

Using Project-Based Learning in Enhancing Students' Speaking Skill at SMA PSKD 7

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Abstract

The objectives of this research were to improve the students' speaking skill and students' interest about learning speaking by using Project-based learning. This research used classroom action research method in which the subject was the 25 ten graders of SMA PSKD 7 Depok and the subjects consisted thirteen males and twelve females. The quantitative data were analyzed by computing the students' score of pre-test, post-test 1, and post-test2. Based on the data results, the mean score of pre-test, post-test in Cycle1, and post-test Cycle2 were respectively 49.12, 66.4, and 70.08. The gain of pre-test to post-test1 was 35.17%, the gain of post-test1 in cycle 1 to post-test cycle 2 was 6.14%, and from the pre-test to post-test 2 in cycle 2 was 43.48%. The qualitative data were described based on interview and field-note to the improvement of students' speaking skill. The findings showed that Project-based learning could improve the students' speaking skill, it is suggested to use this method in teaching speaking skill.

Keywords: CAR, Project-based learning.

Introduction

In the study of English language, there are four important skills that should be well-mastered by students, they are listening, speaking, reading, and writing. These skills are related to each other and cannot be separated. These skills become the objectives of teaching and learning English as a foreign language. However, students need to consider that speaking is one of the skills that they should gain well, it has an important role in communication.

Speaking is an important skill because as one of the keys in English communication. Nunan (2003) states that speaking is a process consisting of short, often fragmentary utterances in a range of pronunciation. The students should have the ability to speak English in order to communicate (p. 26). Nunan (2003) also says that speaking consists of producing systematic verbal utterances to convey meaning, and to do it, students should have proper knowledge of the structure, vocabulary, pronunciation, and cultural system of English language. Pardede (2017) states that appropriate pronunciation is crucial because without it one's grammar knowledge and rich vocabulary possession do not guarantee that he is able to speak effectively. Using these, students construct their ideas and deliver what information they have and generate the language development as they resolve problems when they put their ideas in spoken form. The necessity of knowing the cultural system of English language is accentuated by Pardede (2013) by stating that language and culture are inseparable, and thus one needs a sound grasp of the background knowledge of the target culture.

In addition, speaking is one of two productive skills in a language teaching. It is defined as a process of building and sharing meaning through the use of verbal or oral form Gebhard, (1996). Torky (2006) argues that speaking is on motor perceptive skills. He goes on mentioning that speaking is the production of auditory signals designed to produce differential verbal responses in a listener. Howarth (2001) defines speaking as a two-way process involving a true communication idea, information or feeling.

Based on the researcher's observation, it is found out that students still have some problems in speaking such as: the students are still lacking of experiences in speaking; they never use English as the way of communication and discussion at the class; they are not able to compose their thoughts because they have limited number of words, limited patterns of sentences; and they are lacking of motivation. The students consider that speaking is difficult. Therefore, to overcome those issues, Project-based Learning may be implemented well. According to (Bell, 2010) Project-based Learning is an approach to instruction that teaches curriculum concepts through a project. The project is guided by an inquiry question that drives the research and allows students to apply their acquired knowledge.

Project-based learning seems match to this English teaching and learning need. PBL is simply defined as “an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop” (Moss & Van Duzer, 1998, p.1). PBL is different from conventional instruction because it emphasizes learning through student-centered, interdisciplinary, and integrated activities in real world situations (Solomon, 2003; Willie, 2001).

the research was addressed the following questions: (1) Does the students' speaking skill improve if taught by using Project-based Learning? (2) How does Project Based Learning interest the students' speaking skill? it is expected this research will provide us some information how Project-based learning improve students' speaking skill and the students' interest in Project-based learning.

Methodology

A classroom action research was chosen in this reserach regarding to the aim which attempts to see the improvement of the students and their interest in learning speaking skill through Project-based learning. Action research puts ideas into practice for the purpose of self-improvement and increasing knowledge about curriculum, teaching, and learning. The ultimate result is improvement in what happens in the classroom and school (Kemmis & McTaggart, 1982).

This research was done in two months – from April 15th, 2016 – May 27th, 2016 in SMA PSKD 7 Depok. The participant in this research was limited in ten graders specifically class X.C. The participants of this research are 25 students i.e.,13 Males and 12 Females.

The data were collected by using test and non-test instruments. The test technique was used to collect the quantitative data were taken from the students' test (pre-test, post-test 1, and post-test 2). The qualitative data were taken from the observation (field-notes & interview).To analyze the quantitative data collected, the researchaer analyzed it by using statistic descriptive technique. It was used to find out the mean, minimum and maximu score of the pre-test, post-test I in cycle I and post-test II in cycle II. While, the reseracher used descriptive analysis for the qualitative data collected (field-note & interview).This action research used the score ≥ 76 as the success indicator based on minimal mastery level criterion by the school (SMA PSKD 7 Depok). The improvement increasing in score indicated and improved of techniques toward speaking skill.

Result and Discussion

In this classroom action research, the students were found they were lack of vocabulary, grammar, and the biggest difficulty for them in speaking English was controlling their self-confident to speak in front of the class, also their mother tongue was more dominant in speaking English. There were three sets of raw score showing the students' improvement in speaking skill under the study taught through Project-based learning. There were the reflection of pre-test score, post-test1 and post-test2. It can tabulate as follows:

The pre-test was conducted on April 15th, 2016. As can be seen from Table 2, students' Pre-test Score Percentage shows that the mean of the pre-test was 49.12 points. The reseracher found some problems faced by the students dealing with speaking skill. These problems ranged from all aspects of speaking skill: pronunciation, grammar, vocabulary, fluency, and comprehension. It was found that the students still poor in Grammar and Vocabulary where the mean of both components were 59.5 points (see Table 1) and it is still in fair category based on the students' success indicator. The pre-test was about making introduction of themselves in their class by video-typed, at the end the researcher found some problems from the students dealing with their speaking skill.

Table 1.
Mean of Speaking Components in Pre-Test

No	Components	Score
1	Pronunciation	63
2	Grammar	59.5
3	Vocabulary	59.5
4	Fluency	62
5	Comprehension	63

Table 2.
Students' pre-test Score Percentage

Range of Score	Category	Frequency	Percentage (%)
80-100	Very Good	-	-
60-79	Good	4	16%
40-59	Fair	21	84%
20-39	Poor	-	-
1-19	Very Poor	-	-
Total		25	100%

Table 2 illustrates the students' pre-test score percentage. The mean score (X_0) of the pre-test could be computed as follow:

The \bar{X}_0 of Pre-Test scores = $\frac{\sum X_0}{N} = \frac{1228}{25} = 49.12$

N= 25

Based on Table 2, it indicated that there were 21 students (84%) in fair category and 4 students (16%) in good category. This phenomena was caused by their mother tounge was more dominant. In other words, the students did not know how to express it in English with proper grammar and there was no motivation from the teacher to motivate the students.

At the end, the researcher also found that students were shy while they were doing a video-tape in front of the class. According to this issue, the researcher then planned a good treatment in order to improve the students speaking skill through Project-based learning.

Report of Cycle I

Planning; seen from the preliminary research, the researcher has designed the action with his collaborator related to activities that could be implemented in the first cycle. The researcher designed all things that needed in teaching materials such as the researcher planned the following instructional mean activities; designing lesson plan; analyzing the text book about the material, conducting the test (pre-test) as the students' first test in order to know their capability in speaking skill; Identifying the problems that were going to be solved which occurred in the first test before doing the treatment; Preparing and designing the speaking material that were used in the all cycles by using the text book in school and other sources; Conducting the post-tests each cycle; Preparing the teaching aids and source of materials; Designing the interview question to know the students' perception about project-based learning as the method to improve speaking skill.

Action; the actions of cycle 1 were conducted in four meetings on April 19th, April 22nd, April 26th, and April 29th 2016. The lesson was started by giving the students a topic "Healthy Food" in the first meeting was started by introducing the students about the topic and the goal of the lesson was making a project to help them speak in front of the class. In the second meeting the class was started with the reseracher's question to the students due to the project or carrying out the project. They need to find the solution regarding to the reseracher's questions, they must create their own optimum environment to practice speaking skill by discussing the topic, finding the solution, and showing their knowledge through the project. Next, in the third meeting the lesson started with the students' preparation about their project and remind their project would be presented in public (classroom) and having a final evaluation of their project. At the end of the

meeting, they need to present their project and at the same time, the researcher took the oral test of speaking from the students. Finally, the researcher gave the students some feedback related to their project and their speaking skill.

Observation; in this phase the observation was finished toward the implementation of the action of cycle 1, here the researcher acted as a classroom teacher as well as an observer. The researcher kept observing and monitoring the teaching and learning process through Project-based learning. As the aim of this stage was to collect the data about what happened when the teaching and learning process was done-field note. The complete data can be seen below.

Table 3.

The Observation of Cycle I

Meetings	Time & Date	Field-note
1	April 19th, 2016	When the teaching and learning process was conducted by using English, most of the students were hard to understand what the researcher said. In this case, the researcher used his Bahasa with a small portion for giving direction or clear explanation. The researcher reminded them to bring English dictionary and there was no any mobile phone during the class. Sometimes, the researcher moved around the class to see the students' activity and check their understanding about the topic, unfortunately when the researcher asked them in English, their respond wasn't good and they seemed afraid to talk even shy to express their own opinion or question. Furthermore, researcher found that the students still had difficulties in showing their idea in spoken English, their comprehension and choosing the right diction.
2	April 22nd, 2016	The situation of the class was more active than the first one. The students focused and learned to start the class with using English for communication and discussion. When the researcher asked them in English their respond quite satisfy, they could explain and elaborate it in short explanation. They knew what they had to do in their own project. However, when the researcher called one of them to recite the project, some students refused and pointed their friends to represent the project. Hopefully, in the next meeting the researcher could give them more motivation in speaking.

3	April 26th, 2016	This section, the students' attention in the class was satisfying. They could understand all the questions from the worksheet and answer the questions. They were active to ask the questions related to the topic. We were reviewing the project and played some games called ZIP, ZEP, ZOP. When they played this game, it was stimulated the students' attention, concentration, and kept them engaging in learning English. The researcher still found some obstacles while teaching, the students seemed to low in gain vocabulary.
4	April 29th, 2016	After the project based learning was implemented, the students had courage to speak and to make a short conversation when they discussed their task. The researcher reminded and described the activity they were going to do to the students. It was an oral test. In this case, the form of oral test was an individual presentation. The researcher also explained the procedures of how to report the result of their task in front of the class before starting the test.

Reflection; the situation of Project-based learning implementation in the first cycle was reflected on the improvement of students' score achievement. The improvement of students' score achievement can be seen from the result of pre-test and post-test 1 in the following Table 4. The students' score achievement in first cycle

Table 4.

The students' score achievement in first cycle

	P	G	V	F	C	Mean
Pre-test	63	59.5	59.5	62	63	49.12
Post-test 1	84	81.5	85	78.5	88	66.4

The result of pre-test and post-test 1 showed that there were some positive points of integrating project based learning in English speaking class. The mean score of whole students in pre-test was 49.12 points, but after they had treatment the next test, their improvement in post-test 1 was 66.4 points. The complete data of post-test1 can be seen at Table 5. Students' Post-test Score in First Cycle.

Table 5.
Students' Post-test Score in First Cycle

Range of Score	Category	Frequency	Percentage (%)
80-100	Very Good	-	-
60-79	Good	24	96%
40-59	Fair	1	4%
20-39	Poor	-	-
1-19	Very Poor	-	-
Total		25	100%

Table 5 illustrates the mean score (X1) of the post-test 1. The X1 of Post-Test scores = $\frac{\sum X1}{N} = \frac{1660}{25} = 66.4$

Based on Table 5, it indicated that there were 24 students (96%) in good category and 1 student (4%) in fair category. There were some positive improvement from the last meeting in pre-test, however, the researcher would like to make the students improvement into the next level. So, the researcher needs to formulate or revised the plan to be implemented in the cycle 2. The basic plans were still the same as the plans in the cycle 1 but several addition and/or changes were made in order to get better result in cycle 2. The plans are as follows: (1) the students will have some drill due to their fluency, they will be asked to repeat some sentences from the text or worksheet. (2) In teaching class situation or teaching learning process, the researcher monitored the students' activities more effectively, improving time management in doing their project. (3) The last was keeping the students engaging with their topic and motivating their speaking skill.

Report of cycle II

Planning; from all the action and the results in cycle 1, the researcher revised the plan to be implemented in cycle 2. The basic plan was the same as the plan in cycle 1 but several addition and/or changes were made in order to get better result in cycle 2. The plans are as follows: (1) the researcher planned and designed all things that needed in teaching materials, lesson plan, and also the topic through PBL. The topic was My Favorite Hobby, it was focused on constructing their knowledge in idea deliverance in spoken language. (2) The students will have some drills due to their fluency, they will be asked to repeat some sentences from the text or work-sheet. (3) In teaching class situation or teaching learning process, the researcher monitored the students' activities more effectively, improving time management in doing their

project. (4) The last was keep the students engaging with their topic and motivating their speaking skill.

Action; the actions of cycle 2 were conducted in four meetings on May 3rd, May 10th, May 13th, and May 24th, 2016. The lesson was started by giving the students a topic "My Favorite Hobbies" in the first meeting was started by leading the students in activities and discussing about the topic and the goal of the lesson was making a project to help them speak in front of the class. In the second meeting the class was started with the researcher's question to the students due to the project or carrying out the project. They need to find the solution regarding to the researcher's questions, they must create their own optimum environment to practice speaking skill by discussing the topic, finding the solution, and showing their knowledge through the project. Next, in the third meeting the lesson started with the students' preparation about their project and remind their project would be presented in public (classroom) and having a final evaluation of their project. At the end meeting, they need to present their project and at the same time, the researcher took the oral test of speaking from the students. Finally, the researcher gave the students some feedback related to their project and their speaking skill and motivated them in studying English.

Observation; in this phase the observation was finished toward the implementation of the action of cycle 2, here the researcher acted as a classroom teacher as well as an observer. The researcher kept observing and monitoring the teaching and learning process through Project-based learning. As the aim of this stage was to collect the data about what happened when the teaching and learning process was done-field note. The complete data can be seen below.

Table 6.

The Observation of Cycle II

Meetings	Time & Date	Field-note
5	May 3rd, 2016	When the teaching and learning process was conducted by using spoken English, most of the students understood what the researcher said. In this case, the class was run in open-ended question due to the topic, everyone in the class was active and engaged with the topic. The class situation was good. The students enjoyed the topic, they could elaborate it. However, the researcher found that some students still had difficulties in constructing their idea in spoken English, their comprehension about the topic

		and choosing the proper diction.
6	May10th, 2016	The situation of the class was more active than the first one. The students focused and learned to start the class with using English as the way of communicating or discussing. When the researcher asked them in English their response quite satisfy, they could explain and elaborate it in short expression. At the end, they knew what they had to do in their own project.
7	May13rd, 2016	This section, the students' attention in the class was good. They could understand all the questions from the work-sheet and answer it. They were active to ask the questions related to the topic. We were reviewing the project and the researcher still found some obstacles such as time management, students' discipline in submitting the project, their attitude while the class run or doing a presentation, and the last was the students low in fluency and comprehension.
8	May 24th, 2016	After the project based learning was implemented, the students had courage to speak and to make a short conversation when they discussed their task. The researcher told them that they would have a final oral test. In this case, the form of oral test was an individual presentation. The researcher also explained the procedures of how to report the result of their task in front of the class before starting the test.

Reflection; the situation of Project-based learning implementation in the second cycle was reflected on the improvement of students' score achievement. The improvement of students' score achievement can be seen from the result of pre-test, post-test 1 and post-test 2 or final test.

Table 7.

The students' score achievement in final test

	P	G	V	F	C	Mean
Pre-test	63	59.5	59.5	62	63	49.12
Post-test 1	84	81.5	85	78.5	88	66.4
Post-test 2	84	81.5	87	91	96.5	70.48

The result of pre-test and post-test showed that there were some positive points of integrating project based learning in English speaking class. The mean score of whole students in

pre-test was 49.12 points, but after giving them a treatment in the next test they had some improvement in post-test was 66.4 points and for the last treatment the mean score of whole students in post-test 2 was 70.48. It indicates that the use of Project-based learning in this class was successful to improve students' speaking skill.

Table 8.
Students' Post-test Score in Second Cycle

Range of Score	Category	Frequency	Percentage (%)
80-100	Very Good	1	4%
60-79	Good	23	92%
40-59	Fair	1	4%
20-39	Poor	-	-
1-19	Very Poor	-	-
Total		25	100%

From the data presented in Table 8, the mean score (X₂) of the post-test 2 could be computed as follow:

$$\text{The } X_2 \text{ of Post-Test scores} = \frac{\sum X_2}{N} = \frac{1752}{25} = 70.48$$

N 25

Based on Table 8, it indicated that there were 23 students (92%) in good category, 1 student (4%) in very good category and the last 1 students (4%) still in fair category. Based on the data above, the researcher ended the research up to cycle 2. It had covered the weaknesses of cycle 1 by the reasons all indicators of students' speaking skill such as pronunciation, grammar, vocabulary, fluency, and comprehension had been improved. Students' score of speaking had been improved and the last in teaching learning process, the students were more active, engaged and motivated by using Project-based learning in the English speaking class.

The additional data required for the classroom action research were collected through interviewing the students at the end of cycle 2. The researcher chose six students who had different competence, two students who are high level, two students who are medium level, and two students who are low level. The researcher chose the students based on their score.

The aim of this interview was to know the students opinion or information about the use of Project-based learning improve students' speaking skill and also their interest in learning speaking through Project-based learning. In addition, this interview questions lead students elaborate what they got and felt during the treatment. Students were encouraged to state their

opinion or give some information related to the treatment. The answers of the interview were open-ended questions and were described qualitatively.

The results of data analysis which were established as the findings showed the improvement of project based learning in students' speaking skill. The data also indicate that students gave positive response in learning speaking through project based learning.

The result of the data analysis from interview was considered as additional supporting data which was state above. There were some keys findings from interview such as the advantages and disadvantages learning speaking by using Project-based learning; the aspects of speaking skill-before and after in Project-based learning.

First, the key finding in the interview was the advantages and/or disadvantages in learning speaking through PBL as it is written below through interview:

“Yes, I like studying with PBL because it is not monotonous and boring. We become creative and active learners.” (**Respondent 1**)

“Yes, I feel my fluency in English is getting better, I feel creative, active while doing my project and I can brainstorm my idea into a project.” (**Respondent 5**)

The rest of respondents also had positive responses in learning speaking through PBL. At the end, they mentioned that PBL can improve their speaking skill in the class room, this can be aligned with pervious study (Maulany, 2013) stated that the finding research was PBL could improve the students' speaking skill.

In addition, in this research also found the disadvantages from PBL especially in enhancing the students' speaking skill. The participants also stated their ideas regarding the implementation of PBL in the class. the following are some extracts:

“The time is too short in order to do the project and to prepare the project, at least we need two weeks.” (**Respondent 3**)

“the duration is too short, and I cannot finish my project in time. As the result, the quality of the product is not satisfying.” (**Respondent 6**)

Regarding the statement above, researcher realized that in doing a project is not easy, takes time and concentration. which is consistent with the theory of (BIE.org, 2016) and (Thomas, 2012) which states project-based learning as a teaching method in which students gain

knowledge and skills by working for an extended period of time to investigate and respond to an engaging and complex question, problem, or challenge.

Second, in this key finding was the students' progress in speaking aspects, namely Pronunciation, Grammar, Vocabulary, Fluency, and Comprehension. The researcher have some various statement from the students, regarding to their speaking aspects. Mostly, they found themselves aware of their progress, some of them realize they found the differences before and after the treatment of PBL in the class. It can be seen from this interview, started from Pronunciation.

“Yes, I founded it. For example: I recognize the right way to pronunciation it, such as (Bor'ed /bɔ':d/) becomes (Bored /bɔ:d/).” **(Respondent 5)**

“Before: sometimes I get miss pronounce the word, but now I know how to pronounce it well.” **(Respondent 3)**

Next, researcher sees from the grammar aspect. The finding was quite varieties, some of the students had built their awareness in learning and independent learner. These finding was supported by Fragoulis (2009) and Bell (2010) stating that PBL can make the students actively engage. As it is written below:

“yes, I have found the difference. Before I have PBL in my class, I do not put any consider with my grammar, but after PBL in my class I do realize that my grammar is still bad and correct myself if I make a mistake.” **(Respondent 1)**

“when I learned English with Miss Dumay, she told me the correct grammar, and after we use PBL in the class, I have my own awareness if I made a mistake in my grammar.” **(Respondent 4)**

Then, researcher jump into the next aspect, it is Vocabulary aspect. In this section, most of all the students found themselves make a progress. They gain new words through the project, Fragoulis (2009) and Bell (2010) state through PBL it can create optimal environment to practice speaking English. PBL seemed could enhance the students' speaking skill and the result can be seen from the interview below:

“before we have PBL in my class, I do not have a new vocabulary. But after PBL in my class, I have a new word because the project helps me to find the words.” **(Respondent 2)**

“I found new words through the project, because I need to explain my project with people.” **(Respondent 5)**

The next finding is in Fluency aspect. In this phase, three out of six participants still had an obstacle with their fluency, this condition caused by some factors such as anxiety, low vocabulary, and grammatical system. However, other participants had the opposite views concerning the fluency. The result of the interview can be seen below:

“...I still have some obstacles in fluency, nervous and stutter.” **(Respondent 1)**

“I do. It is become habitual for me to speak English.” **(Respondent 2)**

“My fluency is getting better since we use PBL in class.” **(Respondent 3)**

“my fluency is not good at the moment, sometimes I just found the obstacle.”
(Respondent 4)

“I have no any problems while speaking in front of the class.” **(Respondent 5)**

“...,I still have some problems in my fluency. For example: I know what I am thinking and I have constructed it in my mind but it is hard to deliver it. Because my grammar is still bad.” **(Respondent 6)**

And for the last aspects, it is Comprehension. For this section, most of the students can interpret the idea, topics, and material given into a project, this finding was supported by Patton (2012) mention that it empowers the learners to pursue content knowledge on their own understanding. The result of the interview can be seen below:

“Before: I was confused with the given topic. But once there is an activity to make a project I find it helpful to understand the topic that has been given.” **(Respondent 2)**

“yes, it is acceptable for me.” **(Respondent 6)**

Conclusion and Suggestions

In summary, it can be seen that all the students have able to construct their idea into a project, they able to understand all the topic and develop some solution regarding to their project. Furthermore, these data clearly showed that their speaking skill of the ten graders of SMA 7 PSKD Depok was improved through Project-Based Learning and the students were able to cover their speaking aspects-pronunciation, grammar, vocabulary, fluency, and comprehension.

Moreover the result of data analysis from interview and observation (field-note) were considered as additional supporting data which indicated that the students had positive interest in

using Project-based learning for speaking teaching-learning in the classroom. Ultimately, teachers are recommended to use Project-based learning as an alternative in teaching to the students.

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