

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes methodological aspects of the present study. Three main aspects of the research will be discussed: first, research design; second, data collection method; and third, data analysis method.

The study made used of quantitative design and qualitative design by employing a case study. The experimental design was used to find out the influence of *YouTube* videos in the controlled condition. Because this method is a part of the quantitative method, there would be some statistic computation in order to analyze the data of the research. The three instruments of data collection method, observation, interview and response journal were also used to collect data and information to answer the research questions while a triangulation of research context were used to in analyzing the data collected from the three instruments.

3.1. Research Questions

It is previously mentioned that the study seeks the answer to the following research questions:

1. What young learners' learning principles are attended to by *YouTube* Videos?
2. Can *YouTube* videos help young learners develop their vocabulary mastery?
3. How do the children respond to the lesson in *YouTube* during the learning process?

These questions become the reference to design the vocabulary test, interviews, response journal, and the conduct of participant observation.

3.2. The Research Design

This research employed both quantitative and qualitative research approaches to answer the research questions. This is relevant to Yin's statement (1993, 2009, p. 22) in Duke and Mallette (2011) that case study can be based on any mixture of quantitative and qualitative evidence and it can be used for description, explanation as well as exploration. Similarly, Merriam (1988) proposes that case study can be classified as an evaluated study because it involves description, explanation and judgment.

This study used multiple data collection as the characteristics of case study (Freebody, 2003; Yin 1994, 2009, p. 22) which aimed to enhance the construct validity of the study and to gain more complete accounts to investigate the values and effectiveness of the teaching program implemented. In this study, the qualitative data were obtained through observation, journal response, and interviews. Moreover quantitative data was collected through vocabulary test.

A case study is different from the experimental study in some ways. The difference is that the experimental study typically involves comparing two or more groups, while a case study involves a single individual or group, and does not attempt to set up experimental and control groups. This is supported by Emilia (2005) who states that a case study design is employed in "a small scale, a single case", focus on one particular instance of educational experience or practice. In a case study, the behavior of the subject or subjects is measured at two or more points in a time. As it was mentioned earlier that the

decision to use this method was based on the researcher's intention to get an in-depth understanding by investigating the improvement and process occurred in the class by *YouTube* videos in learning English.

3.3. The Research Site

The study was conducted at EEP (English Executive Program) Bandung. The first reason for choosing this course was that the researcher has been teaching in this course for ages so it gave relatively easy access to do the research. Based on the course program, memorizing and mentioning vocabularies become the focus in the teaching learning processes while song, game, computer lab activity and direct translation are mostly used in classroom. In relation to this, the researcher found a challenge to implement a different technique that should enable the students to use the vocabularies in meaningful context.

Another reason for choosing this school was familiarity because the teacher had taught the students for one term when they were in *Komodo 2* class. So she had been familiar with the course and the students. Therefore, it was expected that there will be natural performance in the instructional process during this study (Emilia, 2005).

The researcher took one class as participants of the study. They were elementary students ranging from the first to the second grader. The participant of this study was 11 students whose ages range between 6 and 7 years old that had mostly the same English language level. The name of the class was 'Komodo 3' class at EEP (English Executive Program). The class is usually small class. This aims to make the teacher easier in managing the class. A purposive sampling was used in the study. According to Arikunto (2006), purposive sampling is the technique of sampling used by the researchers that

concern on some consideration (limitation of time, energy, and fund) in order to acquire a certain objective.

Table 3.1
Sessions of Teaching and Learning Process

Session	Date	Events and Materials	Remark
1	April 30 th	Try out test	
2	March 3 rd	Pre test	
3	March 8 th	Weather	2 videos watching
4	March 10 th	Review Weather	1 video watching Interview & Response Journal
5	March 15 th	In the zoo (Present cont)	
6	March 17 th	What are the people doing?	3 videos watching
7	March 22 nd	What are the people doing?	2 videos watching Response journal & Interview
8	March 24 th	The Pumpkins (Pres cont)	2 videos watching
9	March 29 th	Food and Drink	
10	March 31 st	Review Food and Drink	2 videos watching Response journal
11	April 5 th	Preposition	1 video watching Interview
12	April 7 th	Review Preposition	2 videos watching Response journal
13	April 12 th	Day and Birthday	
14	April 14 th	What day is it?	2 videos watching Response Journal
15	April 19 th	Rabbit's Riddles	1 video watching
16	April 21 st	Rabbit's Riddles and pumpkins quiz	2 video watching Response journal & Interview
17	April 26 th	Post-test	

The video watching was conducted in 16 different meetings in half term of teaching and learning period (one term consists of 25 sessions, and are conducted twice a week on Tuesday and Thursday for 70 minutes per session). The session started from March to April 2011 is displayed on table 3.1.

3.4. Participant Observation

The type of observation used was participant observation. Participant observation requires the researcher to become a participant in the context being observed (Trochim: 2006). The observation in this study was conducted to obtain data on the effect of video based on material-based and investigate what young learners' learning principles are observed in *YouTube* video. From this observation, she was not only able to analyze their vocabulary improvement, but also to notice their reaction to the tasks given, through observing their activities in the class. In addition, the researcher wrote down anything that happened during the teaching and learning process. It was important to know the improvement of the students meeting by meeting.

3.5. Data Collection Method

To collect the data the researcher relied on quantitative and qualitative method since she wanted to find out the students' vocabulary improvement through videos and qualitative research method to go deeply in generating data became rich and embedded in context. Vocabulary tests, classroom observation, response journals, and interviews were the main sources of data collection and each of which will be described below.

3.5.1. Vocabulary Tests

There are two tests, pre- and post-test (see the appendix 7), that would be given to the students. The pre-test was given before the observation and treatment. This can help to know the initial achievement of the students (Hatch and Farhady, 1982). Furthermore, after the observation and treatment, the post-test would be given to find out the difference of students' achievements at the end of the level after the whole treatments and lessons given. The pre-test was conducted before the treatment, precisely on the 3rd of March, and the 26th of April for the post-test.

In this study, the pre- and post-test were conducted in EEP Bandung and they were actually in the same form of multiple choice, matching, gap filling and writing production ability test. All of the tests contained 30 items that the writer adapted from the materials given in the course book and the real vocabulary *Komodo 3* final test at the course itself.

Moreover, there are some disadvantages in using this kind of tests. It needs quite a long time to construct this test; in other words, it is a time-consuming type of item to construct. Furthermore, it can give the students chance to guess the right answer. However, the problems would be prevented by: (1) giving brief and varied vocabulary items; (2) providing pictures, attractive typography, and color to make children engage in test; (3) involving their first language and developing cognitive ability; (4) giving similar tasks in the sense that two or more skills are 'integrated' (Hughes, 2003).

3.5.2. Classroom Observation

Observation is one of the characteristics in a case study. In this study, observation was used to record young learners' behavior. According to Harrington, Billman, and

Sherman in Wortham (2005) observation can be used for three major purposes: (1) to understand children's behavior, (2) to evaluate children's development, (3) to evaluate learning process. Therefore, the teacher acted as a researcher observation investigated the effect of video based on the material-based on vocabulary mastery of young learners, young learners' principles which were observed in videos, and the students' responds toward *YouTube* videos. The observation plan can be seen on the Appendix 4.

The researcher took part as a participant observer, that is, as their teacher. As a result of this fact, she was not only able to analyze their academic progress, but also to notice their reaction to the tasks given, through observing their activities in the class. There was one experienced teacher helped the researcher in the classroom. She also took part as the teacher's assistant and helped to evaluate learning process. Data from observation was obtained from teacher's note during the teaching program in the classroom and the vocabulary test score which was conducted before and after the treatment. Since classroom observation was important to identify the growth of young learners in every meeting, in this research, classroom observation was held for 16 meetings and it took two hours fifteen minutes lesson per week, with 70 minutes each meeting from 2 p.m. to 3.10 p.m. Note-takings and running record were conducted during the observations in order not to miss the important points. In order to obtain the natural reaction and interaction during video watching, the children activities were videotaped.

The teaching program conducted for 10 weeks. In addition, before and after the teaching program, vocabulary pre-test and post-test was given to students to compare initial and final abilities of the students (see appendix 7). Further discussion on vocabulary test will be described in the chapter 4. The themes taught to the students were: *weather*,

present continuous (what are the people doing? Family and in the park), food and drink, and preposition. This is consistent with Shih (2006) that it is recommended to teach the lesson in themes to young learners.

3.5.3. Response Journals

Response journal was important for assessing their behavior and knowledge after an observation. It was distributed to respondents to fill in as soon as they finished watching the video. The students were asked to write their feelings and responds towards the video. Merriam, Bogdam and Biklen (1992) assert that private documents such as journal, diary or letter enable a researcher to obtain the language and words of informants, represent the data that are thoughtful in that informants have given attention to compiling. This was aimed to facilitate the researcher to obtain what the students experience and feel during the watching. Considering their age and nature of children, the questions were designed in such a way that they are simple and easy to understand by the student. The form of response journal is presented on Appendix 3.

3.5.4. Interviews

To assure that respondents were consistent with their answer and to obtain more comprehensive information that they give in the response journal. Interviews were conducted on the following day after they watched video and completed their response journals. According to Bogdan and Biklen (1992) interview allows researcher “control” over the line of questioning and provides “indirect” information filtered through the views of interviewees.

In this study, the interview was aimed to collect the information about the students' thought, feelings, responses, difficulties, and expectation towards the implementation of *YouTube* videos in their vocabulary practice. As Merriam (1991) notes that in qualitative case study, the main purpose of interview is to obtain a special kind of information. It is used to find out those things that cannot directly observe such as feelings, thought, and intention (Patton, 1980 as cited in Merriam, 1991)

Semi-structured interviews were employed, as Kvale (1996) states “it has a sequence of themes to be covered, as well as suggested questions. Yet, at the same time there is and openness to changes of sequence and forms of questions in order to follow up the answer given... by the subjects” (p.124). Furthermore, the researcher asked some questions to the students informally. The details on the questions asked in interview can be seen in Appendix 4. The interview was conducted individually so that it could help students express their idea easier. Respondents were interviewed about how they felt and what they did during the watching. Every time they finished watching a video they would be interviewed. The interviews were conducted four times.

3.6. Collecting Data Procedures

There are some steps that are applied in collecting the data. The steps are as follows:

- a) Finding out some theories and concepts related to the research: general characteristics of first grade of elementary school students, six to seven years old; children development; and English videos from *YouTube*.

- b) Giving pre-test and post-test to find out their vocabulary achievement before and after the video watching. The test based on the lesson from the course book and adapted from the course final exam.
- c) Conducting the observation, first to sixteen meetings, where the writer took part as a participant observer, that was, as their teacher, to investigate the students' learning activities.
- d) Administering the response journal to the students after holding the observation.
- e) Carrying out the interview with all students in the class.
- f) Organizing and analyzing the data obtained which afterwards they would be presented and discussed to draw some conclusions.

Furthermore, in organizing the teaching procedure, the material for teaching and learning process were collected and selected based on the English course program for teaching children class. Besides, the teaching procedure was arranged in the lesson plan. The lesson plan was used as guidance for teaching and learning process. As what is Harmer (2001) stated that the lesson plan can help teacher identify the aims and anticipate potential problems of the teaching. The lesson plan in this study is adapted from the lesson plan that is usually used in elementary school in organizing and sequencing learning materials to achieve the learning output.

Moreover, there are three steps in every meeting of the lesson plan: pre-activities, core activities, and post activities. In general, the pre activity phase consisted of greeting, checking students' attendance and giving apperception. The core activities were divided into three stages (preview, viewing, and follow-up activity). These three stages of

watching video in the classroom were adapted from Scrivener (2005). The preview activities start with a language focus on lexis, function that will come up on the video or students are asked to predict what will happen from some given information or pictures. The task in viewing activities can be in form of oral instruction or teacher elicits some questions related to the vocabulary studied. The last activity is follow up activity that teacher can do some activities after viewing, such as providing worksheet or giving a quiz. Meanwhile, the post activity was used for reviewing, summarizing, giving chances to the students to ask some questions before closing the lesson, and announcing the next topic.

Here are the brief stages have done during the class activity using *YouTube* videos:

❖ **Pre Activities (5 minutes)**

- Greeting the students
- Checking the attendance list

❖ **Core Activities (60 minutes)**

- An introduction of the subject: the teacher explained to the pupils that he would like to teach the vocabulary based on the theme.
- Warm up activity: she invited the pupils to get involve to the theme by answering some questions related to theme he would like to teach.

What's the weather like today?

Have you ever gone to the city or jungle?

What is Jen doing?

What food do you like to eat for dinner?

Where are the toys?

- Video; watch the videos a few times and create a difficult vocabulary guide. Propose a short introduction to the videos pupils watch. The more context that is provided by the teacher, the better your pupils will understand the videos they

are about to watch. The videos played until they really understand about the theme and they enable to memorize the vocabulary that provided by the video clips.

- Worksheet and quiz; Worksheets are given based on the videos. An individual or group task is brief and varied in form of listening and writing worksheet such as placing objects or identifying people, multiple choice pictures, gap filling, and information transfer. Oral tasks are also given by asking straightforward question about what they are watching and asking them to point out people, things, say where the object is, what someone is doing, etc.

❖ **Post Activities (5 minutes)**

- Summarizing the lesson that has been learnt
- Giving chances to the students to ask some questions before closing the lesson
- Announcing the next topic
- Closing the class.

Furthermore, the materials for the teaching and learning process were taken from *YouTube* video clips (www.youtube.com). In this study the video clips from *YouTube* downloaded by using download engine (www.keepvid.com) or Internet Download Manager (IDM). The downloaded video clips would be played in the classroom by using VLC media player software. There are some samples of videos clips that are used in this research as follows:

1. My first English words in the jungle (animal)

<http://www.youtube.com/watch?v=TqnvsYBUXPk>

This video introduced the situation in the jungle and provided the name of animals that live in the jungle (e.g. monkey, zebra, parrot, snake, tiger, lion, crocodile etc). The video was enriched by verb and adverb which had relationship to that vocabulary and it applied in simple sentences that used the mentioned vocabulary, so it made young learners easier to understand the meaning such of the vocabularies and how to use it in the sentences.

For example : *The monkey is jumping in the tress*
The elephant can splash its self with water
The giraffe has very long neck
The lion is a king of the jungle
The zebra has white and black strips

2. My first English words in Family

<http://www.youtube.com/watch?v=n608j7ju-Pc>

This video introduced the member of the family (e.g. mother, father, grandmother, grandfather, sister, brother, etc). The video was enriched by verb, adjective and adverb which had relationship to that vocabulary and it applied in simple sentences (present continuous) that used the mentioned vocabulary, so it made the students easier to understand the meaning such of the vocabularies and how to use it in the sentences.

For example : *Grandfather is playing the chess*
Mother is watering the cactus
Sister is drawing a picture

3. We are Busy Beavers

<http://www.youtube.com/user/wearebusybeavers#p/u>

This video contained some topics (e.g. preposition, food and drink, night and day, present continuous, weather etc). The video was provided by songs that used the mentioned vocabulary. Young learners loved the songs and sang along together with the class that

were fun for them, thus when they listened to the song they were exposed to how words in English were pronounced.

4. Weather

<http://www.stormy.25&id=6382fe1eff7e0d0b&st=lc>

<http://www.windy.25&id=b9c1468db2e2c74e&st=lc>

<http://www.foggy.25&id=b12c6c4cdce3d4cd>

These videos provided the real scenes of weather which recorded in certain place and country. Young learners were able to see many kinds of weather around the world and listened to the real sound of the weathers such as thunder/lightning and rain.

5. Ribbit's Riddles

http://m.youtube.com/index?desktop_uri=%F&gl=US#/watch?v=JgTYvBR37IE

This video introduced some funny animals or objects with their characteristics. The students had to listen to the description given and watched the shapes carefully so they might guess and shared what the animal or object was. This video allowed the students to listen to the native speaker and spoke in English when they tried to answer the riddles.

For example : *I have a little tail
My nose is usually called snout
I live on the farm
I can say oink-oink
What I am? I'm a pig*

3.7. Data Analysis Procedure

This study used both quantitative and qualitative data analysis. Data convey through words have been labeled 'qualitative'; meanwhile data presented in number form

are quantitative data (Merriam, 1991). Data from the pre- and post-test were measured using *the independent paired samples t-test* formula in order to compare the significant mean difference between the two tests. The result of the pre- and post test scores were calculated by using *t-test* in order to determine whether the mean of the students in pre-test and post-test are significant or not. They were statistically analysed by using *the paired-sample t-test* on SPSS 17 for Windows Program with the level of significance (p) = 0.05 and the t critical with $df = N-1$. Finally, the writer determined whether null hypothesis should be rejected or retained by comparing the obtained t with the critical t (if $t_{obt} \geq t_{crit}$, H_0 can be rejected but if $t_{obt} \leq t_{crit}$, H_0 cannot be rejected)

A qualitative data analysis was immediately conducted after the data from observation, response journals, and interviews were available. The general patterns of data analysis were a simultaneous action during the collection stage. Data obtained from observation, response journals, and interviews were triangulated to see that the data showed consistency. Moreover, Miles and Huberman (1994) states that there are three steps that the researcher can analyze the data concurrently: data reduction, data display, and conclusion drawing,

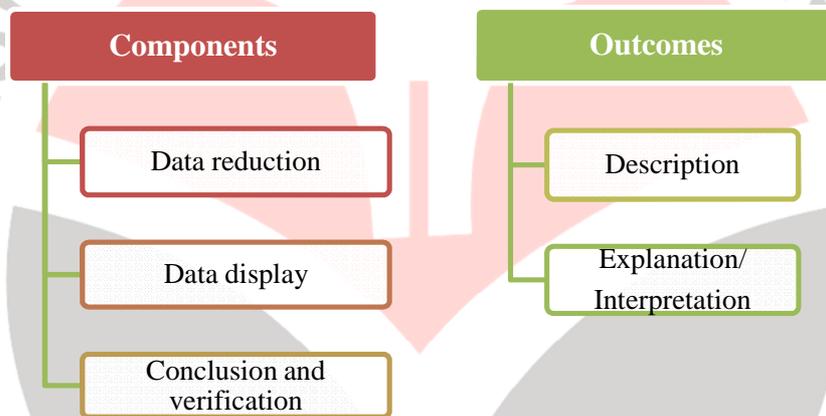
1. *Data Reduction*. The data reduction is the process of selecting, focusing, simplifying, abstracting, and transforming the data that emerge in written-up field notes or transcriptions. In this study, the data collected were selected, focused, simplified, abstracted, and transformed, even before the data actually collected, thus the researcher had a clear view about the study.
2. *Data Display*. The data can be displayed by using many types of graphs, charts, matrices, and networks. However, the most common form for displaying

qualitative data in the past has been extended text. This study, response journals the interviews results were displayed in some tables and graphs.

3. *Conclusion Drawing.* The researcher then made an interpretation on the data analyzed and the conclusions and recommendations were also drawn for further research.

Table 3.2

The Qualitative Analytical Procedure



(Adapted from descriptions of Spiggle 1994)

The data from qualitative and quantitative methods were compared and matched, and then the final conclusion related to research questions were drawn and based on.

3.7.1 Analysis of Data from Observation

There are three sources of data in analyzing data from observation. They are: the teacher's field notes, observation sheet, and vocabulary test score of the students. The

analyses of classroom observation data (from teacher's field notes and observation sheet) were conducted through several stages as follows:

1. Reading and reviewing many times the teacher's field notes and observation sheet transcript which recorded setting, the participants, the duration, activities and interaction, and subtle factor (Merriam; 1991). The details on teacher's field note can be seen in Appendix 5 and observation sheet for young learners' learning characteristics in Appendix 2.
2. Analyzing and classifying the data into some categories related to the main focus of observation, which were the teaching activity. The central theme was about young learners' learning principles were attended to by *YouTube* videos, the improvement of young learners vocabulary mastery, and their responses towards the use of *YouTube* videos in helping young learners improve their vocabulary practice.
3. Interpreting the data to address the research question on young learners learning principles, the effect of *YouTube* videos and the students' responses toward the teaching program.
4. Data from vocabulary test (pre- and post-test) which were conducted before and after the teaching program were computed through SPSS 17.0 for windows program. Further discussion on the analysis of data from vocabulary test is provided in section 4.2 in chapter IV.

3.7.2 Analysis Data from Response Journal

The data from response journal was aimed to obtain what the students experienced and felt during the watching. It was important for assessing their behavior and knowledge after an observation. Considering their age and nature of children, the questions were designed in such a way that they are simple and easy to understand by the student. The form of response journal is presented on Appendix 3. Some steps in analyzing the data from response journal are as follows:

1. Analyzing and classifying the data into some categories related to the main focus of the central theme was about students' feelings and responds towards the video and responses toward their favorite and less favorite part in *YouTube* videos.
2. Interpreting the data to address the research question on young learners learning principles, the effect of *YouTube* videos and the students' responses toward the teaching program and students' feelings towards the video.
3. Categorizing the data from response journal into several themes which became main concern of this study.
4. Interpreting the data from response journal to address research questions.

3.7.3 Analysis Data from Interview

The data from interview was recorded through a video recorder. It was captured the audio during the interview. The steps in analyzing the data from interview are as follows:

1. Transcribing the data from interview which was in the form of voice recording.
2. Categorizing the data from interview into several themes which became main concern of this study, this was, related to young learners' learning principles were

observed in *YouTube* videos, the effect of *YouTube* videos, and the students' responses.

3. Reducing inappropriate data.

4. Interpreting the data from interview to address research questions.

Furthermore, the data gained from observation, response journal, and interviews were triangulated. In this study, the data collected and analysed from classroom observation, response journal, and interview were compared and matched to see the relationship among them. Triangulation could strengthen the reliability as well as internal validity especially in terms of using multiple methods of data collection and analysis (Merriam, 1991).

3.8 Testing the Validity

Testing the validity is important to test out the trustworthiness of the data. According to Alwasilah (2002), validity is the truth of a description, conclusion, interpretation and other kinds of reports. To test the validity and to construct the trustworthiness of this study, there are some kinds of strategies that were applied: triangulation, feedbacks, and member checks.

- 1. Triangulation.** Data obtained from observation, response journal, and interviews were triangulated to see if the data show consistency. Triangulation was applied to obtain as many data as possible and to avoid bias data because a bias in one data can be neutralized by other data from other resources or methods of data collection as suggested by Alwasilah (2002). The researcher held the participant observation

and jotted down the process of the observation in the journals, and then, to avoid bias the findings were compared with the information gathered from the journal response and interviews.

2. Feedback. Asking feedback, comments, and critiques from others are needed to identify validity bias and researcher's assumption, and also logical weakness of the research (Alwasilah 2002). The people that can be asked are the experts of the study, supervisors, peers, and other people that understand about the study. In this study, it involved asking those who knew the research situation well. The researcher asked feedback from her research supervisors and some critical friends.

3. Member Checks. Member check is very important feedback from the participants. This technique can help the researchers to: (1) avoid misinterpretation of participants' answer of the interviews, (2) avoid the misinterpretation of participants' attitude in the observation process, and (3) confirm participants' perspective of the process that is happening (Alwasilah: 2002). In this study, the researcher corrected, changed and even added the information based on the information from this member checks.

3.9 Summary of Chapter 3

This chapter has discussed the detail context of the study. The discussion has covered research questions that cover three research questions: Can *YouTube* videos develop vocabulary mastery of young learners? What young learners' learning principles are observed in *YouTube* Videos? How do the children respond to the lesson in *YouTube* during the learning process? It also covers the description of a case study as the design

used in this study as the design used in this study. The setting of the study was at EEP (English Executive Program) in Bandung and it involved eleven students as participants. The data for the study were collected through vocabulary tests, observation, response journals, and interviews. A triangulation was applied in order to obtain consistency of data gathered.

