CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents the methodology of this research. It covers the elaboration of research design, the research site and participants, the data collection techniques, the research procedure, the implementation of PBL, and the data analyses. The method is applied to find out the formulated research question, which is how the implementation of PBL in teaching analytical exposition text improve students' speaking skill.

Research Design

This research deals with the process of students' speaking skill improvement resulted from PBL implementation in teaching analytical exposition text to communicate using authentic English language, which is considered as one of difficult aspects of language learning for the teacher to get his or her students speak in English.

In conducting the research, the writer applied qualitative research design as the research methodology. A qualitative research design is concerned with event and human behaviour without the use of numerical data (Best and Kahn, 1989). The use of this research method because this research attempts to analyse how students' speaking ability is improved using PBL, analysing speaking aspects that are improved, and finding out speaking activities used in PBL implementation in teaching analytical exposition text.

The rational of using qualitative research design is because the characteristics of qualitative research employment answers the formulated research questions, which focus on analysing the process of speaking improvement through PBL implementation. As explained by Creswell (2009) the

characteristics are natural setting, multiple sources of data, inductive data analysis, participants' meanings, emergent design, and interpretive inquiry.

Research Site and Participants

The eleventh grade students of one of senior high schools in Bandung were taken as participants of the research. There are some reasons to conduct the research using the students as participants: firstly, because students' cognitive development in that age have reached analytical stage where they can think abstractly and critically; secondly, analytical exposition text is one of teaching materials given to the eleventh grade students, this research suits the material they were learning.

The participants of this research consisted of 35 students. From the total number, only 30 students were taken as final participants, considering students' absences in participating the research.

Data Collection Technique

In collecting the data, two techniques were employed, which are observation and interview. These data collection techniques will be discussed below.

Observation

Observation as explained by Suharsaputra (2012) is a method to find out particular data which, gives information and diagnose. Thus, observation can be conducted at existing behaviour such as attitude. There are four types of observers: complete participant, which the researcher conceals the role; observer as participant, which role of researcher is known; participant as observer, which observation role secondary to participant role; and complete observer, which researcher observes without participating. (Creswell, 2009)

The role of the researcher in the observation is an observer as participant, which means role of researcher is known. The advantage of this type of role is as explained by Creswell (2009) is the researcher can record information as it occurs. However, the flaw is that the researcher may not have good attending and observing skill.

The observation technique was used four times to observe students' speaking improvement in doing project stages. The first observation were conducted to see whether PBL stages of first meeting was fulfilled, which are, material of analytical exposition delivery and project theme introduction. It also analysed students' prior in speaking skill. The second observation was conducted to see students' progress on their projects and their speaking improvement. The third observation was conducted to record students' progress of project presentation, and to analyse their speaking improvement. The last observation was conducted to analyse students' final speaking performance in reporting their project product.

During the observation, the researcher videotaped students' discussion and presentation process. It was process of collecting data by recording students' speaking progress throughout conducting their projects. There are some benefits of videotaping as explained by Fraenkel and Wallen (1990, as cited in Cresswel, 1994). Firstly, it is audio visual material that can preserves data needed by the researcher. Secondly, it could be replayed several times to check and assure the data. Thirdly, it can be shown to other researchers that might need for another next research.

Interview

According to Johnson (2008), interview is defined as asking questions and getting the answers from the participants in a study. Interview was done in this research for several reasons. Firstly, it was to back up the observations' inquiry and interpretation. Secondly, it also aimed to make this research more objective

and valid. Thirdly, in addition, interview was also done to inform psychological aspect of the students as the participants of this research. Fourthly, it also functioned as valid rationales why soma aspects of speaking were improved through the implementation of PBL.

Among five types of interviews classified by Johnson (2008), which are structured interview, semi-structured interview, unstructured interview, informal interview, and focus groups, structured interview was chosen due to lack of time. One of the characteristics of structured interview is that it asks each participant the same series of question. The type used for this interview is web-based interview, using Line social media because most students used this social media, so it became more practical for them to answer the questions of the interview.

The question 1 was aimed to obtain information about methods used by students in reporting the project progress finding to improve their speaking ability. The question 2 was to find out whether their speaking skill was improved through PBL implementation and why it got improved. The question 3 was to see students effort in enhancing their pronunciation skill while presenting the report of finding progress. The question 4 was to find out how did students do to improve their pronunciation toward certain vocabularies. The question 5 was to see whether by PBL the content and comprehension of students in analytical exposition text got improved. The question 6 was to find out why by PBL implementation, students' vocabulary bank got increased. The last question was to see whether PBL improved grammar aspect of the students.

Number of participants that were interviewed was 15 students. Among 15 students, only 12 students gave the answers of the questions due to number of students who actively use Line at that time.

Research Procedure

The procedure of this research is described in the following table:

No	Steps	Time	Description
1	Designing project	Feb, 2015	The project selected for the implementation of PBL in teaching analytical exposition text was exhibition, and the project product made by students were posters presenting facts and data. The content discussed following topics - National examination should be banned VS. National examination should not be banned. - Public school is better that home school VS. Home school is better than public school. - Home mom is better than working mom VS. Working mom is better than home mom. - Sex education should be taught in schools VS. Sex education should not be taught in schools.
2	Designing instrument, syllabus, lesson plan	Week 1-3 of march 2015	The instrument used for conducting this research was observation and interview. Observation or videotaping was utilized by primary standing camera and secondary camera to complete the missing parts. Meanwhile interview was done to find out why the phenomena happened that way. Other instruments used were lesson plans specially designed for research, which were interpreted from the syllabus using the new national curriculum of 2013 format (see appendix B). The lesson plans were featured with students' worksheet for them to work on.
3	Observing and videotaping learning process in five meetings of PBL	March to May 2015 (precisely 31st march, 7th April, 23rd April, and 7th May 2015)	The observation in form of videotaping was done in three months started from March to May. The rational of choosing March is because according to syllabus, material of analytical exposition text is taught right after midterm test. However it ended at May (though it only took four times of observation) because of some days off when students have conducted their projects.
4	Transcribing videos and coding the transcripts	The 2nd week of May 2015	Transcribing videos were done after all observations have been conducted. The transcript for all records are available in appendix E.
5	Analysing the transcript to see students' speaking improvement	The 3rd week of May 2015	The analysis of transcript was done to answer the formulated questions, which is how PBL implementation in teaching analytical exposition text improve students' speaking skill.
6	Interviewing	The 4th week of May 2015	The interview was done using Line social media (web based). It consisted of seven structured

			questions.
7	Presenting the result of the study	The 1st week of June 2015	The result of this study is presented in chapter 4.

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The Implementation of PBL

This subchapter covers PBL implementation that is presented in form of schedule and stages that derive from selected project type, proposed by Henry (1994, in Richard and Renandya, 2011). In term of teacher and students collaborative work, the project selected and used throughout this research is semi-structured project, which the project are defined and organized in part by the teacher and in part by the student.

The stages used is adapted from Richard and Renandya's framework (2011) and Kriwas (1999, in Bell and Maulany, 2013). Richard and Renandya's framework is detail version, while Kriwas's is general outline. This study used in between framework version.

Conducting the projects spent four meetings. The first meeting was for starting point and preparation, two next meetings were for doing the projects, and the last meeting was spent for reporting the projects. In detail, the schedule and its activity is presented as follows:

No	Date	Agenda	Descriptions

| 1. | March, 31st 2015 | 1. Analytical exposition material delivery | In the first meeting, the students were firstly introduced to analytical exposition texts by displaying videos of spoken text as an exposure. It includes the exploration of the text which are structure of the text, language features, and function of the text. |
		2. project product introduction	In this session, students were introduced to project product, which is poster and exhibition, displaying topics determined by the researcher.
		3. group determination and topics introduction	The students were divided into eight groups based on the topics discussed. The topics determined were four topics, which each topic was divided into two stands: pro and con stands.
2.	April 23rd 2015	1. collecting data	In this session, the students focused on collecting data. Most of them investigated the data by browsing. The data collected were translated into point of arguments which strengthen their stands.
		2. reporting the findings	After that, each group presented their findings with the progress in the front of the class. The rest of the students came up with questions and opinion against the presenter's findings. Discussion and mini debate occurred.
3	May, 5th 2015	1. monitoring and reporting progress of the project	In the third meeting, students' were given chances to share their report of the project progress by presenting their findings again.
		2. Poster making	After reporting the progress, the students worked on the project product, poster, by posing their findings and feedback given through the presentation into a carton based on their creativity.
5.	7th May 2015)	1. exhibition	The activity of the day was exhibition. It displayed their project products, which are posters, on the wall. Each student was given one of these roles: stand keeper and visitor.
		2. role play	The students who were stand keepers were tasked to explain their posters in the stand to the visitors and answer the questions coming from the visitors. Meanwhile, visitors were tasked to visit at least five stands and ask some questions in regard to the

			information displayed on the poster, design of the poster, and any other questions. They were also tasked to give score toward stand keepers' speaking ability in explaining them the content of the poster: content, grammar, fluency, pronunciation, and grammar.

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Data Analysis

The analysis of collected qualitative data, which is observation, was conducted in several steps as guided by Creswell (2009) as mapped in this following diagram.
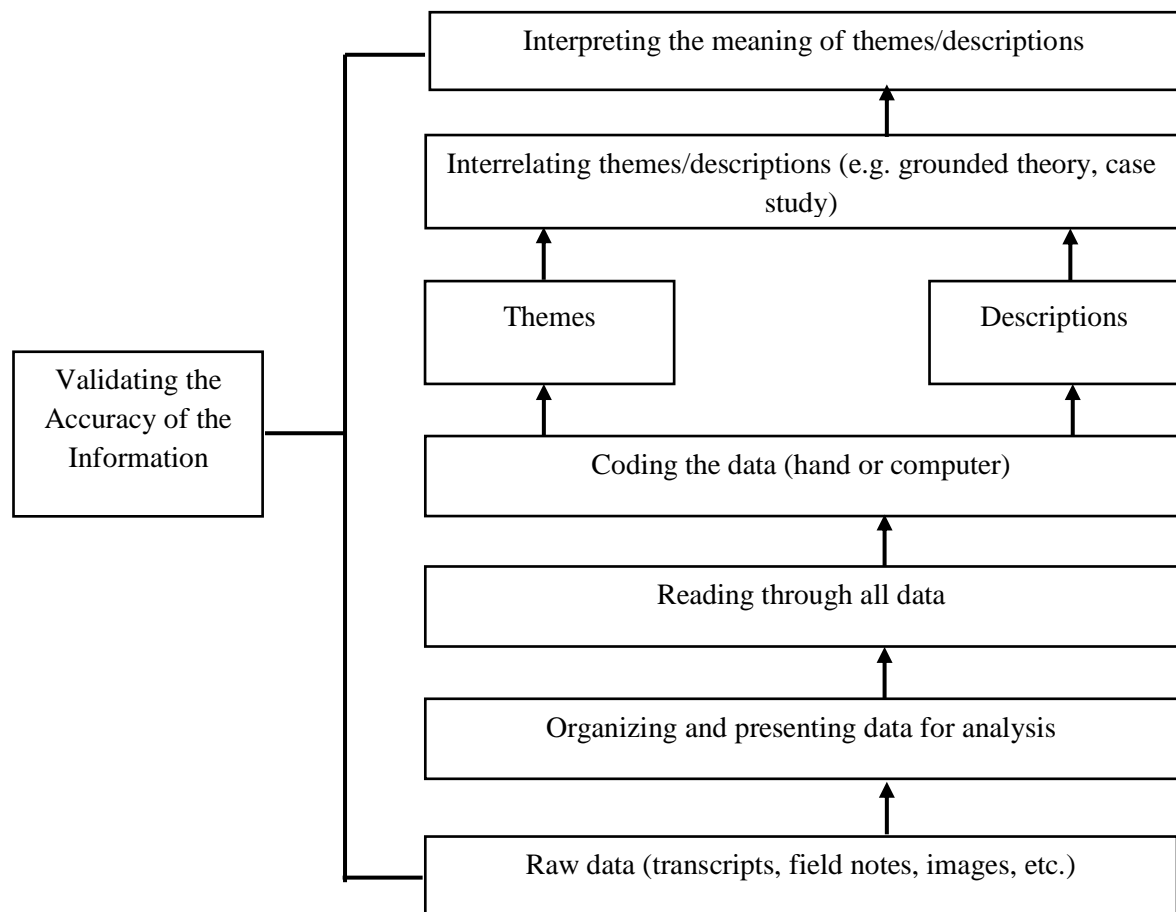
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1. The first step is organizing and preparing the data for analysis. This involves transcribing interviews, typing up field notes and observation sheets, and sorting the data into different types depending on the source of information.

2. The second step is reading through all the data. It is to obtain a general sense of the information and to reflect on its overall meaning.

3. The third step is coding the data. It is the process of organizing the material into chunks or segments of text bringing meaning to the information. It includes classifying, labelling the data into the right classification. There are types of code as proposed by Bogdan and Biklen

(1992, p. 166 in Creswell, 2009, p. 187), that will be used in analysing the data of this research. They are process code and activity code.

4. The fourth step is using the coding process to generate a description of the setting or people as well as themes for analysis. Descriptions here mean detailed rendering of information about people or setting, while themes are codes or categories made for classifying the data.

5. The fifth step is examining in advance how the description and themes will be presented in the qualitative narrative.

6. The sixth step is analysing and interpreting the meaning of the data. It could be the researcher's personal interpretation, which is couched in the understanding that the inquirer brings to the study from her or his culture, history, and experiences. It is presented flexibly.

In this research, there are two types of code. The first code type is used to analyse students' speaking aspect improvement. The second code type is used to analyse speaking activities occurring in the learning implemented by PBL. The table below shows the video transcript codes.

No	Description	Code	
		Main	Sub
1	Teacher	T	
2	Student	S	
3	Students	Ss	
4	Visitor	V	
5	Stand keeper	Sk	
6	Bahasa Indonesia	L1	
7	English	L2	
6	Sentence structure	S.S	
7	Sentence structure criterion 1		S.S1
8	Sentence structure criterion 2		S.S2
9	Sentence structure criterion 3		S.S3
10	Fluency	F	
11	Fluency criterion 1		F1
12	Fluency criterion 2		F2
13	Fluency criterion 3		F3
14	Vocabulary	V	
15	Vocabulary criterion 1		V1
16	Vocabulary criterion 2		V2
17	Vocabulary criterion 3		V3

18	Pronunciation	P	
19	Pronunciation criterion 1		P1
20	Pronunciation criterion 2		P2
21	Pronunciation criterion 3		P3
22	Comprehension (of information)	C	
23	Comprehension criterion 1		C1
24	Comprehension criterion 2		C2
25	Comprehension criterion 3		C3
26	Grammar	G	
27	Grammar criterion 1		G1
28	Grammar criterion 2		G2
29	Grammar criterion 3		G3

(Table **Error! No text of specified style in document.**.3)

The criterion above means level of comprehension in a certain aspect of speaking. Each aspect has three levels of criterion. Criterion 1 is the lowest, criterion 2 is the middle or average, and criterion 3 is the highest where the students almost flawlessly master a certain speaking aspect. The detail of these codes will be explained in chapter 4.

The table below shows codes for speaking activities occurred in PBL in the whole meetings.

Main activity	Sub activity	Code
Material delivery	Informal chat	Ic
	Giving instructions	Gi
	Modelling	Mod
	Speaking drill	Sd
	Class discussion	Cd
	Video cued	Vc
Findings report	Conversation	Cv
	Question answer	Qa
	Giving arguments	Arg
	Giving opinion	Op
	Debating	Deb
	Paraphrasing	Prh
	Translation	Tr
	Giving feedback	Fb
	Group discussion	Gd

	Pronunciation practice	Pron
	Presentation	Prs
Exhibition	Data cued	Dc
	Picture cued	Pc
	Interview	Iv
	Role-play	Rp

(Table **Error! No text of specified style in document.**.4)

After speaking aspect and speaking activities being coded, the data was analyzed using qualitative design. This is because the characteristics of qualitative research employment answers the formulated research questions, which focus on analysing the process of speaking improvement through PBL implementation in teaching analytical exposition text. As explained by Creswell (2009) the characteristics are natural setting, multiple sources of data, inductive data analysis, participants' meanings, emergent design, and interpretive inquiry.

According to Alwasilah (2009), to answer the formulated questions using qualitative method, process of data reduction and data display are needed to find relevant data. In reducing data, some of students who did not follow all stages of PBL are dismissed. Then, only data of students who follow all stages of PBL that is going to display, or called data display.