

CHAPTER THREE

RESEARCH METHOD

This chapter elaborates the research method of the study which aims to find out 1) the effect of using movies in teaching listening on the high school students' listening comprehension skill, 2) its implementation, 3) students' attitude toward its use, and 4) the students' reasons underlying their attitude. This chapter includes mixed-method which is the research design of the study and will be described in section 3.1, meanwhile, 3.2 describes the setting of the research. After that, population and sample where 66 senior high school students of experiment class and control class involved in the study are elaborated in section 3.3. Section 3.4 presents research materials followed by section 3.5 which consists of pretest/posttest, field-notes, and questionnaires as research instruments to obtain the data. Data collection method can be seen in section 3.6 and data analysis is described in section 3.7. Section 3.8 is data triangulation and the chapter is ended with the conclusion in section 3.9.

3.1. Research Design

In order to find answers of the problems mentioned above, This study uses mixed-method design which involves “the use of both quantitative and qualitative methods in a single study” (Fraenkel et, al., 2012, p. 557). This mixed method concurrent embedded design collected the data quantitatively and qualitatively at the same time (Creswell, 2010). This design was used for the secondary data to support the primary data.

In this research, the researcher collected quantitative data by conducting experimental studies and at the same time observed the implementation of the process and the students' attitudes toward the teaching-learning process by conducting observation and questionnaire. The quantitative data explain the result from the treatment and the qualitative data explore the process of the treatment

and the students' attitudes during and after the treatment. The quantitative data were collected by employing experimental study because the researcher wants to see if the treatment, that is viewing movies in teaching listening makes a difference in students' listening comprehension.

The experimental research compared two groups (later named as the control class and the experiment class) that receive different treatments (Punch, 2009). In this research, students in the experiment class were taught narrative through the use of movies, while the students in control class were taught by using conventional method which used audio materials in teaching listening.

The schematic representation of the research is represented as follow: (Hatch and Lazaration, 1991)

$$\frac{G_1 \text{ (random)} - X_1 - T - X_2}{G_2 \text{ (random)} - X_1 - 0 - X_2}$$

Where: G_1 is experimental group

G_2 is control group

X_1 is pretest

X_2 is posttest

T is treatment

To support the data from the tests, observation during the treatments and questionnaires on the students' attitudes toward the application of the method were also employed to collect the qualitative data. The observations were also conducted to reveal how using movies in teaching listening was implemented. The data from observation were collected by using field-notes. For the students' attitudes and their underlying reasons, close-ended and open-ended questionnaires were employed. Both data are described in discussion section in chapter four.

3.2 Research Setting

This study took place in one of state high schools in Subang, West Java. The decision of choosing this site was based on several considerations. First, the school English teacher said that the use of movie for teaching listening is a new

method. Second, the situation and the condition of the school are familiar for the researcher. Finally, the access and aids from the school supported the researcher in conducting the research.

3.3 Population and Sample

The population of the research was the year tenth students of one SMAN in Subang. Each class consists of 33 students. The reasons for choosing the year tenth of senior high school was mostly because it was challenging for the researcher to enhance the students' achievement in listening comprehension at the early stage so that if the method is successful, it can be applied in further stages as an alternative method in learning listening. Besides, students' achievement in listening comprehension at the first stage will help them to gain a better achievement in listening at the higher level. Moreover, the narrative texts which become the subject material of this research was taught in this grade. According to the competencies of English Language curriculum for Language and Literature of English for the year tenth students, the students in this year are expected to be able to analyze social function, generic structure, and language features of the narrative text.

Two classes were selected as the samples for this study by employing a cluster random sampling. It means that the researcher selects groups, or cluster of subjects rather than individuals (Fraenkel, Wallen, and Hyun, 2011). The selection was employed because of several considerations. First, the class had already been arranged and it was not easy to change the original order. So, it was not possible for the researcher to select individual samples. Besides, this sampling technique did not change the existing class. Every class was taught in similar learning conditions and patterns. Finally, for there were ten classes at this level in the school, cluster random sampling was used since it is more effective with larger number of groups (Fraenkel, Wallen, and Hyun, 2011)

To find two equal classes for the study, t-test was administered to compare the means of the two groups (Urdan, 2005). The formula for the independent samples t-test is as the following:

$$t = \frac{\text{observed difference between sample means}}{\text{standard error of the difference between the means}}$$

Or

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{S_1^2(n_1-1) + S_2^2(n_2-1)}{df} \right) \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

\bar{X}_1 is the mean for class 1

\bar{X}_2 is the mean for class 2

S = variance

n = sample size

To decide whether the two classes are equal or not, the statistic test was compared to the criterion, that is, degrees of freedom (df), alpha level ($\alpha < .05$), and critical value for non-directional or two-tailed. The two classes are equal (H_0 is accepted) if there is no statistically significant difference between the two classes on the dependent variable (t_{obs} is less than t_{crit}).

3.4 Research Materials

3.4.1. Lesson plan

The lesson plan of this research was modified from Kusumarasdyati's lesson plan used in her research (n.d) in teaching listening by viewing movies as presented on her paper *Incorporating Culture into Listening Comprehension Through Presentation of Movies*. This form of lesson plan has been applied for years in a number of tertiary institutions in Indonesia. In general, the class activities were conducted at three stages; pre-viewing, while-viewing, and post-viewing. The activities for each stage were developed from teaching listening activities as suggested by Underwood (1989), Richards (2008), and Field (2003). In this study, Pre-viewing activities needed ± 15 minutes. While-viewing stage took ± 70 minutes and post viewing stage took ± 50 minutes.

However, the time allotment could be changed based on the length or duration of activities carried out in each stage. For instance, post-viewing stages were longer than while-viewing stages when the activities in post viewing phase needed extra time (e.g. making a storyline of the movie they had watched, identifying the conflicts that happened to the actors/actress/participant of the movies). Please refer to appendix 1 for details about the lesson plan.

The time allocation for English subject in a week is 180 minutes which was divided into two meetings. One meeting took 45 minutes and the rest took 135 minutes. There were five meetings conducted in this study. Each meeting was conducted once a week within 135 minutes (3x45 minutes) at each session (See appendix 1 for details). The first meeting focused on the students' ability in identifying the generic structure of the narrative text. Those are: the orientation of the text which consists of the characters involved in the text and the setting of place and time, and the complication and the resolution of the text. In the second meeting, students were asked to answer the questions based on the information on the movie and fill the missing words/phrase.

In the third meeting, students were to fill a missing word/phrase based on the text they had heard and to identify what happened to the characters (complication) in the narrative texts. In the next meeting, the teaching-learning was conducted in order to the students were to identify the setting of place and time of the narrative texts, to answer the questions about explicit or implicit information related to the texts, and to identify characters and characterization of the actors/actresses/participants of the movie. In the last meeting, that is meeting five, students were to identify the setting of place and time of the movie and what happened to the characters (complication) in the movie they had watched.

3.4.2 Movies.

The study uses three movies for viewing. They are *Winnie the Pooh: The Heffalump Movie*, *How to Train Your Dragon* and *The Nut Job*. The reasons of

choosing these movies were based on several considerations, as suggested by Rost, 2001; Oguz and Bahar, 2008; Berk, 2009. The first was related to the language level. The vocabularies which are used by the characters of the movies are not too complex for the students. Second, the moral values of the movies were in line with the moral values that become the main topic in the syllabus. Moreover, these movies attracted students' attention and motivation in learning listening for the students are quite familiar with the cartoon/animation movies.

Winnie the Pooh: The Heffalump Movie was presented without the subtitles in the first meeting. For the second and the third meetings, *How to Train Your Dragon* was provided with the subtitles, and for the forth and the last meetings, *The Nut Job* was also viewed without the subtitles. The consideration of the absence or the presence of subtitles in the movies was due to the complexity of the vocabulary, the story and the exercises that given while and after viewing the movie in the teaching process.

3.5 Research Instruments

In order to gain proper data, four research instruments had been prepared before and during the data collection process. The first research instrument was pretest/posttest, which consists of five types questions focusing on narrative texts. The second was field- notes to observe the process of teaching listening by using movies. The last two research instruments research instruments were questionnaires; close-ended and open-ended questionnaire. The following is the description of each instrument:

3.5.1 Pre-test and post-test

The same listening test was used for pre and post-test which focuses on narrative text. The pretest was given in advance in order to find out the students initial skills as the starting point in accordance with the students' improvement in listening to narrative texts before the treatment. Moreover, the result of the test was also used to decide two equal classes for experimental and control class. In

these test, students in three classes were asked to answer the questions based on the texts they had heard. After the measurement using T-test, two equal classes were identified as control class and experiment classes. Meanwhile, the posttest was conducted at the end of the treatment in order to find out whether or not there was an improvement on the students after the treatments.

The listening test was developed on the basis of the listening achievement constructions which were originated from the indicators of the learning purposes. The construct is what our test is measuring (Buck, 2001). The audio materials for the test were selected from students' standardized textbook which had not been used in their English class and others were taken from audio story on internet websites. The decision of choosing or using a part of the whole text was based on the complexity of the vocabulary and the story, and the length of the text (as suggested in National Examination which commonly consists of 96-129 words in each text). For the complexity of the vocabulary and the story, the researcher discussed the material with the supervisors of this research. The script for the listening test can be seen in Appendix 3.2.

The students' test result can vary depending on the type of the task. Buck (2001) suggests that the test should consist of a variety of task types in order to reduce the effects of any one type of task. Therefore, the listening test is developed as follows:

Table 3.1 The division of Listening Test

No	Test type	Questions	indicat or item no	indicators				
1	A. short answer	When did Jack make a snowman?	2	6. Students are able to answer the questions about explicit or implicit information related to the texts	5. Students are able to recognize verbs used in the texts	4. Students are able to identify the ending of the story (resolution)	3. Students are able to identify what happened to the characters (complication) in the narrative texts	2. Students are able to identify the setting of place and time of the narrative texts
2		What did Jack need for the snowman's nose?	6					
3		Where did Jack make the snowman?	2					
4	B. Multiple Choice	1. Who is Daedalus?	1					
5		2. What did Daedalus build?	6					
6		3. How did Daedalus escape from Crete?	6					
7		4. Where did the story take place?	2					
8		5. What did the fly think about himself?	1					
9		6. Did mosquitoes talk long time ago?	5					
10		7. Why was the snake so angry? Because...	6					
11		8. Who took the mosquito's voice away?	4					
12		9. Where did the Sun and the Moon live?	2					
13		10. When did the story happen?	2					
14	C. Gap Filing	When he ____ the town it was almost midnight	5					
15		He ____ at the door	5					
16		The traveler ____ rest, food and shelter	5					
17		"It's a strange lock and can be opened only with a silver key," ____ the innkeeper	5					
18		The traveler ____ a silver coin through a slit in the door	5					
19	D. T/F checklist	What happened to the main participants?	3					
20		What happened to the main participants in the end of the story?	4					
21		The ending of the story is	4					
22	E. Note taking	Write adverbs of place on the text you have heard.	2					
23								
24								
25								

The tests consist of five types of test item which represent the indicators of listening to the narrative texts. The first part of the test is short answer question type. There are three questions that the students should answer based on the text they have heard. In the second part, the students answer ten multiple choice

questions. The third part is completing text by using the correct verbs they have heard (Gap filling). The students choose the verbs that are printed on the answer sheet. The next part is testing how students understand the story by giving the checklist on the correct phrases, or sentences (True/False test type). The last part is note taking test. Students listen to a story and then write down the adverbial of places they have heard on the story. The maximum raw score for the test result is twenty-five. This score was then multiplied by four to get the final maximum score that is a hundred.

Before the test was administered to the students, the test was tried out to other students who have the same level with the students in control and experiment classes. This try out was conducted to see 1) whether or not the instructions of the test are clear, simple, and explicit enough for the students, 2) which item is the most difficult and the easiest so that the test item can be organized from the easiest to the hardest, and 3) to see the time duration once the test is administered. After that, the test was checked, corrected, and revised.

Related to validity issue, Brown & Abeywickrama (2010:30) say that a valid test has to “measure exactly what it proposes to measure” and to have a valid test, test developer should develop the test based on its construct (Buck, 2001) that is the knowledge, skills and abilities that the test-takers (students) should have and the tasks that they should perform (Chapelle, 1998 as cited in Buck, 2001). In line with that, this listening test was developed following the indicators of the teaching-learning objectives in the syllabus of English language teaching of curriculum 2013 (refer to section 2.3.2 for more details about the indicators of the lesson). The indicators of teaching-learning listening in the recent study were the construction that were reflected in the listening test. In addition, the two supervisors of this research were also asked for their judgments related to the content and the format of the test whether the test is appropriate or not to be employed.

To see the reliability of the test, Pearson product moment correlation was applied to the test since the scores were produced by the same raters on two

separated times by the same group of students (Hatch & Lazaraton, 1991). The data was measured by using SPSS 17. The students of this group are at the same level with the students in the experimental and control groups. The test is reliable at $r_{obs} = .573$, which is higher than $r_{table} (.573.344, \alpha = .05)$ (see appendix 4 for detail).

3.5.2 Field-Notes

Observation in teaching listening by using movies was conducted to support posttest data result. To gain the data from the teacher and the students' activities in teaching-learning process, an observation by using field-notes was conducted in capturing the three phase teaching-learning activities: 1) pre-listening/pre-viewing, 2) While-listening/while-viewing, and 3) post-listening/post-viewing. The observer paid attention to what the teacher did, said, asked, and her responses to what the students did, said, and asked, and vice versa. In other words, the observer used her eyes and ears in witnessing what was going on during the process (Silverman, 2005).

In this study, non-participant observation was employed for the researcher was not directly involved in teaching-learning activities (Fraenkel, et al., 2012). The researcher herself observed the teaching-learning process by taking field notes. The teaching process was done by the school teacher; however, she was aware that the activity was being observed since the researcher requested for permission to conduct an experiment and submitted the lesson plan to be applied in the classroom (Language laboratory). The students may or may not realize the presence of the researcher for the students had been accustomed to notice the researcher attendance in the class room (language laboratory). This type of observation made the researcher free to capture the teacher's and students' behavior and attitudes during the teaching-learning process (Fraenkel, et al., 2012).

3.5.3 Questionnaires

3.5.3.1 Close-ended Questionnaire

The close-ended questionnaire was conducted to obtain the data about the students' attitude toward the application of movies in listening class. The questionnaire was modified from Sabet and Mahsefat (2012), which adapt the survey from Al-Musallami (2009). Before the questionnaire was employed by the experimental students, it was piloted on a group of fifteen students in order to test its clarity and to see if it would produce the required responses. The questionnaire was also given to the supervisors of this research for feedback. Based on the supervisors' suggestions, some of the items were omitted and others were modified. The statements to reveal cognitive component of attitude are reflected in the items number three, four, six, eight, nine, ten, eleven, and twelve. Affective is represented in items number one, two, five, and behavioral component is in items number seven and thirteen.

There are thirteen statements on the questionnaire in its final version and a four point Likert Scale was adopted. The score for strongly agree, is four. If the students agree, the score is three; for disagree, the score is two, and for strongly disagree, the score is one. In order to determine the kind of the students' attitudes toward using movies in teaching listening, the scores of all items from each student were summed. The maximum score was 60 and the minimum score was 15. Based on this range, the students' attitudes were divided into four levels to determine the attitudes they hold. A score between 50 and 60 indicated a very positive attitude, a score between 39-49 indicated a positive attitude, a score between 27-38 indicated a negative attitude, while a score between 15-26 was considered a very negative.

The attitude questionnaire was applied on a sample from the population equivalent to the participants of the study. Reliability of the questionnaire was obtained by a statistical measurement Cronbach's Alpha using SPSS 17. As the result, the test is reliable at t_{crit} (2-tailed) at α 0.05 with $(n) = 33$, is 0.344 and $t_{obs} = 0.642$. The result of the SPSS measurement is presented at appendix 6.2.

3.5.3.2 Open-ended Questionnaire

The open-ended questionnaires were administered to gain in depth information of the students' attitude (Fraenkel, et al, 2011). Besides, this type of questionnaire gives more freedom for the students to reveal their mind, feelings, and opinion since the students are sometimes not eager to show their real convictions to their teacher.

There were four questions of the questionnaire which were divided into three categories. Both the questions and its category can be seen in appendix 7. The first category is intended to figure out the students' feelings towards viewing movies in teaching listening. The second category was aiming at reveal the students' challenges in listening by viewing movies. The third category consists of two questions to get the information on the students' point of view about the strengths and weaknesses of viewing movies in listening class.

The close-ended and the open-ended questionnaire are written in Bahasa Indonesia to avoid the students' misunderstanding in interpreting the questions. The questionnaires were delivered to the experimental students after they had finished the teaching-learning process.

3.6 Stages of Data Collection

In collecting the data, some steps were employed. Firstly, the instrument of the pretest and posttest for the students in experimental and control classes were consulted with, the supervisors of this research. Next, they were piloted to other participants who had the same characteristic with the real participants to see the difficulty of the test. After it had been revised, it tested again to assure the reliability. Secondly, pretest was given to year tenth classes to select the two equal classes as experimental and control classes. The result of the pretest was also used to figure out the students' initial ability in listening.

Thirdly, the treatment of using movies in teaching listening to narrative texts was taught to the experimental class. The treatment conducted in five meetings. Meanwhile, the control class was taught by using the conventional teaching method. At this stage, the researcher observed the learning process and took notes in experiment class.

After the treatments, both the control and the experimental classes had the same listening posttest. Then, the students in experiment class were given the questionnaires to explore their attitudes toward the use of movies in teaching listening and their reasons behind it.

3.7 Data Analysis

3.7.1 Pretest/posttest Data Analysis

Firstly, the result of students' listening both in pretest and posttest were examined and scored. The test consists of five parts with the score for each part is three scores for part one, ten scores for part two, five scores for part three, four scores for part four, and three scores for the last part. Therefore, the maximum raw score is twenty-five. This score then multiply by four to get a hundred as maximum score. Then, to test whether or not the treatment had an effect on the experimental group, the data from the pretest and posttest were analyzed by using the t-test formula.

After the t-obs obtained, this result was consulted with the t-value. If the t-obs is lower than the t-value, it means that using movies in listening to narrative texts cannot improve the students' listening comprehension ability, especially in understanding narrative texts. In other words, the null hypothesis (H_0) of the study is accepted, and rejected the alternative (H_i) hypothesis. Conversely, if the t-obs is higher than the t-value, the null hypothesis of the study is rejected which means teaching listening by using movies give positive contribution to the students' listening comprehension.

3.7.2 Observation Data Analysis

Observation data were taken from the teacher and the students' activities within three phase stages of teaching-learning listening by viewing movies. The observer noted and recorded what the teacher did and said and what the students did and said as the responses, and vice versa during the five meetings in the written form. The data from observation then were analyzed by implementing data reduction, data display and conclusion drawing/verification observation data analysis as suggested by Miles and Huberman (1984, as cited in Silverman, 2005). To make the data more reliable, the researcher then checked the notes with what the teacher had experienced during the teaching-learning process in the classroom.

3.7.3 Questionnaires Data Analysis

Further, the data from the close-ended and open-ended questionnaire were analyzed. In the close-ended questionnaire, the scores of each statement were calculated to find its average. The mean of each statement indicates if the students have very positive, positive, negative, or very negative attitudes.

In the open-ended questionnaire, the researcher classified the findings of open-ended questionnaire into categories that become the focus of the study. Then, in the close-ended questionnaire, the key words of each category were used to explore the students' reasons behind their decision to respond the statements.

3.7.4 Embedding Data

In this mixed-method research, the study used embedded design in which the qualitative data were embedded to the primarily quantitative data (Creswell, 2010). The qualitative data play a role as supportive data which are used to explore and build quantitative data (Punch, 2009; Creswell, 2010). Therefore, the data from observation and questionnaires, open-ended and close-ended, of this research were also used to enrich the data from posttest. The embedding data guided by the theories presented in chapter two.

3.8 Data Triangulation

Data triangulation was implemented in this research to collect information from different sources or types of data to corroborate each other in answering the same research question (Mason, 1996 in Silverman, 2005; Fraenkel, Wallen, & Hyun, 2012; Yin, 2003). Triangulation was used because “it improves the quality of the data that are collected and the accuracy of the researcher’s interpretation” (Fraenkel, Wallen, & Hyun, 2012). This research uses triangulation within a single method that was analyzing the data from field-notes and questionnaires.

3.9 Concluding Remark

This chapter has discussed the methodology applied in the research which focuses to answer the questions what the effect of using movies in teaching listening towards the high school students’ listening comprehension is, its implementation, the students’ attitude towards the use of movies in teaching listening and the reasons underlying it. The study was conducted by implementing mixed-method concurrent embedded design with quantitative data as primary data and qualitative data as secondary supportive data. The quantitative data were collected through experimental study. Pretest and posttest were employed to control class and experiment class to see whether there was positive improvement in the students’ listening comprehension after they experienced learning listening by viewing movies. Besides that, observation by using field-note was conducted to elaborate how using movies in teaching listening was implemented and questionnaires were also employed to reveal the 33 experimental students’ attitude toward it. The data from each type of data then were collected and analyzed. The next chapter explores the research findings and discussion related to the data obtaining from the field.