

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter elaborates the method employed to collect and analyze data in this study. This chapter also describes the procedures of the study to answer the research questions stated in chapter one. It covers the research design, sample of the study, data collection & instrumentations, and data analysis.

#### 3.1 Research Design

The research design of this study is a qualitative case study. This design is in line with the present research purpose that is to understand the case or cases in full and in depth (Malik & Hamied, 2014). As this study is aimed to investigate the effect of Audio Visual Aids (AVAs) in students' English pronunciation and to find out the strengths and weaknesses of Audio Visual Aids (AVAs) in teaching English Pronunciation.

In addition, this study considered as a case study research since it focused on pronouncing word stress as a case where the teacher using some videos of native speaker as Audio Visual Aids (AVAs) to teach the students. Then, the students watched the videos of word stress and repeated what the native speaker in the videos and teacher says together. Moreover, the teacher used kind of learning method such role play, games, individual, match, group, and repetition method to support the pronunciation learning process.

In this study, in order to get the data, pre-test and post test were used by the teacher. There were 20 items of word stress. Then, the pre-test and the post-test used the same items. Pre-test was used before the use of Audio Visual Aids (AVAs). It used in order to know the students' ability in pronunciation especially word stress. On the other hand, Post-test was used after the use of Audio Visual Aids (AVAs). It used in order to know the improvement of students' pronunciation especially word stress. Thus, the subjects were asked to pronounce word stress. The subjects' performances were recorded for later analysis.

### **3.2 Site and Participants**

This study was conducted in one of the senior high school in Cianjur, Indonesia. Thus, the school was chosen as regard for several reasons as follows.

Firstly, the researcher chose this school as the second option. It was because there were USBN in one of senior high school in Bandung as the first option. There should not be any activities in the school until USBN finished. So, the researcher chose this school because it is a boarding school. Thus, the researcher had internship relation in the school as graduated school student.

Secondly, it was deal with the accessibility of the researcher. In this case, the accessibility refered to the ease for both researcher and participants in collecting data. Since the boarding school was the place where the researcher and participants were study, it made them both easy to manage the time to arrange the schedule to collect data. Besides, the researcher lived in the bording school along this study conducted.

Lastly, it is related to this study that focuses on pronunciation issue. However, almost the students have difficulties in pronunciation subject. So, the reseacher observed and interviewed the English teacher and the students in the boarding school about pronunciation issue. However, one of the pronunciation issues in this boarding school was the students wanted to speak English fluently but they did not know how to stress words correctly. By implementing instructional aids such audio visual aids (AVAs), it would help them in improving their pronunciation.

In this study, the participants were chosen by the teacher. The students who studied in the second grade of senior high school contains 15 students. However, the research sample is a portion of the population taken as a data source and can represent the entire population. Then, the class used for this study was chosen by purposively in order to help researcher find the appropriate class to conduct this study.

### **3.3 Data Collection**

As stated previously in chapter I, the study is attempted to answer the question; how Audio Visual Aids (AVAs) affects students pronunciation and what are the strengths and weaknesses of using Audio Visual Aids (AVAs) in teaching English

pronunciation are. Several techniques to collect the data were obtained from pronunciation test, questionnaires and interview.

In this study, the researcher participates as a teacher to give the students a treatment of pronunciation especially materials about word stress by watching some videos of native speaker and using speaker. The researcher also was being the interviewer to gain deep information about the use of audio visual aids (AVAs) in improving students' pronunciation.

The various sources of data from a case study will be employed to get better understanding in interpreting matters (Denzin & Lincol, 2005, cited in Duff, 2008). The types of data collection are elaborated as follows.

### **3.3.1 Pronunciation test**

The first data collection is pronunciation test. The pronunciation tests includes pre-test and post-test. It consists of 20 test items about word stress. The pre-test and post-test use the same items. It covers the following words: fast, cute, record, secretary, undo, response, recognise, everyday, purchase, handsome, employee, committee, present, pronunciation, photography, communicate, electrical, hospitality, enthusiastic, & miscellaneous.

Therefore, the students asked to pronounce word stress in the test aloud before and after using Audio-Visual Aids (AVAs) while the teacher record the students' voice. After that, the result of students' pronunciation recordings were analyzed based on the aspect in pronunciation scoring rubric, such; **Oo, oOo** (see table. 2). In the end, the students' scores of the pre-test and post-tests were compared. Thus, the scores will be grouped into three categories. It was high, medium and low category.

Beside that, the result of the correct answer in pre-test and post-test also were calculated into a range. So, there were a range of students' pronunciation test improvement. Regarding this, there were 2 ranges. It was the higher range (15) and the lower range. Then, the analysis of pronunciation test description was analyzed from the higher range to lower range. However, this aimed to know the students' improvement in pronouncing words especially in word stress.

### 3.3.2 Questionnaire

In this study, close-ended questionnaire was chosen for gathering the information. Likert scale was applied in this study to find out students' response on the given statements. To fill in the information, the students were allowed to choose one of the range numbers for each statement which is suitable with their attitude. Number one until four indicate different attitudes one for strongly disagree (DA), two for disagree (D), three for agree (A), and four for strongly agree (SA).

Before the statements are given to the participants, the frameworks for the questionnaire is being shown below. The scope of the questions is as follows.

Table 3.3.2 Framework of the Questionnaire

No	Categories	Indicator	Item Number	Total
1	Students' personal feelings, attitude, drive, & goal.	Students' personal feelings toward the use of AVAs	1,2,3,4,5,6,7	7
		Learning goal toward the use of AVAs	8,9,10,11	4
2	The sensory nature of the stimulus	The use of AVAs in improving students' pronunciation in EFL Classroom	12,13,14	3
3	The background or setting of the stimulus	Students' learning process	15,16,17	3
		Teachers' role in using AVAs	18, 22	2
		Peer's role in using AVAs	19, 20, 23	3
4	Learning experience	The advantages of using AVAs in teaching Pronunciation	21,24,25	3
<b>Total</b>				<b>25</b>

(Adapted from Resmianti, 2007)

The questionnaire consists of seven categories which are students' personal feelings toward the use of AVAs, learning goal toward the use of AVAs, the use of AVAs in improving students' pronunciation in EFL classroom, students'

learning process, teacher's role in using AVAs, peer's role in using AVAs, and the advantages of using AVAs in teaching pronunciation.

The questionnaire consists of 25 statements. There were five negative statements and 20 positive statements. Then, the questionnaire was given to the all students (15). The questionnaire was written in english language. Whereas, all students were asked to answer the questions which best represent their attitude. After the students' responses were calculated, the data is shown for each indicators.

### **3.3.3 Interview**

This study employs standardized open ended interview. Then, the interview is conducted by asking the participants personally in which the researcher asks and records the participants at a time (Creswell, 2008). The outline of the interview is designed to help the researcher to ask the main points related with the research questions. The outlines of the questions of interview are presented below.

- The strengths and weaknesses of AVAs in teaching Pronunciation
- The advantages of the use of AVAs for students' pronunciation

The steps for interviewing the students for this study are proposed by Creswell (2008, p. 228-229). The steps are: 1) select the interviewees based on the purposeful sampling; 2) record all the interview, including the questions which are asked by the researcher; 3) write the main idea from the interviewees' response; 4) stick with the questions, but keep maintaining the flow of the interview.

## **3.4 Data Analysis**

The analysis of the data is elaborated descriptively. Specifically the analysis of each technique is elaborated below.

### **3.4.1 Analysis of Pronunciation test**

In this study, the researcher compares between the first test and the last test after treatment whether there is any improvements before and after treatment or not. This analysis of recording will be transcribed manually based on Oxford dictionary by using pronunciation pattern such as big circle (**O**) for the stress and small circle (**o**) for the unstress. This analysis of recording was explained in Chapter 2 (Table 2

Tendencies for Word Stress). Then the result from pronunciation test A and B will be calculated by using Hake formulation (1999), namely:

$$\text{Normalized Gain } (<g>) = \frac{\text{Score (Posttest)} - \text{Score (Pretest)}}{\text{Score (Ideal)} - \text{Score (Pretest)}}$$

The criteria of normalized gain as explained in Table 3.4.1

**Table 3.4.1**  
**Criteria of Normalized Gain Index**

Normalized Gain Score	Interpretation
$(<g>) > 0.7$	High
$0.3 < (<g>) \leq 0.7$	Middle
$(<g>) \leq 0.3$	Lower

### 3.4.2 Analysis of the Questionnaire

In this study, close-ended questionnaire was employed. It was given after the last meeting and all students got the same questionnaire. There were four ranges of likert scale to find out about the students' perception which covers four different categories. The steps to analyze the students' responses were as follows:

- a. First of all, the responses in the questionnaire were categorized into different scores. The picture is shown below.

**Table 3.4.2 Categories of the Responses**

Category of the responses	Strongly Agree	Agree	Disagree	Strongly Disagree
Weight	4	3	2	1

- b. Then, the participants' responses were classified manually by the researcher.

### 3.4.3 Analysis of the Interview

After the interview was conducted, first of all, the documents from the note and recording will be transcribed. Then, the students' responses will be categorized which is about their opinion about the strengths and weaknesses of Audio Visual Aids (AVAs) in pronunciation and their opinion about the advantages of AVAs for

students' pronunciation. Finally, all of students' responses will be concluded by the researcher.

### **3.5 Research Procedure**

The procedures of this study can be described as follows.

#### **3.5.1 Preparation**

Before applying the treatment of using Audio Visual Aids to improve students' pronunciation, there are some preparations. They are material, instruments and validation paper for instruments, media, schedule and a place for pronunciation test.

The first preparation was material including topic. In selecting the topic, several criterias were considered. First, the topic was related to pronunciation issue. It caused to help the students solving the pronunciation problem in the daily life. Thus, the issue should be a hot problem in the students' school environment. Then, the topic was appropriate with the age of students who experience pronunciation issue. Because appropriate topic made the students exciting and curious in learning process. At the end, the students could solve their pronunciation problem.

In selecting the topic, the researcher observed and interviewed the English teacher and the students. The researcher asked about pronunciation issue in the school environment. The students also asked for some the students to speak English such as "In the early morning, I went to the market. Then, I bought apple, banana, water melon, and pineapple... etc." Regarding this, based on the result of observation and interview, the students wanted to speak english fluently. But, the listeners did not understand what they mean. There was no stress in every word. However, "word stress" was chosen as the topic regarding the students' pronunciation issue.

The second preparation was media including videos, lesson plan and validation paper of videos and lesson plan. After selecting the topic, the researcher looked for kind of videos about word stress in youtube as many as possible. Then, the researcher downloaded every videos about word stress. After download process finished, the researcher played and watched the word stress videos one by one. While watching the videos, the researcher was focused on some criterias such as the content of word stress, the clear voice of native speaker in delivering materials,

the level of language, and interesting videos. Then, the researcher chose and selected 14 appropriate word stress videos based on the criteria. After the videos were chosen, the researcher prepared the lesson plan.

The researcher arranged the title of word stress materials for every meeting. Besides that, the researcher also arranged the activities, exercises and methods for every meeting. After the arrangement of materials finished, the researcher edited all of the videos. The word stress videos were merged for the whole meeting. There was added such title in every different word stress material slide to differ the sequence of meeting. So, the duration was more or less one hour. To overcome the level of language, the researcher also added the subtitles which was available in two languages; Indonesia and English language. After editing process finished, the researcher prepared the validation paper of videos.

The researcher made the instrument of evaluation of learning module (for media experts) based on journal articles. Next, the videos as learning material was validated by the experts of media whether the videos worth or not based on the validation paper. And the results of validation process were there was a video that must be deleted because the speaker's voice was unclear and too many distractions. There were two videos that must be changed or deleted too and there was a video that disturb the sense of sight for the students but the video still can be used. Besides that, the word stress video also should be separated into some meetings; not whole meeting. Also, for the important word stress materials can be repeated in some meetings. However, the researcher re-edited the word stress videos based on the feedback given.

Before editing the videos, the researcher was re-arranged the lesson plan and made the validation of it. After that the re-editing video was started. There were 14 word stress videos that was used for learning materials. For every meeting, three of four videos were merged. So, there were six videos for six meetings (one video for one meeting) for the AVAs treatment. After the process of video editing finished, the videos re-validated by the experts of media. However, the word stress videos were ready to use as learning materials. At the end, the researcher prepared the laptop, projector, speaker, and power point media for the instructions of some exercises given for every meeting based on the method and activities used. The



researcher also prepared the hand phone as recording media for students' pronunciation tests.

The third preparation was instruments including interview, questionnaire, pronunciation tests; pre-test and post-test and the validation paper of interview and questionnaire. First, the researcher made the interview regarding the research question and the questionnaires regarding the four categories. The interview and questionnaire papers were made as the additional source to analyze the data. Then, the instruments were validated by two lectures. After getting the feedback, the researcher re-edited the instruments and re-validated it until the instruments can be used for AVAs treatment process.

Then, the researcher prepared the pre-test and post-test for the pronunciation test. The researcher made the items of pronunciation test refers to Oxford dictionary. The pronunciation test consisted of 20 items. In selecting test items of word stress, the researcher divided the stress into five syllables: one syllable; no stress, two syllables, three syllables, four syllables, and five syllables. Based on the level of difficulty, two items were chosen for one syllable; no stress, six items were chosen for two syllables, four items were chosen for three syllables, four items were chosen for four syllables, and four items were chosen for five syllables. The test items for one syllable; no stress were only two items because this was the easiest level. For the rest, it was chosen because of middle and high level of difficulties. Somehow, the pronunciation test for pre-test and post-test were 20 items.

The research schedule was conducted in 10 meetings. It was held in three weeks; three meetings in the first week, four meetings in the second week and 3 meetings in the third week. The first meeting used to communicate with the elements of school to conduct a research. Then, the researcher discussed the phenomenon appears in EFL classroom. The researcher also was found which class and students that would be the focus of the study. The next meeting used to conduct the pre-test. And the third to eighth meeting was allocated to implement the treatment in the classroom by using AVAs in teaching pronunciation especially word stress. The post test, questionnaire and interview are administered in the rest two meetings.

Last, the students helped the teacher to find a comfortable place for pronunciation test. The criterias for the place were quite and conducive. Hence, the place was used to do a pronunciation test where the students' performance was recorded.

### **3.5.2 Pre-test**

Pre-test was administered to all participants (15) in the second meeting. It was aimed to find out the stressed word in pronunciation test of students' recording. Hence, there are several steps to conduct the pre-test. First, the teacher announced the instructions such as; the student should be waited outside the classroom. Then, the student was called by the teacher. After that, the student came into the class to do a pre-test. After finished, the student might not tell about the test. Second, the teacher called the student randomly from an absent. Third, the students were asked to pronounce the word stress before using Audio-Visual Aids (AVAs). Regarding this, the students pronounced 20 items of word stress that had given by the teacher. It covered the following words: fast, cute, record, secretary, undo, response, recognise, everyday, purchase, handsome, employee, committee, present, pronunciation, photography, communicate, electrical, hospitality, enthusiastic, & miscellaneous. Last, the students' performance was recorded by using a handphone.

### **3.5.3 Treatment**

The treatment program was done in ten meetings. The pronunciation subject was about word stress. The researcher was chosen the word stress as the topic because it was a hot issue in EFL Classroom especially in the environment of that school. Regarding this, this was chosen after the discussion with the English teacher in the first meeting. The audio visual aids employed in this research were videos and power point. The research schedule can be seen as follows.

Table 3.5.3. Research Schedule

No	Date	Activities
1.	March, 13 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- The researcher communicated with the school authority to conduct a research.</li> <li>- The researcher discussed the phenomenon appears in EFL classroom.</li> <li>- The researcher found which class and students that would be the focus of the study.</li> </ul>
2.	March, 15 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- The students were gathering in the classroom</li> <li>- The researcher explained the purpose of their participation in this study</li> <li>- The researcher asked for the students to do a pre-test before using AVAs</li> </ul>
3.	March, 17 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Teacher introduced the topic about word stress by introducing the lesson objectives, background and example of word stress</li> <li>- Students learnt about the definition and example of word stress, the importance of word stress, kind of syllables, and the connection between word stress and syllable</li> <li>- Students worked in pairs to pronounce 10 word stress from the assignment cards given by the teacher</li> </ul>
4.	March, 19 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Students learnt the definition and example of word stress, word stress in two syllable, word stress in two syllable (da-DA), and word stress in two syllable (DA-da).</li> <li>- Students worked in individual to pronounce word stress in random. It consisted of two syllable, two syllable (da-DA) and (DA-da).</li> </ul>
5.	March, 21 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Students learnt about word stress in three syllable and word stress in 3 syllables (da-DA-da)</li> <li>- The teacher gave group work assignment to do a role play.</li> </ul>
6.	March, 23 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Students learnt about rules of word stress, word stress in two syllables (Nouns, Adjectives, Verbs), and exercise of (Verb, Noun) in syllables</li> <li>- Then, the teacher give ask each students to do a peer teaching to explain the wordstress rules (minimal three minutes)</li> </ul>

7.	March, 24 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Students learnt about rules of word stress and word stress in suffixes</li> <li>- The teacher gave the students a game</li> <li>- At the end, the teacher asked for the students to restate about the rules of word stress</li> </ul>
8.	March, 26 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- Students learnt about rules of word stress and word stress in suffixes (-ate) and summary</li> <li>- The teacher gave an assignment; the teacher gave oxford dictionary to the students</li> <li>- The students find the –ate suffix ending in the dictionary</li> </ul>
9.	March, 28 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- The teacher asked for the students to do a post-test after using AVAs</li> <li>- Then, the teacher guided the students to fill the questionnaires</li> </ul>
10.	March, 30 <sup>th</sup> 2018	<ul style="list-style-type: none"> <li>- The teacher asked for the students to do an interview</li> <li>- Closing</li> </ul>

#### 3.5.4 Post-Test

Post-test was administered to 15 participants. It was held after the treatment had been done, because it aimed to find out the improvement of stressed word. However, after the Audio Visual Aids (AVAs) treatment where the teacher gave some materials related to word stress, the students knew their mistakes in pretest. Finally, all students were asked to do a post-test after using Audio Visual Aids (AVAs). The test was used 20 items of word stress. It covered the following words: fast, cute, record, secretary, undo, response, recognise, everyday, purchase, handsome, employee, committee, present, pronunciation, photography, communicate, electrical, hospitality, enthusiastic, and miscellaneous. Then, the teacher recorded the students' performance in order to compare the result between the pre-test and post-test.

#### 3.5.5 Questionnaire

In the last meeting from whole 10 meetings, the chance was used to administer the questionnaire to students. The questionnaire discussed about the effect of using AVAs in pronunciation and the strength of using AVAs in pronunciation. So, the

questionnaire was administered for the students who had experienced the treatment of the use of AVAs in Pronunciation in their learning process.

As for there were several steps of questionnaire session. First, the questionnaire was distributed to the students by the teacher. Second, the students prepared their stationary. Third, the teacher read the instruction of questionnaire. Forth, the teacher translated each number of questionnaire. Last, the students filled the blank column. So, the students filled it together after the teacher finished translating each number.

### **3.6 Concluding Remark**

This chapter has presented the methodology in conducting the research and description of research procedure in order to find out the answer from research question stated in Chapter I. This chapter also has discussed several main parts of the study which are research design, site and participants, data collection, and data analysis technique.