life, social media, anti-corruption, and anti-drugs. The teacher showed a video to raise student's awareness about some problems in Thai society and how they can help improve them. Students selected their own topic they want to see improvement in Thai society. The procedures of this project are illustrated in Figure 2.

From the beginning to the end of the project, students passed through processes that allowed them to collaborate with their friends and to use English in multiple tasks from searching for information to giving presentation of their products. Apart from the target 21st century skills under the study, the skills of task-designing, problem-solving and computer and technology literacy could also be practiced and improved.

Figure 2: Procures of Cool Teen

• Students form groups and select their own topic. Then, they discuss possibility with the teacher.	• Students collect information about the topic of their choice, language sources and other relevant information to drive the project forward.	• Students draft a script and story line of the video to promote the value they choose.	• Students make an appointment to consult with the teacher about their scripts in terms of the content, language use, and organization.	• Students do a deeper inquiry to revise their script and story line.	• Students capture a 5-7 minutes video promoting their selected values.	• Each group posts their video on YouTube to publicize their work to the general viewers. • Each group gives a presentation about their video to their classmates.

3.2.2. Data Collection Instruments

As discussed earlier, the aim of this study was to investigate the students' perception towards the effect of PBL on promoting the 21st century skills and learning motivation. According to Nunan and Bailey (2009), surveys in social inquiry especially in education fall among common elicitation techniques as they can help to find out about the respondents' attitudes, conditions, and opinions about something at a particular point of time. Therefore, both questionnaires and semi-structured interviews were utilized in the present study to obtain relevant information about the topic from the participants.

A. Questionnaires

The questionnaire contained 20 questions to which the respondents should provide answers by making a tick

on a five-point Likert scale. The question items were adapted from the report by Chu et al. (2012 p.55) in their part two which also sought to develop students' 21st century skills by technique strategies. The 20 question items were divided into four parts to shed light on 1) students' perception on effects of PBL on their motivation to learn English 2) perceived effects of PBL on peer collaboration and 3) perceived effects of PBL on their communication skills.

B. Semi-structured Interviews

The semi-structured interviews can elicit both qualitative and quantifiable data. The interview responses would provide a more detailed explanation about students' answers to the questionnaire. In the interview, six questionnaire respondents were selected for an interview a few days after the questionnaire. They were selected on the basis of high, moderate and low ratings responded to the questionnaires. Among these six students, four were students who rated very high in the questionnaire, one was student giving average score in the responses and one was the student who gave the lowest scores to the questionnaire.

3.3 Data Analysis

In this study, both qualitative and quantitative data was obtained. The questionnaire brought about the numerical data that would indicate the perception of students towards the effect of the PBL on their collaboration and communication skills. It could also

show the participants' attitudes towards PBL and motivation to learn English. Meanwhile, the interview could shed more light on reasons underlying the answers to the questionnaire.

The participants responded to the questionnaire by making a tick on the five-point Likert scale to show what they think about each item. Then, the collected data was tallied and the mean and standard deviation were calculated. Such descriptive data analysis could provide an answer to the first research questions about the participants' perception on learning motivation in the PBL classroom. In addition, the responses from part C and D of the questionnaire could respond to the second research question about the perceived effects of PBL on collaboration and communication.

The data from the interview was also very helpful for the study. The interview responses were taken as notes then categorized. This part of information could support the findings from the questionnaire and elaborate on the trends found from the questionnaire.

4. Findings

4.1 Findings from the Questionnaire

4.1.1 Students' Perceptions of Effects of PBL on Motivation to Learn English

Table 1: Students' motivation to learn English in PBL setting

	Means	S.D.
A1. Use of the projects enhanced my interest in the course	4.15	0.81
A2. I would like to see projects used in other courses	4.15	0.59
A3. I will retain more material as a result of using the projects	4.05	0.60
A4. I participated in the assignments more because of using the projects	4.3	0.66
A5. Use of the projects aided me in achieving course objectives	4.2	0.70
B1. Benefit of using the projects is worth the extra effort and time required to learn it	4.1	0.64
B2. I think classes that use projects are helpful to students	4.1	0.79
B3. I would prefer classes that use projects over classes that do not use projects	4	0.65
B4. It's good if other English courses also use projects	4.1	0.72
B5. I have a more active role in the classroom when I am the chapter leader	4.55	0.51
TOTAL	4.17	0.09

From the survey results in Table 1, it could be seen that most of the students have positive attitudes towards project-based leaning. The most agreed-upon reason is that they have a more active role in the classroom when they work on the assigned project. That is to say the students perceived that the teaching methods that allow them to work on projects could improve their interest and motivation to learn in the course.

4.1.2 Students' Perception about the PBL on their 21 Century Skill: Collaboration

Table 2: Students' perception about the PBL on their collaboration skills

	Means	S.D.
C1. I liked working in groups to prepare to be a Chapter Leader	4.6	0.50
C2. I like seeing other students paying attention when I lead the chapter	4.5	0.51
C3. I like seeing other students helping each other to discuss with the teacher	4.4	0.60
C4. I learned more because of group discussion	4.3	0.66
C5. Use of the projects promoted collaborative learning	4.35	0.59
TOTAL	4.43	0.06

The results from Table 2 suggests that students perceived that group work and group discussions in the projects were most beneficial aspects of PBL in urging them to collaborate. Project works trained them to collaborate appropriately with other students. Having a chance to lead other students is also a highly positive factor PBL.

4.1.3 Students' Perception about the PBL on their 21 Century Skill: Communication

Table 3: Students' perception about the PBL on their communication skills

	Means	S.D.
D1. Participating in the projects allow me to communicate with teacher and friends	4.25	0.79
D2. Benefits of using English in the projects outweighed the difficulties of trying to speak in English	4.3	0.57
D3. Leading a chapter to other students is a good way to practice communication	4.5	0.61
D4. Capturing a video to show to friends and post on YouTube makes me feel more eager to speak	4.45	0.69
D5. Group discussion helps me to improve my English communication	4.3	0.73
TOTAL	4.36	0.09

Table 3 shows that the students perceived that the projects in the course encouraged them to practice communication. Projects are also effective in encouraging the students to become more eager to communicate in English especially when their projects are to be shown to outsiders such as being shared on the social media such as YouTube.

4.2 Findings from the Interview

After the questionnaire administration and score calculation, a semi-structured interview was conducted to explore the reasons behind the answers to the questionnaire. 6 questionnaire respondents were selected on the basis that they gave the highest and lowest scores to the questionnaire items or they gave equal average rate to

every questionnaire item. For the sake of understandability, these 6 students are labeled as students A, B, C, D, E and F.

Students A, B, C, and D were the highest raters. They rated 5 for every item. From the interview, this was not done because of laziness or unwillingness to answer. Students agreed with the questionnaire items and found projects useful to them. Students A and B were in the same group working in the Cool Teen project. They performed well and came up with a very good video project. Student B said 'I like this project a lot because I can practice my English and I can do something good for my community'. This can show that they have a positive attitude towards learning English through PBL. Also, they think the projects can promote their communication skills.

From student C's perception, she prefers Cool Teen Project to the Chapter Leader. She reasoned that 'it's going be shared on YouTube'. It seems that when their products are going to be shared to a boarder audience, students will be more enthusiastic in working. Similarly, students D favored the Cool Teen Project, saying 'it's about problem in society and I can do something with it'. This demonstrates the benefits of the project which is related to real-life situations.

Student E was the lowest rater. He rated 3 for almost all the questionnaire items. According to student E, he liked the projects but it was difficult for him to contribute to the projects due to his limited English proficiency. He also said that doing project is a hard

work. This shows that the projects might be demanding for some students.

Student F rated 4 for every item. To him, he liked the projects but it was a hard work for him as well. He also said 'I have to speak in English on YouTube. This is my first time. I practiced a lot. It's good.' This again shows that having outside audience is a positive element of the project. However, the demanding tasks might make some students find projects less favorable.

5. Discussions

This part of the article will discuss the findings in relation to the inquiries in the research questions. Initially, it will look at the students' perception of PBL on communication skills. Next, the perceived effects on motivation to learn English are explored, followed by the perceived effects on collaboration. Some other intriguing findings and some concerns are also presented.

From the survey results, the students perceived that their communication skills could be improved in their attempts to accomplish the projects. In fact, it was not only their communication skills, but also their reading and vocabulary could be improved because they used these skills to acquire and analyze information as they worked on their project. These findings indicate that PBL, which urges the use of language in peer discussions, in presenting the products and in the product itself, can enhance communication skills. Similar results were also reported in Srikrai (2008)' interview with

NEST project showing that the activities under the project were perceived by the participants to positively affect their communicative skills. This shows that the speaking opportunities embodied in the PBL such as peer discussions and product presentations are contributing factors that benefit participants in terms of their communication. The way the project is designed to cater for the target knowledge and skills is crucial as well.

In the students' responses to the questionnaire, most of the students agreed that the projects allowed them to have an active role in the classroom. This reflects their enhanced motivation to learn and engage more actively. From the interviews, some students such as students C and D prefer the Cool Teen Project, saying it relates to the social problems and it is to be shared to general public. This confirms the notion that PBL can lead to an improved motivation for learning. Moreover, the opportunity to make choices and to lead others make them feel good. This can be related to the benefit of the autonomous aspect of PBL. Thomas (2000) suggested that students' choice and autonomy are essential attributes of PBL which foster the learners to be more independent and motivated on their own learning (p.4).

The results from part C of the questionnaire concerning perceptions about collaboration had the highest average score (4.43). This can indicate that students regard PBL as having positive effects on improving their collaborative learning and working. The findings also corroborate with Srikrai (2008) which

pointed out that the participants of the project learn to work cooperatively with their classmates. However, the data from student's interview doesn't explain much on what manner PBL improve their collaborative skills.

From the interviews with high-rater questionnaire respondents, student B, who performed well in the projects, expressed her feeling that she enjoyed doing the projects as she can improve her English as well as benefit her community. The response emphasizes the real-life connection of PBL as previously discussed. Additionally, the response reflects the student's self-esteem as the project seems to provide some advantages to society. Larmer and Mergendoller (2010) suggested that students will find the project more meaningful when they are aware of the benefits of the project in real life. Thus, this adds to the importance of the awareness raising as a significant element of PBL. Likewise, Solomon (2003) suggested that the real-life focus of PBL helps students to realize the importance of the project. That encourage them to contribute to the tasks which are expected to impact others.

In addition, the students' preference for the project with a real world connection and with a product shared to general public demonstrates good characteristics of the implemented project in two aspects. First, an engaging project must be related students' real life and what enables this is to include the sense of authenticity into the projects possibly by setting authentic goals or including authentic tasks. The Cool

Teen Project could address both of these because it drove students to promote good values to the society and the skills required in the video project such as filming and editing videos are the skills that students in this century need and seem to enjoy. Second, a good project would urge students to create products beyond classroom purposes. A project can be more meaningful when it can be shared to the outside general public. According to Lee (2002), projects that incorporate authentic tasks are more meaningful to students. As a result, it could uplift interest and motivation of the students and can, therefore, promote learning.

However, in regard to the perceptions of student E who rated the PBL relatively low, some concern over PBL can be pointed out. Despite its benefits, PBL can also be overwhelming for some students. One of the reasons might lie in the demanding tasks embodied in PBL which can be deemed too much work by some students. It is appropriate to design projects that is challenging (Thomas, 2000) but it's also important that the projects are achievable. Another cause of this concern may relate to the difficulty level of the task which sometimes can be too high for some students. This can particularly be the case for classrooms with heterogeneous levels of the target content such as English. This concern over the project was similarly found in Poonpon (2011) which discussed that some participants in her projects expressed that the task was difficult because they were not familiar with giving English presentation in front of the classroom. Therefore,

precautions should be taken into consideration when we design a project. The project should be challenging but should not be so exhausting that students become discouraged. Also, the project should not be so difficult that it seems unachievable.

6. Conclusion

Over the decade, students' learning styles and behaviors have changed; therefore, the teaching methods of the teachers should be adjusted accordingly. The project- based learning has been employed by teachers in various contexts and has been reported to help promote the skills of the era, the 21st century skills. For this present study which implemented PBL with EFL learners in a school in the southernmost area of Thailand, the benefits of the PBL have also be confirmed. To elaborate, the PBL method could enhance the leaners' motivation to learn English as they played an active role in the learning processes. In addition, from the students' perception, the projects could promote the 21st century skills of communication and collaboration among the students. This is not to mention the skills of information searching, analyzing, problem-solving, autonomy and self-esteem which are developed during the project.

The study could also propose three important pedagogical implications. First, it is reasonable to include projects with real-life application in an English class especially in EFL contexts such as Thailand where opportunities to use English are limited. Second, as the project-based learning is interdisciplinary by nature, the

teacher must be careful in designing project to make sure that such projects are related to the target content in the curriculum. Third, students' level of the knowledge and skills required for completing the project must be taken into consideration when designing a project in order to tune it appropriately to engage all the learners.

7. Limitations and Recommendations for Further Studies

The current study focused on students' perception of the PBL towards their motivations and 21st century skills rather than experimenting to determine if the PBL has effects on the target skills. This makes the findings relatively limited in terms of making a causal claim. Thus, it would be appropriate for a future study to conduct an experiment on the topic. The following recommendations may be useful for future research.

1. To show that the learners have improved upon some specific skills such as communication, incorporation of assessment methods such as pre-tests and post-tests could help validate the results.

2. To prove the effectiveness of a particular teaching method, recruitment of two groups of participants to the study is a good practice so that the results from the two groups could be compared.

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