III. RESEARCH METHODOLOGY

This chapter discusses certain points; research design, general description of the research, research procedures, indicator of the research, instrument of the research, and data analysis, as follow:

3.1 Research Design

In this research, the researcher used a classroom action research. Action research was characterized by problems and actions done by using cycle to solve the problems. In doing the research, the researcher (acted as the teacher) collaborated with the English teacher of that school (collaborator) were focusing on improving students' speaking ability in group discussion through problem based-learning strategy. The researcher and the collaborator would also carry out reflection after knowing the result of the analysis. The function of the collaborator in this action research was as a resource to find the problem in order that the researcher could see the improvement when do this strategy and also, as the second observer to get the data.

This research was done at the second year of SMAN 9 Bandar Lampung. It would do based on the problem faced by the students and the teacher when they were in class. Based on the problem found by the researcher, the researcher examined the cause of the problem and then found the solution for that problem. The subject of

this action research was the students of the second year students of SMAN 9 Bandar Lampung which consisted of 32 students. The students of this school actually were good in English lesson, but were not so active when they were learning speaking especially in giving comments in speaking lesson and expressing the ideas of the problem that they faced. The students were only good at speaking, in simple conversation and answer the question with simple answer too. According to the researcher's pre-observation towards those students, the researcher concludes that most of the students have low speaking achievement.

In this research, the researcher acted as the teacher by implementing Problem based learning since this was a kind of research that was based on the teacher's problem and how the teacher solve the problem by herself; meanwhile the English teacher of SMAN 9 Bandar Lampung, acted as collaborator and also observed the students since the researcher did not know the ability of each students exactly. The researcher made the lesson plan and performed in the class based on it. So, during the research, the researcher and the collaborator observed everything that occurred in the classroom.

3.2 General Description of the Research

The research was a classroom action research which was conducted based on the problem faced by the students and the English teacher. In doing the research, the researcher does collaboration with the English teacher to improve the students' speaking skill trough Problem based learning strategy by using group discussion. Actually, group discussion was primarily chosen in order to accommodate chances for students who had lower ability to learn with other students with higher ability in

speaking performance. Furthermore, students were expected to increase their speaking through sharing information activity. With the above facts, the use of problem-based learning was expected to solve the problem of improving students speaking ability in group discussion.

While the teacher was applying Problem based learning in the classroom, the collaborator observed the teaching learning process and made some necessary points from that process. In that process, the teacher also held speaking test by deviding students into small group, then giving the students speaking test of a scenario which consised some problems to discuss and solve it together by giving a ranking of a list of items to be put in order. The focus of analyzing and solving the problem of the task, was giving some reasons why they chose the answer and made it as priorities by using expression of asking and giving opinion. After that, the researcher and the collaborator analyzed the result of the observation, and also the speaking test. The researcher and the collaborator also did reflection after knowing the result of the analysis. Based on the analysis and reflection, it was decided whether the next cycle would be held or not, and the next cycle would be focused on eradicating the weaknesses in the previous cycle.

3.3 Research Procedures

In this action research, the researcher implement two cycles depending on the result of the analysis and reflection in the first cycle. The first cycle was based on the problem of the research. The main steps of each cycle were as follows:

1. Planning

Planning was the stage where the problem causes were identified. By knowing the causes, the focus of the problem could be formulated in the importance of the implementation that would be given. After deciding what the problems and the causes were, the appropriate strategy was selected. And based on the problem and the teaching technique, the materials and teaching aids and the type of test were planned. To get a complete series of data, a rater was involved to observe the teaching-learning process.
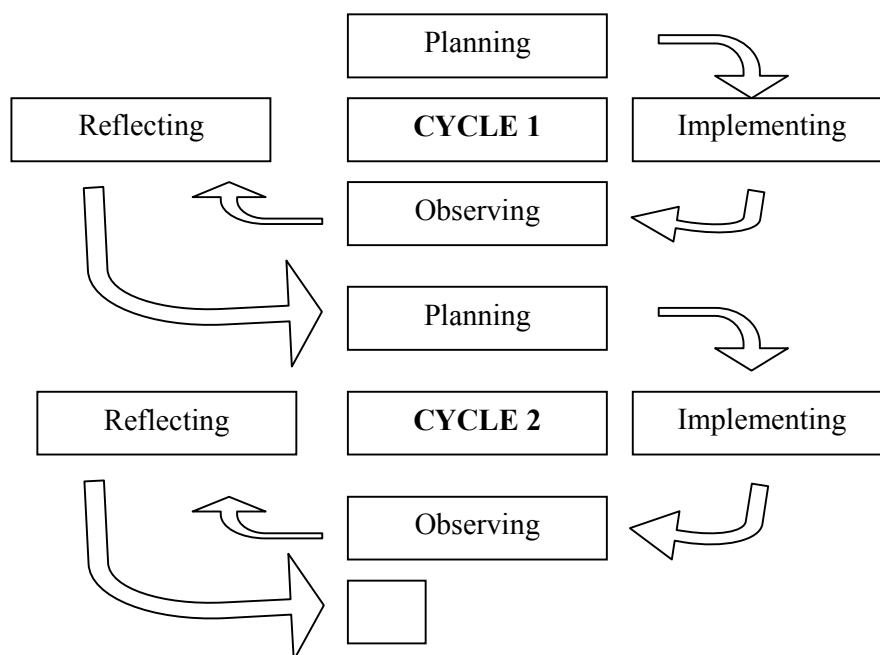
2. Implementing

In this step, the researcher implemented the material by using Problem based learning strategy while she was teaching speaking. First, started the pre-activity for speaking class by giving a text and brainstorming students about the text. After that researcher divided students into small groups consist of 4 students for each group, and then they were given a task consisted of a scenario related to text before, which had to be solved by giving the rank of the result. Students had to make some priorities of the reasons from the test which they were supposed to contribute opinion to the problem solving. During the discussion, each students had to have a chance to give their own opinion or comments and discuss which were the best choice to put as priorities of the rank. After that, each group had to present it in front of the class, and other group would give the questions or comments by using expressions of asking and giving opinion about the result. So that the students would become more active in teaching learning process. The collaborator observed the situation in the class and made some necessary notes.

3. Observing and Interpreting

The collaborator observed the activities happened in the classroom in every cycle and wrote the result of the observation in the observation sheets. The researcher also interpreted the result of the observation. This step was started when teaching learning process was occurring.

4. Reflecting

In this step, the researcher and the collaborator analyzed the result of the speaking test of the students as the learning product. The researcher also analyzed everything occurs in the teaching learning process based on the observation sheets. It was done to find out the improvement after the teacher implemented Problem based learning in the classroom. In analyzing, the researcher together with the collaborator did reflection to discover the weakness and strength of the implementation of Problem Based Learning, and also to know the problems faced by both teacher and students during teaching and learning process. By doing so, the researcher and the teacher know what should be improved for the next cycle. If the indicators of the research haven't been fulfilled in the first cycle, the researcher together with the collaborator would plan the next step to make betterment in the next cycle. On the other hand, if the indicators were already achieved the researcher and the collaborator do not need to hold the next cycle.

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              │        │   Observing  │ ←─┘
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Figure 1 The Cycles of Classroom Action Research Adapted from

(Arikunto, 2006:16)

3.4 Indicators of the Research

In order to see whether PBL could develop students speaking skill, then researcher determine the indicators dealing with the learning product and learning process.

1. **Learning Product**

The target of the learning product determined by the researcher and the teacher was 70 or more. It was done because 70 is the standard score or KKM (Kriteria Ketuntasan Minimum) stated by the school for English subject. So, if at least 70% of students' scores could reach 70 or more for the speaking test, it meant that the Problem based learning could improve the students' speaking ability and achievement. In giving score of the task in speaking test, the researcher uses

speaking rubric score adapted from (Heaton, 1975:100). The speaking rubric can be

seen in the table below:

Level	Accuracy	Fluency	Comprehensibility
6	Pronunciation was only very slightly influenced by the mother-tongue. Two or three minor grammatical and lexical errors.	Spoke without too great an effort with fairly wide range of expression. Searched for words occasionally but only one or two unnatural pauses.	Easy for the listener to understand the speaker's intention and general meaning. Very few interruption or clarifications required.
5	Pronunciation was slightly influenced by the mother-tongue. A few minor grammatical and lexical errors but most utterances were correct.	Has to make an effort at times to search for words. Nevertheless, smooth deliveryon the whole and only a few unnatural pauses.	The speaker's intension and general meaning are fairly clear. A few interruptions by the listener for the sake of clarification are necessary.
4	Pronunciation was still moderately influenced by the mother-tongue but no seriously phonological errors. A few grammatical lexical errors but only one or two major errors causing confusion.	Although he had to make an effort and search for words, there were no many unnatural pauses. Fairly smooth delivery mostly, fragmentary but succeeds in conveying the general meaning fair range of expression.	Most of what the speaker says was easy to follow. His intentions were necessary to help him to convey the message or to seek clarification.
3	Pronunciation was influenced by the mother-tongue but only a few phonological errors. Several grammatical and lexical errors, some of which cause confusion.	Had to make an effort for much of the time. Often had tosearch for the desired meaning, rather halting delivery and fragmentary range of expression often limited.	The listener could understand a lot of what was said. But he must constantly sought clarification. Cannot understand many of the speaker's more complex or longer sentences.

Level	Accuracy	Fluency	Comprehensibility
2	Pronunciation seriously influenced by the mother tongue with errors causing a breakdown in communication. Many basic grammatical and lexical errors.	Long pauses while he searched for the desired meaning frequently fragmentary and halting delivery. Almost gave up making the effort at times. Limited range of expression	Only small bits (usually short sentences and phrases) could be understood - and then with considerable effort by someone who was used to listening to the speaker.
1	Serious pronunciation errorsas well as many basic grammatical and lexical errors no evidence of having master of any of the language skills and areas practiced in the course	Full of long and unnatural pauses. Very halting and fragmentary delivery. At time's give up making the effort. Very limited range of expression.	Hardly anything of what was said can be understood. Even when the istener made a great effort or interrupt, the speaker unable to clarify anything he seemed to have said.

Table 3.4 Classification of Students' Speaking Performance Adapted from
(Heaton, 1975:100)

Speaking Scale Category:

6 = 90 – 100 = Excellent

5 = 80 – 89 = Very Good

4 = 70 – 79 = Good

3 = 60 – 69 = Fair

2 = 50 – 59 = Low

1 = 40 – 49 = Very Low

2. Learning Process

In the learning process, there were two aspects which become the focus of this research, that is, the students' learning activities and the teacher's teaching performance. The indicator of the students' activities is, if at least 80% of the

students did at least 80% of the activities during the teaching and learning process, it means that the implementation of the PBL can improve the students' speaking activities. There are five activities that must be done by the students, that is, responding to the topic enthusiastically, paying attention to the teacher's explanation, responding to the teacher's questions, following the teacher's instructions (to discuss in group and present their ideas in front of the class), and able to respond to the teacher's question (in the form of speaking task).

The target determined by the researcher concerning the students' activities whether there were a problems or not in the cycle. The researcher would observe students' activities in the class from pre-activity to post-activity. If there was not a significant problem during in the class, it meant that the activities of the students' were good. To set the target of the success of this action research, the researcher was carried out a discussion with the English collaborator.

Besides observing the students' activities, the collaborator also observed the teacher's teaching performance during the teaching and learning process. It was expected that the teacher could get score 70 in her teaching performance after implementing PBL strategy. So, if the teacher could reach that target, it means that the teacher's teaching performance was good. For the teaching performance, there were some aspects scored, that is, the teacher's activities in pre activity, while activity, and post activity.

3.5 Instruments of the Research

The data would be collected until there was a consistency of the data, so there was no exact time to gather it. Moreover, to make the data was valid the writer would

use triangulation. Triangulation was a way of collecting the data by combining two or more methods. According to Setiyadi (2006:246) the use of triangulation was to describe the subject in a complete description. Actually there were many kinds of triangulation but this research would use methodological triangulation. To gain the data, the researcher applies three kinds of instruments. The instruments were the speaking test, observation sheet, and questionnaire.

1. Speaking Test

The first instrument used in getting the data was speaking test. In this research, the students would be asked to find solution of problem from a scenario about Private School and Television programs through group discussion. In here, students had to solve the problem and present it as well as the could. By doing these activities, they have been forced to speak and express their ideas. This test was aimed at knowing students' improvement in speaking ability. For example:

Learning Objective:

To find solutions of a problem from a scenario of Privat school through Group Discussion

Instruction:

1. Work with your own group.

2. Read the scenario carefully.

3. Each student tries to rank the items their self first.

4. Then, each student takes turn to communicate their order to other members of the group.

1. After that, discuss the best solution for the problem among those alternatives

2. Make a hortatory exposition text based on your reasons.

3. Present your group result in front of the class, and other group will ask you about your presentation.

4. Don't forget to use expressions of giving and asking opinion during the disscusion and presentation.

7. Write the conclusion of your group discussion on the sheet provided by your teacher to be submitted to the teacher by the end of the discussion session.

The validity of the test would be measured by face validity, content validity, and construct validity. Face validity would be gotten from printing of instruction and direction in the test. Content validity would obtained by choosing the text based on the level of the students and the curriculum. While construct validity would be achieved by focusing the test in problem solving and finding the solution of the text by group discussion of Problem based learning.

The researcher would always try that in collecting the data is reliable. In this research basically there were many ways to collect the data reliable. The reliability would be gotten by using some data collection, such as observation sheet and questionnaire. So, by using that way hopefully the data would be consistence.

2. Observation Sheet

Observation is the primary method that can be used in classroom action research to complement other methods. By doing observation, the researcher can find a lot of data and important information. Observation was conducted in every cycle during the teaching learning process. When teaching and learning process was occurring, the researcher observed the process happened in the classroom. The researcher used structured observation to know the students' activities and also the teacher's

performance in the classroom. So there were two kinds of observation sheets that were filled out by the researcher, that were the observation sheet for the students' activities and the observation sheet for the teacher's performance. Besides, the researcher also made some necessary notes in the observation sheet concerning the students' activities and teacher's performance.

3. Questionnaire

Questionnaires are a number of written questions used to obtain information from respondents in terms of reports of personal or other matters that he knew. The questionnaire used to mention the method or instrument. The questionnaires were used to support the data gain from observation about the students' opinion. Questionnaire is made suitable with everything which related with the answer is needed by the observer as additional data to support the research. In this action research, the researcher would use open-ended questions. Open-ended questionnaire could be used to help the researcher in selecting data because the respondents were free to express their answer (Setiyadi,2006). By using open ended questionnaire, the researcher hopefully would find the important data which could not imagine before.

3.6 Data Analysis

In analyzing the data, the researcher will classify the data into two categories that is, the data of the learning process and the learning product. The data analysis was done during and after the data had been collected from every cycle (1st, 2nd,…). the data from the first cycle had been collected, then the researcher together with the teacher analyzed the data and did reflection based on them. From the analysis and reflection, the researcher knew the weakness and strengths from the first cycle.

Besides, both researcher and teacher knew what should be improved for the next cycle.

1. Learning Product

To know the learning product, the researcher used speaking test to collect the data. There were some steps used to analyze the data got from the test:

1.1. Giving the speaking scores to the students

After giving the test, the researcher checked the result of students' test to give the score, based on their discussion and presentation. Besides that, the researcher analyzed the result to know the errors mostly made by the students. This was very useful for betterment in the next cycle.

1.2. Calculating students' total score

There were two steps that must be done in calculating the total scores:

Calculating the scores from 1st and 2nd rater.

$$X = \frac{X1 + X2}{2}$$

Note:

X: Total score

X1: Score from 1st rater (the researcher as the teacher)

X2: Score from 2nd rater (the English teacher as the collaborator)

2. Learning Process

To get the data from the learning process, the researcher used observation sheets and questionnaire. The result of the observation sheet and questionnaire were analyzed after every cycle is conducted. Since the observation was done for

observing the students' activities and also the teacher's performance, the researcher analyzed the result of the observation separately.

2.1 Students' Learning Activities

In analyzing the data get from observing the students' learning activities, the researcher analyzed the problem that is faced in the cycle.

2.2 Teacher's Teaching Performance

Meanwhile, in analyzing the data get from observing the teacher's performance, the researcher did the following steps:

2.2.1   Counting the total score

 In this step, the researcher counted the sum of scores from all aspects. The aspects that were scored cover the teacher's activities in pre-activity, while-activity, and post-activity.

2.2.2   Making a description from the data that have been analyzed.

It was similar to analyze the students' activities, to analyze the teacher's performance the researcher also made a description from the collected data which could enrich and support the result of the analysis.