

CHAPTER 4

RESULTS

The quantitative and qualitative data obtained through different data collection instruments were analyzed. In this chapter, both the quantitative results and the qualitative findings were presented in relation to each of the research questions formulated at the beginning of the study.

Research question 1: What are Kasetsart University students' needs of English oral communication?

In order to determine the needs of English oral communication of Kasetsart University, a needs analysis was conducted with 165 KU students who completed the three compulsory English Foundation courses. A needs analysis questionnaire was used to gather data, and descriptive statistics of frequency, percentage, mean, and standard deviation were employed in the data analysis.

In this section, the findings are categorized according to the following six parts of the questionnaire:

1. Students' background information
2. The needs of particular language skills in the academic and professional domains and students' self-rating
3. Students' needs of English skill(s) and reasons
4. Students' preferences for practicing listening and speaking skills
5. Students' abilities and their needs for practicing the additional skills required for doing project work
6. Students' topics of interest

1. Students' background information

The objective of this part was to identify the students' general background information. The students were asked to supply the information regarding demographic characteristics including their gender, the year and faculty in which they

were studying, and the number of years they had been studying English. The students' background information is presented in Table 11.

Table 11: Students' background information

Demographic characteristics	Frequency	Percentage
Gender		
Male	89	53.9
Female	73	44.2
N/A*	3	1.8
Year of study at KU		
Second	105	63.6
Third	22	13.3
Fourth	35	21.2
Fifth	1	0.6
Eight	1	0.6
N/A*	1	0.6
Faculty		
Agriculture	9	5.5
Agro-industry	12	7.3
Architecture	11	6.7
Business	13	7.9
Engineering	12	7.3
Economics	14	8.5
Education	16	9.7
Fishery	16	9.7
Humanities	12	7.3
Social science	26	15.8
Veterinary	13	7.9
Science	11	6.7
Number of years studying English		
4 – 8	7	4.24
9 – 13	69	41.82
14 – 20	88	53.33
N/A*	1	0.61
Mean = 13.26, S.D. = 2.95		

*N/A = The information was missing.

As shown in Table 11, more than half of the subjects, or 53.9%, were male, and 44.2% were female, with the proportion of males to females of about 5:4. It was also revealed that the majority of the subjects, or 63.6%, studied in the second year of the undergraduate level. Furthermore, the largest group of subjects, or 15.8%, were studying in the Faculty of Social Science. Finally, the subjects had been studying English for 13 years on average.

2. The needs of particular language skills in the academic and professional domains and students' self-rating

The objective of the second part was to discover how the subjects rated their own competence in particular skills in the academic and professional domains. In the questionnaire, the subjects were asked to assess their proficiency and their needs of the four skills in their present academic, future academic, and future professional domains. The findings are illustrated in Table 12 below.

Table 12: Students' self-rating and their needs for their particular skills

	Criteria		Criteria	
	1 – 1.49	Poor	1 – 1.49	Low
	1.50 – 2.49	Not so good	1.50 – 2.49	Low to moderate
	2.50 – 3.49	Quite good	2.50 – 3.49	Moderate
	3.50 – 4.49	Good	3.50 – 4.49	Moderate to high
	4.50 – 5	Very good	4.50 – 5	High
	How would you rate yourself in terms of your ability in the following skills?		How would you rate your needs to master study the following skills?	
	Mean	S.D.	Mean	S.D.
For your present academic studies				
Reading	3.10	0.86	3.79	0.85
Listening	2.79	0.86	3.77	0.96
Speaking	2.55	0.89	3.84	0.96
Writing	2.43	0.84	3.55	0.83
For your future academic studies				
Reading	3.19	0.86	3.95	0.82
Listening	3.06	0.89	3.99	0.97
Speaking	2.87	0.96	4.16	0.91
Writing	2.63	0.96	3.88	0.89
For your future career				
Reading	3.15	0.90	4.02	0.75
Listening	2.95	1.07	4.37	0.85
Speaking	2.80	1.14	4.40	0.84
Writing	2.60	1.09	3.86	0.90

Table 12 shows that the subjects considered that they were 'quite good' at reading in the present academic, future academic, and future professional domains, with the mean scores of 3.10, 3.19, and 3.15, respectively. On the other hand, writing ranked last in the present academic, future academic, and future professional domains at 2.43, 2.63, and 2.60, respectively.

When the students were asked to rate their needs for skill-practice in the three domains, the students expressed that they had 'moderate to high' demand to develop all of the four skills. Even though they indicated that their writing skill was lowest in terms of proficiency, they expressed their needs to practice their speaking the most as it ranked the highest of the present academic, future academic, and future professional domains at 3.84, 4.16, and 4.40, respectively.

3. Students' needs of English skill(s) and reasons

The objective of the third part was to investigate the particular skills that the subjects wanted to practice after they completed the Foundation English III course. In the questionnaire, the subjects were asked to choose the skill(s) that they wanted to study and the reason(s) why they wanted to improve such skill(s). The selection of the skill(s) needed for improvement and the reasons are presented in Table 13.

Table 13: The skill(s) needed by the students

Skills	Frequency	Percent
1. Reading	20	12.1
2. Writing	12	7.3
3. Listening and speaking	75	45.5
4. Oral communication and presentation	57	34.5
N/A*	1	0.6
Total	165	100

*N/A = The information was missing.

Table 13 shows that the subjects preferred to study the listening and speaking skills more than the other skills at 45.5%, while oral communication and presentation ranked the second at 34.5%. It can be concluded that the students perceived that they needed to improve their oral skill more than reading and writing skills.

Table 14: The reasons why the students expressed their needs to learn the oral skill

Reasons	Frequency	Percent
For your present study	83	50.3
For your future study	103	62.4
For your future career	128	77.6
For your social life	49	29.7
For your free time activities	19	11.5
To get a good grade	51	30.9
To get a good and well-paid job	101	61.2
To improve it because you are not good at	81	49.1
To practice more although you are good at	31	18.8
Other reasons. Please specify <i>I love English.</i>	1	0.6

According to Table 15, the main reason why the subjects felt that the oral skill was needed was because they thought that it would be important for their future career. This reason ranked first at 77.6%. Meanwhile, they perceived that the oral skill was also important for their future studies and for a well-paid job in the future, as these two reasons ranked the second and third at 62.4% and 61.2%, respectively.

4. Students' preferences for practicing listening and speaking skills

The objective of the fourth part was to explore how the subjects preferred to develop their listening and speaking skills. The findings are depicted in Table 15.

Table 15: The preferences toward the learning situations

	Criteria	
	Mean	S.D.
	1 – 1.49	Low
	1.50 – 2.49	Low to moderate
	2.50 – 3.49	Moderate
	3.50 – 4.49	Moderate to high
	4.50 – 5	High
How do you like to study?		
by yourself	3.12	1.04
with a partner	3.86	0.83
in small groups with 3-5 members	4.00	0.79
in big groups containing more than 5 members	2.89	1.16
How do you like to learn listening and speaking?		
by using textbooks	2.55	0.95
by listening to cassettes and repeating	2.86	0.93
by using computers	3.31	1.05
by listening to teachers	3.54	0.95
by discussing in class with either teacher or classmates	3.70	0.91
by giving presentations in class after preparing for oral presentations outside classroom or at home	3.71	1.02
by giving presentation immediately after getting the topic	2.71	1.12
by studying grammar and practicing speaking	3.17	1.02

Table 15 shows that the subjects who selected listening and speaking or oral skill for their elective course preferred to study in small groups with three to five members the most, with the mean score at 4.00 or of a 'moderate to high' level. Second came studying with a partner at 3.86, hence a 'moderate to high' level of preference. In addition, they preferred to study by themselves at a 'moderate' level of 3.12. Finally, they preferred to study in large groups containing more than five members the least at the 'moderate' level equal to 2.89.

When asked about the learning methods, the subjects preferred studying by giving presentations in class after preparing for the oral presentations outside the classroom or at home the most as it was ranked the first at the 'moderate to high' level at 3.71. Moreover, studying by discussing in class and by listening to the teacher ranked the second and third, with the preference level of 'moderate to high' at 3.70 and 3.54, respectively.

In contrast, learning by following textbooks was preferred the least at 2.55, a 'moderate' level, and learning by giving a presentation immediately after getting the topic ranked the second from the last at 2.71, also a 'moderate' level.

5. Students' abilities and their needs for practicing the additional skills required for doing project work

The objective of this part was to investigate how the subjects perceived their potential and their needs to practice the particular skills necessary for doing projects. The findings are shown in Table 16 below.

Table 16: The students' needs and their self-rating toward the particular skills required for project work

	Criteria		Criteria	
	1 – 1.49	Poor	1 – 1.49	Low
	1.50 – 2.49	Not so good	1.50 – 2.49	Low to moderate
	2.50 – 3.49	Quite good	2.50 – 3.49	Moderate
	3.50 – 4.49	Good	3.50 – 4.49	Moderate to high
	4.50 – 5	Very good	4.50 – 5	High
	How would you rate yourself in terms of your ability in the following skills that are necessary for doing projects?		How would you rate your needs for practicing the skills that are necessary for doing projects?	
	Mean	S.D.	Mean	S.D.
Skills to use online dictionary websites	3.04	0.71	3.79	0.93
Skills to use computers to search for information	3.37	0.84	3.90	1.02
Skills to evaluate yourself and your friends	2.68	0.82	3.95	0.69
Skills to give oral presentations	2.13	0.87	4.38	0.74

As depicted in Table 16, the subjects perceived that they were 'quite good' at using online dictionary websites, using computers to search for information, and evaluating themselves at 3.04, 3.37, and 2.68, respectively. However, they thought that they were 'not very good' at giving an oral presentation as the mean score was equal to only 2.13.

In terms of their needs to practice these skills, the subjects indicated that they needed to practice all four skills: skills to give an oral presentation, skills to evaluate themselves and their friends, skills to search for information, and skills to use online dictionary, at a 'moderate to high' level of 4.38, 3.95, 3.90, and 3.79, respectively.

6. Students' topics of interest

The objective of this section was to shed light on the topics that the subjects perceived as interesting for doing projects. The subjects were asked to choose five most interesting topics collected from the list of topics of a series of commercial textbooks for undergraduate students.

Table 17: The students' topics of interest

Topic	Frequency	Percent
Our university	12	7.3
Nature	17	10.3
Food	52	31.5
Earth-Space	13	7.9
Natural forces – weather	6	3.6
History	46	27.9
Future career	60	36.4
Entertainment, music, movie	98	59.4
Our world	25	15.2
Culture	22	13.3
World resources	10	6.1
Daily life	52	31.5
Media	39	23.6
Science and technology	51	30.9
Sport	102	61.8
Environment	12	7.3
Travel	85	51.5
Friend	28	17
Family	26	15.8

Table 17: The students' topics of interest (continued)

Topic	Frequency	Percent
People	23	13.9
Others (specify please)	3	1.8
<i>Politics</i>	1	0.6
<i>Communication</i>	1	0.6
<i>Shopping</i>	1	0.6

Table 17 shows that the four most frequently selected topics were sports, entertainment-music-movie, travel, and future career, at 61.8%, 59.4%, 51.5%, and 36.4%, respectively. It is noteworthy that two of the topics, food and daily life, were both selected at 31.5%; therefore, a total of six topics were finally chosen as the topics for developing projects during the course of instruction.

In summary, it was discovered from the needs analysis that most of the students perceived the need to learn to speak or develop their English oral communication ability than the other three skills: listening, reading, and writing as they realized that this skill was essential for their present studies, future studies, and future career. Besides, getting a well-paid job was another reason that motivated them to further improve this skill.

The results from this needs analysis survey also indicated that the students perceived that their reading ability was better than the other three skills. Their writing proficiency, in contrast, was rated the lowest among the four skills in English language learning.

However, the majority of the students responded that they would attend a speaking course when they were asked to select the next elective course they would want to study. The students also stated that they preferred learning in small groups with three to five members or with a partner to learning in a big group or individually when being asked to identify their preferences of how to learn this skill. Furthermore, they also indicated that they wanted to learn to give presentations in class after having a preparation outside the classroom or at home, by discussing in class, by listening to the teacher, and by using a computer.

In addition, the students perceived that they had moderate abilities in using online dictionary websites and a computer and evaluating themselves, but they would still prefer to practice using the online dictionary websites and a computer and evaluating themselves more. It also found that the students considered themselves not very good at giving an oral presentation; therefore, they indicated their need to learn and practice this skill.

Finally, when the students were asked to select the topics that they were interested in and that they would prefer to use as the project topics, sports, entertainment-music-movie, travel, future career, food, and daily life were chosen more frequently than the others.

Research question 2: How can the English oral communication course based on the Project-based Learning Approach be developed?

The present language pedagogy which emphasized language for communication was developed from the three important theories namely social constructivism, cooperative learning, and the learner-centered approach. There were six important applications that derived from these three theories as follows:

- a. Learners' needs should be defined to explore what language skills and language elements that learners already knew and what they needed to develop and under what circumstances and environments that learners preferred.
- b. Learners should engage in the social learning activities.
- c. Learners need the skills to expand their vision that are important foundations for their thinking.
- d. The environment and the social relationships among group members help learners construct their own knowledge as called 'learning from others.'
- e. The process when learners work together could take place in both small and large groups to accomplish shared goals.
- f. Learners are closely involved in the decision-making process and have considerable control of and responsibility for activities.

In the present study, these six fundamental principles were applied as the guideline to construct the English oral communication course. To briefly explain, initially, according to the concept of social constructivism, it was necessary to explore the students' needs to identify the language skills and language elements that the

students already knew and what they thought they needed to know. Apart from the language skills and language elements, the students' preferences in learning environments, learning styles, learning materials, and evaluation format were identified using the data from the needs analysis.

Secondly, the KU undergraduate students' needs derived from the need analysis were translated into the goals and objectives of the course. Then, the language learning approaches that were appropriate for developing students' desired language skills and language elements and for meeting the students' other desired needs were selected. Later on, the instructional activities, instructional materials, and evaluation were appropriately designed based on the selected theories, the derived course objectives, and the students' needs.

As previously mentioned, the learners' needs analysis survey was conducted and the results from this survey suggested that KU students:

- a. perceived the need to develop speaking or oral communication skill for their personal and academic communication and their career in the future;
- b. preferred learning in small groups or with a partner, by giving presentations, by discussing in class, by listening to the teacher, and by using a computer;
- c. had moderate abilities in using online dictionary websites and a computer and evaluating themselves but still preferred to practice these skills further;
- d. realized that they were not very good at giving an oral presentation and wanted to study and practice this skill more.

As regards language elements, only the topics of interest were identified due to two reasons. Firstly, as mentioned earlier, the main objective of the elective courses for KU undergraduate students was to practice more specific language skills and language elements based on their known knowledge that they had already accumulated from the first three foundation courses or to practice English for academic purposes. As this English course was designed for any KU students rather than for a special target group of students, students' specific language skills were developed based on their known linguistic knowledge. Besides, it was revealed from the review of literature that the Project-based Learning Approach was appropriate for enhancing students' language skills and ability including the four language skills. From these two reasons, the ground basis toward developing students' language skill without any particular language elements but favorite topics for KU students was formulated. As a result, the students' topics of interest were defined so as to set the

project topics. It was discovered that the topics of interest for KU students were sports, entertainment-music-movie, travel, future career, food, and daily life.

As discussed earlier, the Project-based Learning Approach was appropriate for fostering students' all language skills. The findings from previous research findings on this approach have indicated that most of the learners are able to develop their reading and writing skills. No research study on the Project-based Learning Approach particularly at KU had ever been conducted. Therefore, special attention was paid to the development of the oral communication skill on the Project-based Learning Approach.

From the needs analysis results, the students indicated the needs to develop their oral communication skill. Therefore, the English oral communication course was specifically designed to enable the students to develop their oral communication ability based on their known linguistic knowledge and the Project-based Learning Approach, with the goals and the objectives of this oral course formulated based on the students' needs.

Then, the series of tasks which included the instructional tasks, instructional materials, and evaluation were designed. In this process, the principles derived from the Project-based Learning Approach and the students' needs were matched with the sets of objectives. After this integration, the tasks were designed and sequenced into an appropriate series of tasks. Then, the instructional and evaluation materials were designed to suit the tasks. After the verification of the instruments by a panel of experts, the project-based instruction was implemented to the selected subjects. Finally, the course evaluation was conducted to prove its effectiveness.

Figure 4 depicts the summary of the process to develop the English oral communication course based on the Project-based Learning Approach to enhance students' oral communication ability.

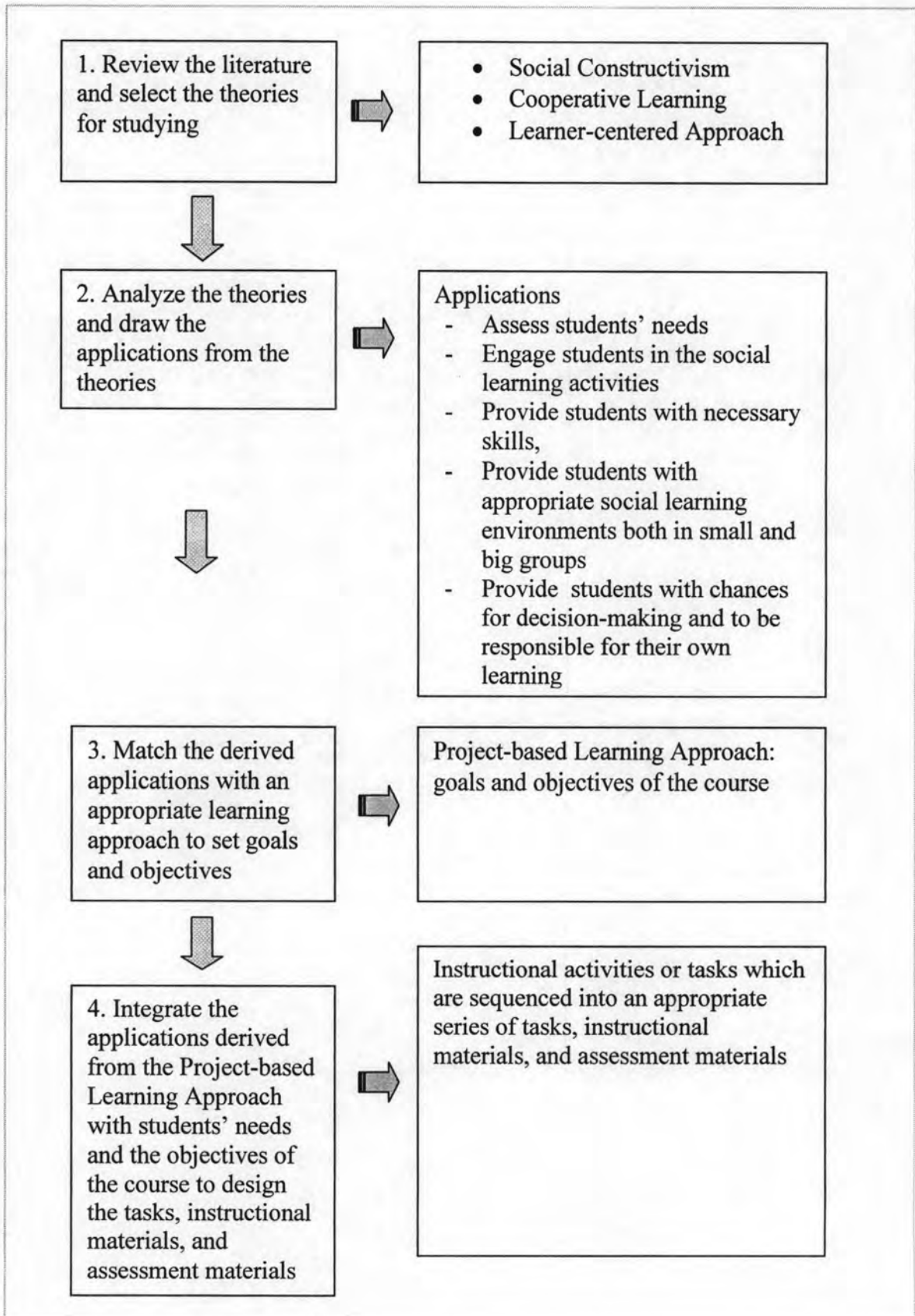


Figure 4: The summary of the process to develop the oral communication course based on the Project-based Learning Approach to enhance students' oral communication ability

Research question 3: Is the English oral communication course based on the Project-based Learning Approach effective in enhancing Kasetsart University students' English oral communication ability? If yes, to what extent does the English oral communication course based on the Project-based Learning Approach improve the students' English oral communication ability?

In order to determine whether or not the English oral communication course based on the Project-based Learning Approach enhanced the students' overall oral communication ability, which involved general oral communication ability and oral presentation ability, the Simulation Oral Communication Test or Group Project Simulation Task (GPST) was administered as the pre-test and post-test in this study. The results of the pre-test and post-test are presented in Table 18 below.

Table 18: Pre-test, post-test, and gain scores of oral communication ability

GPST	Maximum (percentage)	Minimum (percentage)	Mean	S.D.
Pre-test	67.11	29.87	47.11	2.68
Post-test	80.78	52.11	68.70	1.91
Gain score	30.56	13.67	21.60	6.30

As shown in Table 18, the highest pre-test score was 67.11%, and the lowest was 29.89%. The mean of the pre-test score was 47.11%. As for the post-test scores, the highest post-test score was 80.78%, and the lowest was 52.11%. The mean of the post-test score was 68.70%. With regard to the students' gain scores after the application of the English oral communication course based on the Project-based Learning Approach, the highest gain score was 30.56%, and the lowest was 13.67%. The mean gain score was 21.60%.

After that, the paired sample *t*-test was used to determine if the difference in the students' mean pre-test and post-test scores was statistically significant. The results of the paired sample *t*-test are presented in Table 19.

Table 19: The paired samples test of the mean pre-test and post-test scores

		Paired Differences					t	df	Sig. (2-tailed)
	Mean post-test (68.70) pre-test (47.11)	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Pair 1	Post-test score – Pre- test score	21.60	6.30	1.34	18.80	24.39	16.07	21	.00

The results of the *t*-test revealed that there was a statistically significant difference between the mean pre-test scores and the post-test scores. The mean of the gain scores was 21.60, and the standard deviation was 6.30. The *t*-value was 16.07 with a two-tailed *p* value of 0.00. The effect size calculated from the results of the *t*-test by using Cohen's *d* (Cohen, 1988) was 9.48 which could be interpreted as a huge effect. This showed that the students made a significant gain in oral communication ability at .05 level. Therefore, the hypothesis of the present research stating that the English oral communication post-test average scores of the students studying in the English oral communication course based on the Project-based Learning Approach will be significantly higher than the pre-test average scores was accepted.

As mentioned earlier, the research design pursued a mixed approach between quantitative and qualitative methodologies. To increase the breadth and depth of the quantitative findings from the Simulation Oral Communication Test or Group Project Simulation Task (GPST) used as the pre-test and post-test, three qualitative data collection instruments were also administered—the learner logs, student interviews, and teacher's diary. The data obtained from these three instruments were analyzed by means of content analysis, and the findings were then categorized into three major themes consisting of general oral communication ability, oral presentation ability, both of which constitute oral communication ability, and others related findings, which are presented in the following sections.

1. General oral communication ability

The first category is the general oral communication ability comprising five sub-skills or dimensions: comprehensibility, fluency, pronunciation, grammar, and vocabulary. Although it was discovered that all subjects agreed that they were able to improve their oral communication ability, most of them did not identify which dimensions of the general oral communication skills were developed, as can be seen from the following extracts:

** I improve my oral communication skills the most from studying in this course. (S1)*

** I think I can (improve my oral communication skill). It's much better now. (S3)*

On the other hand, some students specifically mentioned the sub-skills of general oral communication ability, which are as follows:

Comprehensibility

The first dimension of the general oral communication is comprehensibility. It is the ability to express ideas clearly when communicating orally, to get the intended meaning across, and to respond to other interlocutors in the course of conversation and classroom discussions effectively. The results obtained from the learner logs revealed that the students reported that their comprehensibility was improved the most in this category:

** Before I attended this course, I could only speak a little English, but now it is much better. Although I cannot produce long sentences, I can express my ideas a bit better. (S2)*

** Yes, I can communicate better. The listeners can understand what I said more. (S5)*

The interview transcripts indicated that the students were able to get the intended meanings across and express their ideas to make themselves understood.

These two elements, the ability to get the meaning across and the ability to express ideas, were components of comprehensibility. Thus, it can be inferred that students successfully improved their comprehensibility. It also indicated that they were able to do so through the project work instruction, although one of the students pointed out that his comprehensibility was improved only a little. This student was in the low oral proficiency group with the lowest score in the pre-test; however, he was one of the two students who could make the highest gain score from 29.89% to 52.11%.

Similar to the above remarks, it was discovered from the teacher's diary that the students improved their comprehensibility as seen from the record of the second project group discussion:

** S1 could express his idea by giving longer explanation. He could speak and express his ideas very well.*

** S2 tried to speak more. ... He tried to introduce his ideas about music and he could produce a lot of phrases.*

The records of the third group discussion showed the same sentiments:

** S1 could communicate and express his opinions better.*

** S3 organized his ideas well and expressed them in steps. His friends could understand well and agreed with him more easily.*

The above statements showed that the students were able to better express their ideas and improved their comprehensibility, especially when the course of the instruction was almost ended.

Therefore, this means that students thought that they were able to express the ideas more clearly when they were communicating orally. They were able to get the intended meaning across and respond to other interlocutors in the course of the conversation and classroom discussions more effectively.

Fluency

The second dimension is fluency which refers to the ability to deliver the intended message easily, smoothly, expressively, effectively, and fluently during the

course of a conversation and in the classroom discussions. It also refers to the ability to support opinions and to develop arguments in each conversation. Fluency is considered important for the improvement of the oral communication, and almost all of the students mentioned that they improved their fluency during the student interviews, as illustrated below:

** I was the one who could speak better, a bit more fluently. (S1)*

** In the former time, I just thought and tried to translate my idea from Thai to English but did not say anything. ... Now, I think it's easier for me to talk to foreigners. (S5)*

** Sometimes, I just forgot what to say (present), so I had to produce the language right away like in the third project when I did the role play with S2. He forgot his script and I tried to suggest how he should respond. He just did not know what to say, so I had to solve the problem that occurred immediately without planning. I switched to talk about something else. (S4)*

** I am able to express my opinions and ideas in English more easily. (S3)*

It was revealed from the above excerpts that most students were able to express their thoughts more easily than they could in the past and speak more fluently as well. As clearly seen in the third excerpt, S4 was able to produce the oral language to solve an immediate problem when her friend forgot his role while they were role-playing. She was able to deliver the unprepared message effectively, which was an indicator that she successfully improved her oral fluency.

Apart from the evidence from the interviews, the teacher's diary revealed that the students improved their fluency in general oral communication. The following excerpts were taken from the record of the second project group discussion:

** S1 could communicate more fluently; however, he still spoke with some pauses and fillers. He could express his ideas by giving longer explanation. He also spoke and expressed his idea very well.*

** S2 tried to speak more. He used the jargons that he was familiar with, e.g. jazz, music festival etc. He tried to introduce his ideas about music and he could produce a lot more phrases.*

** S3 tired to support and elaborate his friend's ideas.*

** S3 spoke quite fluently compared to what he did in the previous discussion.*

** S4 talked more later on. She asked and answered the questions well and interacted well. She also asked her friends to give more explanation.*

These excerpts highlighted the fact that the students were able to speak with longer explanation, to explain in more details, and to interact more effectively orally. As fluency was defined as the ability to deliver the intended messages effectively as well as the ability to support opinions and to develop arguments efficiently, the records from the teacher's diary indicated that the students were capable of doing so. Therefore, it can be concluded that the students improved their fluency to a varying extent.

Pronunciation

Pronunciation is a linguistic component which can easily be noticed as it refers to sound and syllable stress patterns and intonation of words. Pronunciation in general oral communication is an acceptable standard of the sound and syllable stress patterns and intonation of words. According to the data analysis, the students reported the improvement of this ability only twice in the learner logs. One plausible explanation is that it might be possible that the students were able to improve this skill but they did not realize that they were able to do so. The analysis of the student interviews revealed that only one student reported the improvement of pronunciation, as illustrated below:

**.. my pronunciation is better. I personally like to watch English movies and listen to English songs, so I got familiar with the pronunciation. But it did not mean that I could pronounce those words correctly. I had a chance to practice a lot more when I attended this course. (S5)*

S5 not only indicated that she improved her pronunciation but also explained how this happened. She said she was familiar with the native speakers' pronunciation from the movies and songs and had practiced by repeating the problematic sounds so she was able to improve this ability. It was discovered from both the learner logs and

student interviews that the other students had very little improvement in pronunciation. Surprisingly, the analysis of the teacher's diary indicated that the students' improvement of this skill was mentioned only once in the diary of the last project presentation, as shown in the excerpt below:

** S5 could speak well with good pronunciation.*

Even though pronunciation is a linguistic component which can easily be noticed by the listeners, the results from the three instruments indicated that students had little improvement in this skill.

Vocabulary

Vocabulary refers to the accuracy or the appropriateness of the words or terms that convey the intended message. It also refers to the richness and the variety of the words or terms that are chosen for their precise and accurate meanings in the context. It was revealed from the analysis of the learner logs that only one student reported the improvement of vocabulary and he mentioned it only once. This result was quite similar to the finding on pronunciation as most students did not perceive that they increased their ability in terms of vocabulary.

The result from the analysis of the interview indicated that only one student said that he could improve vocabulary as stated in the following extract:

** Although I learned some more vocabulary, I don't know a lot of difficult words. I have to read more. (S2)*

However, S2 indicated that he still had a lot of problems with difficult words. As mentioned earlier, S2 had the lowest pre-test scores in overall oral ability. He could communicate only at the word and phrase levels and could hardly produce complete sentences. He needed a lot more lexis in order to communicate in the general conversations.

It was also noticed in the teacher's diary that S2 had gained more ability in vocabulary and tried to communicate more, as can be seen from the following extract:

** Actually, S2 kept silent when he had group discussion. He often switched to Thai if he could not find the right words in English, but he tried to speak more in this discussion by using the jargons that he was familiar with, e.g. jazz, music festival etc. He tried to introduce his ideas about music and he could produce a lot more phrases.*

In summary, the students had a little improvement in vocabulary after the implementation of the project work instruction.

Grammar

It was interesting to discover that none of the subjects reported the improvement in grammar in their learner logs. They did not perceive that they increased the ability in grammar when they communicated orally. On the contrary, it was discovered from the interviews that some students referred to this improvement as can be seen from the following extract:

** Before studying this course, I said whatever I wanted to and I did not care what was wrong. But, right now, I try to speak with a correct grammar. My grammar improved because I tried to listen to what other people said and what you (the teacher) said, and then, I tried to improve mine. (S5)*

S5 mentioned that she used to communicate just to get the meaning across before taking this course. However, she tried to communicate more effectively with a correct grammar after she had some practice in this course. She explained that she tried to listen to what other people said. Put another way, she learned grammar and structures from other people and eventually improved them.

The comment on the improvement of grammar was also recorded in the teacher's diary. It was noticed that S3 was able to communicate with more language accuracy as can be seen from the following extract:

**It seemed that S3 could speak with more correct grammar although some mistakes could be detected. He spoke quite fluently compared to what he*

did in the previous discussion. He could communicate well and often with correct forms of grammar and a variety of word choices.

S3 was a student in an intermediate level who could communicate quite well as seen from the pre-test score, but he did not speak much at the beginning of this course. His oral communication ability was gradually improved, and it was noticeable that the uses of grammar in his oral communication were improved. He was very aware of his grammar when he spoke and he corrected his own mistakes.

It was also revealed from the learner logs that the students did not perceive that their grammar had improved; however, the evidence from the interviews and the teacher's diary indicated that some students were able to improve their grammar in general oral communication.

The findings led to the conclusion that when it comes to oral communication ability, both the students and the teacher perceived that the students were able to improve their comprehensibility and fluency. It was revealed from the learner logs that the students perceived that they had little improvement in pronunciation and vocabulary. The student interviews and the teacher's diary yielded similar findings. However, the finding from the learner logs was different from those from the student interviews and the teacher's diary as it was indicated in the learner logs that no students perceived their grammar had improved which was contradictory to what was stated in the student interviews and the teacher's diary.

2. Oral presentation ability

The second category is the oral presentation ability. The following section reports on the results from the three qualitative instruments data analysis on the improvement of the students' oral presentation ability.

As mentioned earlier, the assessment of oral presentation focused on the students' linguistic ability in delivering an effective presentation which consisted of four main traits. The first was the quality of the content of the presentation or message which was composed of content, organization, and coherence. The second was the quality of the speaker's transmission of the message or delivery. It comprised articulation and pronunciation and volume and rate. The third is the language which was used to convey the message. It was concerned with choice of words or

vocabulary and grammar. The last was fluency. To evaluate students' oral presentation ability in this study, the six traits or dimensions were measured. They were content, volume, pronunciation, grammar, vocabulary, and fluency.

The following section presents the qualitative analysis of the students' oral presentation ability. Firstly, the learner logs were analyzed into six themes. Then, the data derived from the analysis of the student interviews and teacher's diary were included to further elaborate the findings from the learner logs.

Articulation-Pronunciation

As mentioned earlier, the quality of the speaker's transmission of the message or delivery comprises articulation and pronunciation and volume and rate. Articulation and pronunciation are the quality of the sounds produced. Articulation is concerned with the act or manner of producing distinct and clear speech sounds. It also refers to how the speakers speak, not what they say. Pronunciation refers to an acceptable standard of sound and syllable stress patterns and intonation of words the students recognized that they have gained higher ability to produce speech sounds and produced higher standards of sound and syllable stress patterns and intonation of words.

The evidence that the students' articulation and pronunciation were enhanced was elicited from the student interviews as shown below:

**I started to practice and asked S3 and S1 how to pronounce the words and the meaning of the sentences. If I could not do anything, I asked my friends. I had to memorize my scripts, and I learned more vocabulary and pronunciation. (S2)*

** I think I also improved my presentation skill. I had to practice a lot before giving a presentation, especially my pronunciations. I searched the Internet, and I asked my friends at the International Dormitory how to pronounce difficult terms. (S1)*

** I think I improved my accent, stresses, and intonation. I spent time practicing them before the presentation days. (S5)*

It was revealed from the interviews that the students perceived that they were able to improve their pronunciation and articulation; however, they mentioned the improvement in pronunciation rather than articulation as they were familiar with the term pronunciation rather than articulation. In addition to the findings from the interviews, the analysis of the teacher's diary indicated the same results as can be seen from the following extracts:

** S3 projected appropriate intonations.*

** S3's pronunciation and intonation were quite good.*

** S4 could produce long utterances with good pronunciations, tones, intonations, and articulation.*

** S4's voice was loud enough for everyone to hear, and she had a clearer articulation. ... She could improve her volume and articulation.*

**S5 could present the news smoothly with appropriate tones and pronunciation.*

As illustrated in the above extracts, the students were able to improve their pronunciation, intonation, and tones rather than articulation. Furthermore, it was indicated from the two extracts that S4 had an outstanding improvement in her volume and articulation. At the beginning of the instruction, S4 usually spoke softly in a small and sharp voice. It is undeniable that it is almost impossible to change the natural voice, but what could be seen from S4's performance was the improvement of the ability to project her voice, or the improvement of her articulation. She tried to speak more clearly. With the aid of simple technology like a microphone and loudspeaker, S4 could adjust her volume and articulation appropriately.

The analysis of the three instruments revealed the same results that students improved their pronunciation and articulation; however, it was noticed that students had shown more improvement in their pronunciation than their articulation.

Fluency

The results from the analysis of the learner logs suggested that the students realized that their fluency had improved as frequently as their pronunciation. All students except S4 reported that they were able to deliver more skillful and effective

presentations verbally. The analysis of the interviews yielded the same findings as shown in the following excerpts:

**In the third project presentation, I could remember the script very well and continually presented it without stops. (S4)*

** I think I presented more fluently, and I was glad that I never forgot the scripts because I spent a lot of time practicing. I sometimes asked my mum to listen to me when I practiced. (S5)*

The students perceived that their fluency was improved. All of them stated in the interviews that their fluency increased as can be seen below:

** I think I also improved my presentation skill. (S1)*

** I think I could present well if I had a lot of time to prepare. My presentation skills had been improved. (S2)*

** My presentation skills were improved much more than my communication skills. (S2)*

It was also discovered from the analysis of the teacher's diary of the second and third presentations that the students improved their fluency in oral presentation. The evidence is illustrated below:

**S1 could remember the script quite well and did the presentation quite fluently. Although he spoke softly and made some pauses, he delivered the presentation with appropriate pauses.*

**S3 could act and deliver his presentation well. He was a player in a game show, and he could perform as if he had not prepared a script. He could speak naturally and fluently with physical performances e.g. showing facial expressions when he was disappointed.*

** S4 could speak very fluently with appropriate pauses to wait for the audience's response so that the audience could give their answers to her.*

According to the above excerpts from the teacher's diary, most students were able to deliver the presentations fluently. The three instruments revealed the same

results that all students improved the fluency of the oral presentations even though different students were able to develop this ability to different extents.

Content-Organization-Coherence

From the analysis of the learner logs, a few students mentioned improvement in the content of the presentation. Generally, the content of the oral presentation is not only concerned with the amount of content related to the tasks, the relevance of the content of the task, and the adaptation of the content to the situation, but it involves other two minor dimensions which are organization and coherence. The organization focuses on how the content of the message is structured. Put another way, organization is concerned with sequence and the relationships among the ideas in the message; coherence focuses on how well the ideas in the message are related.

The analysis of the interviews revealed that only one student mentioned the improvement of the organization as can be seen in the following excerpt:

** At first, I did not know how to arrange the contents of my presentations. I gradually learned it in class when I studied this course. (S4)*

It was revealed from the interview transcripts that S4 learned how to structure and sequence the content of the message or the organization of the content of the presentation. She could gradually improve this ability, yet it was the written content. It was not directly referred to the content that the students presented orally. However, there was some evidence that revealed the fact that S4 and the group members used the well-organized written content that S4 constructed in their actual oral presentations.

The data obtained from the analysis of the interviews and learner logs of one of the group member indicated that S4 prepared the scripts for the group presentations. Thus, it can be inferred that she had many opportunities to construct and organize the written contents for the final presentations of the group. In doing so, she had a chance to gradually improve these abilities. When the group members delivered the message she had earlier prepared, the well-structured content was presented to the audience. And thus, it can be concluded that the content of the oral

presentation was improved. In other words, S4 was able to improve the content of the oral presentation.

To support this finding, the analysis of the teacher's diary for the second presentation was analyzed, and the analysis yielded similar evidence:

** The content of her (S4's) presentation was well organized.*

Besides, a similar comment could be seen in the teacher's diary of the same project presentation:

**S4 could present well, and the content was well organized. The audience could follow her presentation and understood it easily. She often presented the content with correct use of grammar. She could ask questions very well in terms of the correct use of grammar, structures, and politeness e.g. 'Could you tell me what it is?'*

As seen from the above illustrations, a few students mentioned that they were able to improve the content of the oral presentations in the learner logs. The analysis of the other two instruments revealed that only S4 was able to improve the content of the presentation.

Volume-Rate

Volume and rate are the other two minor dimensions to indicate the quality of the speaker's transmission of the message or delivery. Volume is the degree of sound intensity, audibility, or loudness. Rate refers to the speed of the oral speech. Although these two minor dimensions can be recognized easily, in this study, only few students mentioned the improvement of volume and rate. Furthermore, it was discovered that none of the students stated that they improved these skills in the interviews. However, it could be seen in the teacher's diary of the last project presentation that the improvement of the students' volume and rate was mentioned once:

** S4's voice was loud enough for everyone to hear, and she spoke with a clearer articulation. ... She could improve her volume and articulation.*

From the above transcript, S4 was able to adjust the volume of her voice by increasing it and trying to project her voice more clearly. As mentioned earlier in the analysis of the pronunciation and articulation, S4 usually spoke softly with a small and sharp voice, but she could improve the ability to project her voice and adjust her volume by using a microphone. As a result, she was able to increase the degree of sound intensity and produce a clearer speech sound. As such, it could be clearly noticed that S4 improved the quality of the delivery, especially her volume and articulation.

Vocabulary

As mentioned in the analysis of the content of the oral presentation section, content can be structured and sequenced in the written form before being delivered in the oral presentation. In composing the content, accurate or appropriate words and terms are selected to convey the intended message. Thus, to improve vocabulary in oral presentation involves choosing the richness and a variety of words and terms for their precise and accurate meanings in the context.

Based on the analysis of the learner logs, it was discovered that only one student reported that he could improve this skill in oral presentation:

** I learned many new words but I should study more vocabulary. (S2)*

Besides, no students stated in the interviews that they improved this skill. However, it was indicated in the teacher's diary of the last project presentation that some students were able to improve this ability, as detailed in the following excerpts:

** S1 delivered information by giving lecture and used a variety of terms instead of using the same word.*

** S2 prepared himself and practiced more for this presentation as can be seen from the variety of the words.*

** S3 could select the appropriate and precise words to suit the content of the message delivered.*

** ... and the choices of the words were appropriately selected to suit the message for the content that was delivered. It was an impressive presentation for me. (S4)*

** ...and there was a variety of terms which were appropriately used in the context. (S5)*

The students learned more vocabulary and were able to use a variety of terms to refer to the same thing when they delivered their oral presentation. The precise terms were selected to convey the intended message more appropriately. The evidence from the analysis of the teacher's diary analysis showed that the students improved their ability to select and use appropriate word choices.

A few students perceived that they improved their ability in vocabulary in oral presentation, as evidenced in the analysis of the learner logs, but no students indicated in the interviews that their vocabulary had been enhanced. On the contrary, the analysis of the teacher's diary revealed the opposite findings. From the teacher's perception, all students were able to improve their vocabulary.

Grammar

Apart from vocabulary, grammar is the other language trait used to evaluate students' oral presentation ability. As language learners take different roles in their presentation, a variety of grammar usage and its complexity are selected to suit each of the role presented. It is worth noting that grammar refers to the correctness of the usage and structures in the context rather than its complexity.

The results from the learners' log analysis indicated that none of the students perceived that they were able to improve this ability. The interview transcripts revealed the same result. However, it was indicated in the teacher's diary of the last project presentation that the students were in fact able to improve their grammar, as evidenced in the following excerpts:

** The grammar used in S1's presentation was correct and appropriate to the context although minor mistakes were detected.*

** S3 still had some difficulties in the use of grammar and sentence structures.*

** The grammar and structures used in this presentation was correct and appropriate with the topic and content of the presentation, e.g. the students used a formal spoken language in the role-play. (S4)*

** Most of the grammar used in the presentation was correct. (S5)*

No students perceived that they were able to improve their grammar in the oral presentation from the analysis of the learner logs or the interviews. In contrast to the results from the two instruments, the teacher perceived that most students, except S2 who got the lowest pre-test score, improved their grammar used in the oral presentation although some mistakes were detected.

3. Other related findings

This section presents other findings that are considered related to development of the students' oral communication ability.

Self-reflection

Self-reflection is the process in which individuals exercise their introspection and become more aware of personal strengths and weaknesses for their improvement. In this study, the learner logs contained the questions that were specially constructed to activate the students' awareness in reflecting on their own performances. The analysis of the learner logs revealed that the students perceived that their ability to do self-reflection had improved more than any other areas. It was not a surprise to discover this as this technique was intentionally used to make the students become more aware of their strengths and weaknesses so that they would be able to improve their performances and their linguistic abilities. An example of the students' perception of their improved self-reflection ability is shown below:

** I learned that we should share the roles equally in the presentation. In this presentation, S4 took a major role. She could do it well as she practiced a lot but I did not, as I spent a lot of time reviewing for the test of another subject. I did not have much practice. I think we should have more*

time to work together and discuss so that we could give a better presentation.
(S5)

As can be seen from the above excerpt, S5 indicated in the learner logs that she was not satisfied with what she did in this presentation. She did not spend enough time to practice for the second project presentation as she devoted the time to prepare for an examination in another course. However, she realized that she would invest more time to practice for the next presentation.

The analysis of the student interviews showed similar results. The students became more aware of their performances as can be seen from the following excerpt:

** At the beginning, I think I had some problems with the learner logs. I could not understand what you (the teacher) wanted from us and why we had to answer so many questions. Finally, I could understand that writing learning logs was like looking at a mirror. I could reflect on what I had done. If I had not written the learning logs, what I had done would have been ignored without any reconsideration. Sometimes, I realized that I should not do something which was not appropriate, but I thought I could correct my mistakes. It was ok to improve what I had done wrongly.* (S2)

It was revealed from the interview that S2 could not understand the purpose of writing the learner logs at the beginning of the instruction. However, he realized the reasons why he had to do so later on. He finally understood that if he was aware of his weaknesses, he would then be able to do things differently for better outcomes. It was also indicated from the following extracts that other students also recognized the importance of keeping the learner logs:

** Writing the learner logs was a good idea because I learned to evaluate myself about what I did well and what needed to be improved. I liked to reflect on what I had done by myself, and I also liked when someone gave me some useful comments that could lead to my improvement.* (S3)

** I learned a lot in the reflection sessions.* (S1)

The results from the analysis of the learner logs and the student interviews revealed that all students learned the value of keeping learner logs. They got used to the process of reflection and finally became more aware of their strengths and weaknesses which would subsequently lead to their language improvement.

The results from the teacher's diary recorded after the reflection sessions revealed that the students responded to the reflection sessions differently. In the first reflection session, some students listened to their friends' comments and accepted that they could improve themselves according to the comments, as shown in the following extract:

** S1 was told out that he had problems producing some certain sounds e.g. /ch/. He accepted it and said that he was nervous and tried hard to deliver a good presentation. (S1)*

However, one student tried to defend his weakness when it was pointed out to him:

** Many students agreed that S3 could remember his scripts well and he was quite fluent. His friends pointed out that he would give a better presentation if he could express more body language while he was presenting instead of sitting still. S3 tried to defend himself by explaining what was happening. (S3)*

At the end of this session, the teacher explained the objectives of the reflection task one more time, with a focus placed on the aim of the task which was to provide the students with the opportunities to learn both strengths and weaknesses from one another so that they were able to better themselves.

The results from the analysis of the three instruments revealed that the students realized the value of reflection tasks from both keeping the learner logs and participating in the reflection sessions. They were able to think about their own performances to define their strengths and weaknesses. Being aware of the strengths and weaknesses in terms of both linguistic and non-linguistic elements, the students were enabled to improve their future performances.

Self-confidence

Self-confidence is a belief in oneself and one's abilities, a mental attitude of trusting or relying on oneself. From the learner log analysis, it was discovered that the students in this study reported that they also gained more self-confidence as a result of their engagement in the project work instruction. It was interesting to see that all students mentioned this improvement especially S5 who referred to this improvement several times.

When the students were able to accumulate the attitude of trust in their abilities and believed that they were capable of communicating or presenting orally, they started to speak confidently. Therefore, self-confidence is generally seen as a crucial component in improving language learners' oral skills.

It was revealed from the student interviews that all of the subjects reported improvement of their self-confidence. When the subjects were asked whether they were able improve their oral communication ability, all responded that they were. Simultaneously, most of them reported that they were able to develop their self-confidence to speak, and it seemed that the students considered gaining self-confidence an important factor for the improved oral ability, as illustrated in the following examples:

** I gained more self-confidence to speak. (S1)*

** S3 told me that I should have my self-confidence to say something because it was better than saying nothing. So, I started to speak and had a bit confidence to say something. (S2)*

** Until now, I don't think I improve much but I gained more self-confidence. I often tell myself to be clam and calmer before saying anything. If I am not relaxed, I will not be able to say anything. I will just say 'er' and 'uh'. But if I am relaxed and stay calm, I will be able to speak. (S2)*

** I had more self-confidence. Before studying in this course, I just kept my thought inside my head, but I was scared to speak. (S5)*

** I had a lot more self-confidence than I ever had before. (S5)*

** I had more self-confidence to present in front of the audience. (S3)*

** I did not have self-confidence to express my idea in English, so I kept silence and accepted whatever people said. But now, I have improved*

my oral communication a lot. I have a lot more self-confidence and am able to express my opinions and ideas in English. (S4)

It seemed that all subjects agreed that they began to develop their self-confidence, trust, and belief in their own ability for the first time. When they had fully accumulated this skill, they were able to speak and communicate in English successfully.

In addition, it was interesting to learn that S2 referred to the improvement of self-confidence in the interview with some added explanations. He reported that S3 told him that he should have self-confidence to say something, stay calm, and be relaxed. As a result, he was able to present his ideas. And as mentioned earlier, S2 got the lowest score in the oral GPST pre-test; he could hardly speak at the beginning of the instruction. In the first session, this student had a hard time even when introducing himself to his friends. He could hardly produce complete sentences, as can be seen in the following excerpt from the teacher's diary:

** S2 had self-confidence to speak in front of the public; however, he usually did it in Thai. He had a good quality of voice, but, he could hardly produce complete sentences at the beginning of the course. He did not have much self-confidence to speak English. What he was able to do was putting a few words together to communicate his ideas. He often produced long pauses and fillers as he might not find the English words to represent his thought.*

The above diary supported the results from the student interviews that S2 did not have much self-confidence to speak English. What's more, he lacked the English repertoire to communicate in English. However, his responses during the interviews pointed out that he was able to produce some language because he had gained more self-confidence. Consequently, it may be inferred that self-confidence is a crucial factor in improving oral communication, especially in low proficiency students.

Scaffolding

Scaffolded learning refers to various forms of support or assistance provided to learners that enable them to complete a task or to solve a problem that would not have been possible without such support. Scaffolding can be given through hinting, questioning, prompting, probing, simplifying, or other similar learning supports. Scaffolded learning provides the opportunities for learners with low oral communication ability to discuss, ask questions, ask for advice, seek for assistance, and interact with the more capable English speakers.

The English oral communication course based on the Project-based Learning Approach in this study provided the students with various opportunities to develop their language skills and other abilities from the scaffolding tasks and scaffolding mixed-group ability. The following excerpts taken from the learner logs show that S2 could improve his oral communication skill by incorporating his prior knowledge about the familiar topic with the encouragement provided by his friends as well as the self-confidence that he had accumulated little by little since the beginning of the instruction. Subsequently, his oral communication ability was enhanced:

** In this discussion, I could share my opinions more. I think because I had a lot of knowledge about music. I had gained a bit more confidence to speak so I talked a lot in this discussion. My friends also encouraged me to share my ideas by asking me to explain or give suggestions. I really liked this discussion because I could speak English a bit better. (S2)*

As can be seen from the above excerpt, S2 was able to communicate by means of the scaffolded learning. Without the support from his friends and the scaffolding tasks that helped him increase his self-confidence, S2 would not be able to develop his language ability. Another example that scaffolding led to successful language development is an account given by S4 who explained that she could present her project well because of the topic of the presentation, as detailed below:

** It was the familiar topic (My favorite free time activities) that everyone knew so they could follow my presentation easily and I could*

prepare myself for the presentation easily as well. I think I had less anxiety because of the topic so I could do it (the presentation) well. (S4)

According to S4, when the topic of the presentation was familiar, she felt that it was easy to prepare for it. This is because the second topic on 'My favorite free time activities' was specially designed based on the principle of the scaffolding tasks.

Cooperative learning

Cooperative learning posits that learners can learn from one another. It refers to a method in which learners at various performance levels work together in small groups toward a common goal. In so doing, they are responsible for one another's learning as well as their own.

The results from the learner log analysis indicated that the students improved their cooperative learning as this skill was one of the frequently mentioned topics in the learning logs. The students were able to achieve both personal goals and the group goals by working cooperatively in groups, as illustrated in the following examples:

** I was really pleased to help my friend when they asked for it. (S1)*

** S3 told me that I should have my self-confidence to say something because it was better than saying nothing. (S2)*

** I started to practice and ask S3 and S1 how to pronounce the words and what the meanings of the sentences were. If I could not do anything, I would ask my friends. (S2)*

The students' interpersonal relations were developed when they offered help or asked for it while working in groups; as a result, they learned to work cooperative to achieve the group goal and help one another grow.

The students talked about cooperative learning not only in the sense that they helped one another learn but also in the sense of adjusting themselves to suit other members' needs and styles so as to decrease conflicts and problems. Examples of such cooperation are illustrated below:

** I also learned to work in groups. I improved my working skills. Working in groups had both drawbacks and benefits. It would be nice if we worked cooperatively and helped each other to work. We needed to learn one another's characteristics and learned to communicate so that we could understand what we had to do. We needed to learn how to communicate with one another because each individual had his/her own style and preferences. But if anyone in the group refused to help, the problems would arise. (S2)*

**We might have some conflicts in the first project as we were not familiar with each other. We were from different majors or faculties. Therefore, we needed to learn to understand each other and adjusted ourselves. Sometimes, someone did not devote the time to work together as he/she might have some homework to do. But they improved themselves, finally. They gradually realized how to learn and what to do, and our relationship was better because we were familiar with one another more and more. (S1)*

** We had some problems working in a team at the beginning as we did not know one another before. We had to adjust ourselves and eventually became good friends. (S3)*

The analysis of the learner logs and student interviews indicated that the students were able to increase their ability to work in a team to accomplish the goals of the projects. In short, they were able to improve their cooperative learning through the process of project work instruction.

Working skills

The results from the analysis of the learner logs revealed that the students were able to improve their working skills after engaging in project work instruction. Working skills refer to the skills that are required in doing a project effectively except the linguistic ability; they include skills in planning, utilizing various resources, searching for the needed information, etc.

As mentioned earlier that as the students worked in groups, their relationship was developed. They worked cooperatively toward the project goals as the success of the group was generated by the success of each individual in the team. When striving

to success, the students were able to learn and develop working skills that were necessary for their project work completion as well as successful completion of other tasks in other courses and in the real work outside class. It was apparent from the learner logs and the interview responses that all students were able to adopt different working skills during their engagement in project work instruction:

** I did a lot of research outside the classroom. (S1)*

** I learned to plan and manage the project. (S5)*

** I learned how to do a project step by step. I spent time planning and collecting the information for my discussion. I spent my free time to search for the information that would be useful for my project. I had never done this before. I used to enjoy myself whenever I had some free time. I could apply the knowledge gained from managing a project work to do the assignments in other subjects. (S4)*

** I gained a lot of my abilities to search for the information for the projects both from the Internet and from talking to the resource persons. (S1)*

** I had to solve the problem that occurred immediately without planning. I switched to talk about something else. My ability to solve the immediate problem was also improved. (S4)*

Preparation

The last skill that was mentioned by the students in the learner logs was preparation. Preparation is defined as the state of having been made ready beforehand or the readiness before giving an oral presentation. It was revealed from the learner log analysis that the students were able to improve this skill. In addition, the students' responses during the interviews also pointed out that preparation was one of the most important components for the success of an oral presentation. This involved a good preparation of contents and visual aids, thorough practice for content delivery which included script memorization, and careful practice of pronunciation, stress, intonation, volume, and rate, as illustrated in the following extracts:

** I had to practice a lot before giving a presentation especially my pronunciations. (S1)*

** I did not prepare much for the first presentation. I think it was a kind of easy thing. I just did it without much preparation. But I discovered that it was not what I imagined. So, I had to prepare for the other presentations. (S2)*

** The more I practiced, the better I was. I practiced a lot when I was studying in this course. (S3)*

** I spent time practicing those (accent, stress and intonation) before the presentation days. When I had times, I did practice my presentation for several times. (S5)*

** I think I presented more fluently and I was glad that I never forgot the scripts because I spent a lot of time practicing it. I sometimes asked my mum to listen to me when I practiced. (S4)*

The above extracts revealed the fact that the students had come to learn that a good preparation was needed before they would be able to achieve the set goal, which, in this case, was orally delivering a good and effective project presentation.

In summary, the English oral communication course based on the Project-based Learning Approach was effective in enhancing Kasetsart University students' oral communication ability.

Quantitative results indicated that there was an improvement in general oral communication ability and oral presentation ability over the course of the study. The results from the paired sample *t*-test showed that the difference between the mean pre-test score and the mean post-test score was statistically significant at the .05 level. Simply put, a statistically significant difference was found in the mean gain scores for oral communication ability of the students, hence suggesting that the students made a significant gain in oral communication ability after they were taught with the project-based instruction. Therefore, the research hypothesis was supported.

In addition, the qualitative data derived from the learner logs, student interviews, and teacher's diary also supported the quantitative findings. Significant findings and interesting findings are summarized below.

It was discovered from the learner log analysis that all of the subjects reported that they were able to develop their oral communication ability, especially their comprehensibility. However, the students mentioned that they had little improvement in fluency, pronunciation, and vocabulary, and none stated that they had improved

their grammar. On the other hand, in terms of oral presentation ability, all of the subjects mentioned that they were able to improve their oral presentation ability, especially their fluency and pronunciation, and some had experienced improvement in the following dimensions: content of the presentation, volume, rate, articulation, and vocabulary. Some students also had improvement in their organization, cohesion, and grammar in oral presentation. In short, all of the subjects in this study were able to improve their overall oral presentation skills although none of the students could improve all dimensions of the oral presentation.

Research question 4: What are Kasetsart University students' opinions toward the English oral communication course based on the Project-based Learning Approach?

To elicit KU students' opinion toward the English oral communication course based on the Project-based Learning approach, the opinion questionnaire designed by the researcher was administered. The opinion questionnaire was categorized into four parts: the students' opinions toward their achievement after taking the English oral communication course based on the Project-based Learning Approach, their opinions toward the benefits and drawbacks of project work, their opinions toward cooperative learning, and their comments and suggestions. It is noteworthy that both positive and negative opinions were outlined to elicit the students' points of view in different aspects of project work.

In this section, the findings from the opinion questionnaire are presented according to these four parts.

1. The students' opinions toward their achievement after taking the English oral communication course based on the Project-based Learning Approach
2. The students' opinions toward the benefits and the drawbacks of project work
3. The students' opinions toward cooperative learning
4. The students' additional comments and suggestions

1. The students' opinions toward their achievement after taking the English oral communication course based on the Project-based Learning Approach

Table 20: Students' opinions toward their achievement after taking the English oral communication course based on the Project-based Learning Approach

Statements	Min	Max	Mean	S.D.
1.1 I think I am able to improve my listening skill.	3.00	5.00	4.27	.63
1.2 I think I am able to improve my speaking or oral skills.	3.00	5.00	4.27	.70
1.3 I think I am able to improve my reading skill.	2.00	5.00	3.32	.84
1.4 I think I am able to improve my writing skill.	2.00	5.00	3.50	.82
1.5 I think I am able to improve my speaking from doing the Project work.	3.00	5.00	4.14	.64

Criteria: 1 – 1.49 = Strongly disagree; 1.50 – 2.49 = Disagree; 2.50 – 3.49 = Neutral; 3.50 – 4.49 = Agree; 4.50 – 5 = Strongly agree

Table 20 shows that the students 'agreed' that they were able to improve their writing, listening, and speaking skills after taking the English oral communication course based on the Project-based Learning Approach, with the mean scores of 3.50, 4.27, and 4.27, respectively and with the standard deviations of .80, .63, and .70, respectively. However, they had a 'neutral' opinion toward improving their reading ability. This means that they did not think their reading skill had improved after learning with project work instruction, with the mean score of 3.32 and the standard deviation of .84. Besides, the students 'agreed' that they had improved their speaking ability after studying in the English oral communication course based on the Project-based Learning Approach, with the mean score of 4.14 and the standard deviations of .64.

2. The students' opinions toward the benefits and the drawbacks of project work

Table 21: Students' opinions toward the benefits and the drawbacks of project work

Statements	Min	Max	Mean	S.D.
2.1 Speaking or oral class is more interesting when applying project work instruction.	3.00	5.00	4.10	.68
2.2 Project work helps me improve my oral skills better than learning from a text book.	2.00	5.00	4.60	.80
2.3 Project work method is time consuming.	1.00	5.00	3.82	1.01
2.4 Project work encourages me to speak or interact in English with others.	3.00	5.00	4.55	.67
2.5 Project work encourages me to learn and practice English in order to communicate better.	3.00	5.00	4.28	.53
2.6 Project work increases my self-confidence in using English.	3.00	5.00	4.28	.53
2.7 Project work increases my working skills.	2.00	5.00	4.10	.75
2.8 Project work experience is stressful.	1.00	5.00	3.10	1.06
2.9 I am willing to accept project work as a means to learn English oral skill.	2.00	5.00	4.19	.91
2.10 I prefer learning speaking by using a textbook.	1.00	5.00	1.86	.99

Criteria: 1 – 1.49 = Strongly disagree; 1.50 – 2.49 = Disagree; 2.50 – 3.49 = Neutral; 3.50 – 4.49 = Agree; 4.50 – 5 = Strongly agree

As illustrated in Table 21, the students 'strongly agreed' that project work helped them improve their oral skills better than learning from a textbook and that project work encouraged them to speak or interact in English with others, with the mean scores of 4.60 and 4.55 and the standard deviations of .80 and .67, respectively. However, when asked again if they preferred learning speaking with a textbook, the students disagreed, with the mean score of 1.86 and the standard deviations of .99.

As regards the benefits of project work, the students 'agreed' that project work encouraged them to learn and practice English in order to communicate better, it increased their self-confidence in using English, and it enhanced their working skills, with the mean scores of 4.28, 4.28, and 4.10 and the standard deviations of .53, .53, and .75, respectively. Moreover, they 'agreed' that they were willing to accept project work as a means to develop English oral skills and that a speaking or oral class was

more interesting when project work instruction was applied, with the mean scores of 4.19 and 4.10 and the standard deviations of .91 and .68, respectively.

Although project work offered the students with many benefits, there were not without drawbacks. The students pointed out that project work was time consuming, meaning that they had to spend a lot of time working on the projects with the mean score of 3.82 and the standard deviation was 1.01.

In addition, the students had a 'neutral' opinion toward the statement that project work was a stressful experience with the mean score of 3.10 and the standard deviation of 1.06.

3. The students' opinions toward cooperative learning

Table 22: Students' opinion toward cooperative learning

Statements	Min	Max	Mean	S.D.
3.1 I feel comfortable to participate in project work group discussion.	2.00	5.00	3.86	.89
3.2 I feel stressful when I discuss in groups at the beginning of the course.	1.00	5.00	3.45	1.27
3.3 I feel stressful when I discuss in groups from the beginning of the course through the end of the course.	1.00	4.00	2.09	.97
3.4 I feel embarrassed to share my thoughts with my group.	1.00	4.00	2.23	.97
3.5 I am frightened of group interactions due to my weak language skills.	1.00	4.00	2.64	1.18
3.6 I don't mind sharing my thoughts with my group.	2.00	5.00	3.68	.89
3.7 I improve my working skills when I work in group in this course.	3.00	5.00	4.05	.58
3.8 I prefer working in the same group or with the same friends.	2.00	5.00	3.50	.67
3.9 I am able to improve myself after listening to the comments during the reflection session.	3.00	5.00	3.96	.65
3.10 My friends' and teachers' comments help me improve my oral and working skills.	2.00	5.00	4.23	.81
3.11 My friends give me suggestions when working in group.	3.00	5.00	4.00	.69
3.12 My friends blame me when working in group.	1.00	5.00	2.36	1.29
3.13 My friends encourage me to improve my oral skills.	1.00	5.00	3.64	1.14
3.14 My friends help me to improve my oral skills.	1.00	5.00	3.59	.85

Criteria: 1 – 1.49 = Strongly disagree; 1.50 – 2.49 = Disagree; 2.50 – 3.49 = Neutral; 3.50 – 4.49 = Agree; 4.50 – 5 = Strongly agree

Table 22 shows that the students agreed that cooperative learning was a factor that helped improve their learning. The data presented could be divided into two main aspects—the improvements from cooperative learning and the students' opinion toward cooperative learning.

Firstly, in terms of the improvements that the students gained from cooperative learning, the students 'agreed' that their friends and the teacher's comments helped them improve their oral and working skills with the mean score of 4.23 and the standard deviation of .81. This statement was confirmed when they 'agreed' with the statement that they could improve themselves after listening to the comments shared during the reflection sessions, with the mean score of 3.96 and the standard deviation of .65, and that their friends helped them improve their oral skills with the mean score of 3.59 and the standard deviation of .85.

Besides, they 'agreed' that their friends encouraged them to improve their oral skills with the mean score of 3.64 and the standard deviation of 1.14. Moreover, the students 'agreed' that their friends gave them suggestions when working in groups with the mean score of 4.00 and the standard deviation of .69. They also 'agreed' with the statement that they improved their working skills when they worked in group in this course with the mean score of 4.05 and the standard deviation of .58.

Secondly, when considering the other aspect—the students' opinion toward cooperative learning, it was found that the students 'agreed' that they felt comfortable when participating in project work group discussion and they did not mind sharing their thoughts with their group members, with the mean scores of 3.86 and 3.68 and the standard deviations of .89 and .89, respectively. They also 'agreed' that they preferred working in the same group or with the same friends with the mean score of 3.50 and the standard deviation of .67.

Besides, the students had a 'neutral' opinion toward the statements that they felt stressful when they took part in group discussion at the beginning of the course and that they were frightened of the group interactions due to their weak language skills with the mean scores of 3.45 and 2.64 and the standard deviations of 1.26 and 1.18, respectively.

Finally, the students 'disagreed' that they felt stressful when they discussed in group from the beginning of the course through the end of the course, that they felt embarrassed to share their thoughts with their group, and that their friends blamed

them on the mistakes that occurred when working in groups with the mean scores of 2.09, 2.23, and 2.36 and the standard deviations of .97, .97, and 1.29, respectively.

To summarize, the students had positive opinions toward cooperative learning. They did not feel stressful or embarrassed when they worked or discussed in groups. They also felt that cooperative learning was a factor that helped improve their learning. More importantly, they indicated that cooperative learning or learning from each other could help them improve not only the language skills but other skills such as working skills.

4. The students' additional comments and suggestions

The last part of the questionnaire elicited the students' comments and suggestions about their experiences with project work instruction. The following table summarizes the students' comments and suggestions.

Table 23: Students' additional comments and suggestions

Statements	Min	Max	Mean	S.D.
4.1 I will recommend this course to my friends.	2.00	5.00	4.05	.90
4.2 I think the group members should be changed after finishing each project.	1.00	5.00	3.27	1.16
4.3 I think teacher should be more involved in doing projects.	1.00	5.00	3.18	1.05
4.4 I am able to apply the project method gained from taking this course to the project method in other courses.	3.00	5.00	4.36	.58

Criteria: 1 – 1.49 = Strongly disagree; 1.50 – 2.49 = Disagree; 2.50 – 3.49 = Neutral; 3.50 – 4.49 = Agree; 4.50 – 5 = Strongly agree

According to Table 23, the students 'agreed' that they would be able to apply the project method gained from taking this course to the project method in other courses and they would recommend this course to their friends, with the mean scores of 4.36 and 4.05 and the standard deviations of .58 and .90, respectively. However, they had 'neutral' opinion toward the statements that the teacher should be more involved in doing projects and the group members should be changed after finishing

each project, with the mean scores of 3.18 and 3.27 and the standard deviations of 1.05 and 1.16, respectively.

It was revealed from the opinion questionnaire that the students in this study 'strongly agreed' that project work helped them improve their oral skills better than learning from a textbook. They also 'strongly agreed' that project work encouraged them to speak or interact in English with others. In other words, the students believed that project work provided them with more opportunities to interact with others in the social contexts than what a textbook could offer them. They also believed that the improvement of their oral ability resulted from the implementation of project work instruction. In addition, the students perceived that some aspects of their non-linguistic abilities were also developed along side with the improvement of their oral linguistic abilities, e.g. working skills. However, some students revealed that they were stressful while they were discussing in groups at the beginning of the course, and others felt that project work was a time consuming activity.

Conclusion

The findings from the present study indicated that KU students perceived the need to develop their oral communication ability. The English oral communication course was successfully developed based on the findings from the KU students' needs analysis and the Project-based Learning Approach. The findings also revealed that the English oral communication course was effective in enhancing KU students' oral communication ability and that the project work was an appropriate language teaching method to promote students' oral communication ability as well as the ability to work cooperatively with others.

Both the quantitative and the qualitative findings obtained from different data collection instruments are discussed in detail in Chapter Five.