

CHAPTER III

RESEARCH METHODOLOGY

Chapter three presents the methodology on conducting this study. This chapter provides four main parts of the investigation: research design, data collection technique, research procedures, and data analysis technique.

3.1 Research Design

Quantitative method in the forms of quasi-experimental design was employed in this study, with nonrandomized or non-equivalent pre-test and post-test groups. Task-Based Language Teaching (TBLT) treatments were implemented in the experimental group of this study, whereas, the control group was the class which did not get TBLT treatments. This design was used because it allows for attempts to fulfill standards of the true experimental design as closely as possible (Hatch and Farhady, 1982).

The quasi-experimental design using nonrandomized control group pre-test and post-test design can be depicted bellow:

Table 3.1
Research Design

Group	Pre-test	Treatment	Post-test
Experimental	O ₁	X	O ₂
Control	O ₃	-	O ₄

Note:

- X refers to the exposure of a group to an experimental variable
- O refers to the process of observation or measurement

(Campbell and Stanley, 1963, as cited in Cohen and Manion, 1994, p. 169)

As cited from Hatch and Farhady (1982, p. 51), a variable can be defined as an attribute of a person, a piece of text, or an object which varies from person to person, text to text, object to object, or from time to time. In research, there are two kinds of variable, independent variable and dependent variable. Independent variable is the variable which is selected, manipulated, and measured by the researcher, while the dependent variable is the variable which a researcher observes to determine the effect of the independent variable. The independent variable of the research is TBLT approach and the dependent variable is the students' speaking skill.

Hypothesis is defined as a formal affirmative statement predicting a single research outcome, a tentative explanation of a relationship between two or more variables. It also limits the focus of investigation to a define target and determines what observations are to be made (Best and Kahn, 2006). Null hypothesis is the common hypothesis in which stated there is no difference (Hatch & Farhady, 1982). Null hypothesis is known as statistical hypothesis (Arikunto, 2010, p. 113). Therefore, the hypothesis of this study was as follows:

- H_0 = There is no significance difference between students' post-test scores in experimental group and control group.
- H_A = There is a significance difference between students' post-test in experimental group and control group.

3.2 Data Collection

3.2.1 Population and Sample

Population is any group or individuals that have one or more characteristics in common that are of interest of the researcher; while sample are a small proportion of a population selected for observation and analysis (Best, 1981). The sample of this study was chosen purposively, based on the same number of students and absence of significant difference between scores of the two groups.

The population of this study was second grade students of one senior high school in Majalengka whereas two classes were used as the sample: one class for the experimental group and the other one for the control group.

3.2.2 Research Instruments

Research instrument is a tool which is used in collecting data (Arikunto, 2010, p. 203). The data were collected to answer research questions of a study. There were two kinds of research instruments utilized in this study; pre-test, post-test, and interviews. The pre-test was conducted to both experimental and control group before the treatment, in order to measure students' ability of spoken narrative texts. The post-test was conducted to both groups after the treatment, in order to see whether or not there is a change on students' spoken narrative texts ability. The questionnaire was conducted to the experimental group only. It was aimed to find out students' responses toward the implementation TBLT communicative approach.

The pre-test and post-test in this study were in the form of a speaking test. The taped performance was used because it can be kept as evidence to support the teacher's judgments and it is available for checking by others if the teacher is unsure about assigning a score or grade to a particular student, as suggested by Brown and Yule (1999, p. 105).

Filling questionnaire was conducted in the last meeting. Questionnaire was distributed to 20 students of the experimental group. The questionnaire was distributed to explore students' responses toward TBLT and to find out the advantages and disadvantages of the approach based on students' responses.

3.2.3 Research Procedures

3.2.3.1 Organizing Teaching Procedures

In organizing teaching procedures, the researcher served as the teacher and facilitator for both experimental and control groups. The teaching procedure was organized through two steps. The first step was preparing

appropriate materials for the teaching and learning processes during the treatment. The material was about spoken narrative text. Spoken narrative text was chosen as the material of this study because it was appropriate with the Competence Standard and Basic Competence. The second step was organizing teaching procedure. The teaching procedure in the experimental class employed TBLT approach while the control group employed Presentation-Practice-Production.

3.2.3.2 Organizing the Research Instruments

An instrument is used to gather data (Cresswell, 2008, p. 90). In this research, organizing the research instruments includes creating the test item for both pre-test and post-test and constructing closed and opened questionnaire.

The first instrument was students' pre-test and post-test scores in order to answer the first research question that investigates the effectiveness of Task-Based Language Teaching (TBLT) in teaching spoken narrative text. Then, the second instrument, questionnaires, was distributed to answer the second research question which gives the information about students' responses to TBLT approach in spoken narrative text. The questionnaire consists of 12 questions in a form of likert scale.

3.2.3.3 Testing the Validity of the Pre-Test and Post-Test through the Pilot Test

The pre-test and post-test were examined to find out whether or not the items have face and content validity. To test the two kinds of validity, the test item was pilot-tested to ten students of the same school with the subjects in this study. At first, the ten students were asked to read the instruction contained in the test item, in order to find out whether or not the instruction was understandable and clear enough. This was conducted to examine the face validity of the test item. Then, because the instruction was found to be clear, the students were asked to do the test. After that, the students' work in the test

were examined, to find out whether or not the students had performed the particular language skills and areas expected in the test item.

3.2.3.4 Administering Pre-test to Experimental and Control Group

Administering pre-test to experimental and control group was conducted before conducting the treatment in order to portray students' ability of spoken narrative text.

3.2.3.5 The Teaching Program

The experimental group and the control group used a different treatment. The treatment in the form of Task-Based Language Teaching (TBLT) was only carried out in the experimental group, while the Presentation-Practice-Production was carried out in the control group. The learning materials and context were approximately similar, only the methods were different.

3.2.3.5.1 Experimental Group

In conducting the treatments, the researcher acted as the teacher. The teacher used Task-Based Language Teaching (TBLT) approach during teaching learning process in teaching spoken narrative texts in the experimental group.

The treatments were carried out in five meetings in which lasted for 90 minutes for each meeting. The treatments' process that applied TBL approach in spoken narrative text will be systematically interpreted below:

- **Step 1:** Create a number of schema-building tasks.

The material given in this study was spoken narrative text. Spoken narrative text was chosen as the material of this study because it was appropriate with the SKKD. In this step, teacher introduces the topic, decides the context for the task, and introduces some keywords as the vocabularies to help the students completing their tasks (Nunan, 2004, p.

31). Teacher chose a topic that is closely related to the students' real life in order to make them motivated in doing the tasks.

- **Step 2:** Give learners controlled practice in the target language vocabulary, structures and functions (Nunan, 2004, p. 31). Students were given worksheet related to the topic and vocabularies gained in the previous step.
- **Step 3:** Give learners authentic listening practice (Nunan, 2004, p. 32). This step might use worksheet and video as the media. The students watch some videos while they have to fill in a worksheet.
- **Step 4:** Focus learners on linguistic elements, e.g. grammar and vocabulary (Nunan, 2004, p. 31). This step focuses on the grammar and vocabularies of the material being given.
- **Step 5:** Provide freer practice (Nunan, 2004, p. 32).

Students were asked to work in groups. On the first day, the students were asked to brainstorm their idea helped by their own team. On the second, third, and fourth day, the groups' job was to practice together and to give some feedbacks to the members in order to help improving the students' speaking skill.

- **Step 6:** Pedagogical task.

In this step, students have to perform their spoken narrative text with the chosen topic using their own ideas. In this step, the students feel more confident in doing final task alone after getting much input through the sequence of tasks (Nunan, 2004, p. 33). This step was done in the last meeting and considered as post-test.

3.2.3.5.2 Control Group

In conducting the treatments, the researcher acted as the teacher. The teacher used Presentation-Practice-Production approach during teaching-learning process in teaching spoken narrative texts in the control group.

The class was conducted in five meetings which lasted for 90 minutes for each meeting. The teaching process that applied Presentation-Practice-Production in spoken narrative text will be systematically interpreted below:

- **Step 1: Class Presentation**

In the class presentation, teacher delivered the materials about spoken narrative text to the students. The teacher delivered the material through lecturing to build students knowledge before the presentation. Class presentation is done in every meeting.

- **Step 2: Students' Practice**

In this step, students were asked to work in groups. This step was given in every meeting. On the first day students were asked to brainstorm their own idea individually. Then, on the second, third, and fourth meeting, the students were asked to perform in groups and giving feedback to each other.

- **Step 3: Production**

This is the last step of PPP approach. Students were asked to students have to perform their spoken narrative text with the chosen topic using their own ideas. The students were given 5 minutes to perform. This step was done in the last meeting and considered as post-test.

Although the approaches were different, the learning materials and context were approximately similar between experimental group and control group, as can be seen in the following teaching schedule:

Table 3.2
The Teaching Program

Activity (In-class Instruction)			
Day/ Date	Experimental Group	Day/ Date	Control Group
<i>Mon/ 31-Mar-14</i> <i>(Pilot test)</i>			
<i>Tue/ 1-Apr-14</i>	Pre launch (introduction of <i>Task-Based Language Teaching</i>)	-	-
<i>Wed/ 2-Apr-14</i>	Pre-test	<i>Wed/ 2-Apr-14</i>	Pre test
<i>Tue/ 8-Apr-14</i>	Task 1: Keyword identification	<i>Thu/ 3-Apr-14</i>	Modeling of Listening Text
<i>Wed/ 9-Apr-14</i>	Task 2: Group discussion (groups brainstorming)	<i>Wed/ 9-Apr-14</i>	Listening Exercise
<i>Tue/ 15-Apr-14</i>	Task 3: Group discussion (groups brainstorming)	<i>Thu/ 10-Apr-14</i>	Listening Exercise
<i>Wed/ 16-Apr-14</i>	Task 4: Speaking practice	<i>Wed/ 16-Apr-14</i>	Listening & Speaking Exercise
<i>Tue/ 22-Apr-14</i>	Task 5: Grammar error identification	<i>Thu/ 17-Apr-14</i>	Listening & Speaking Exercise
<i>Wed/ 23-Apr-14</i>	Task 6: Speaking practice in group	<i>Wed/ 23-Apr-14</i>	Speaking Exercise
<i>Tue/ 29-Apr-14</i>	Post-test	<i>Thu/ 24-Apr-14</i>	Post-test

3.2.3.6 Distributing Questionnaires

Questionnaires were distributed to 20 students in the experimental group. The questionnaire consisted of 12 questions in the form of closed-coded questionnaire. Closed questionnaire consists of five responses category: strongly agree, agree, undecided, disagree, and strongly disagree. The questionnaires were distributed to find out students' responses toward TBLT. The questionnaires were distributed in the last meeting.

Consist of 12 positive statements; presented below the framework of the Questionnaire:

Table 3.3
Framework of the Students' Questionnaire

No.	Categories	Item Number	Total
1	Response to the implementation of Task-Based Language Teaching	1, 2	2
2	Response to the importance of learning English using Task-Based Language Teaching	3, 4, 5	3
3	Response to the lesson content given in learning using Task-Based Language Teaching	6, 7, 8	3
4	Response to the role of the teacher in teaching and learning English using Task-Based Language Teaching	9, 10, 11, 12	4
Total			12

3.2.4 Data Analysis

3.2.4.1 Scoring Rubric

As the pre-test and post test scores were the main data analyzed in this study, the process of generating scores from the students' work in the pre-test and post-test would use appropriate scoring rubric. The scoring rubric used in this study was adapted from C. J. Wein (1990) as described below:

Table 3.4
Scoring Rubric

No.	Aspect	Score	Criteria
1.	Fluency	10	The student has the ability to talk with normal level of continuity.
		8-9	The student talks with normal levels of continuity but there are some hesitant responses.
		7	Utterances may still be hesitant and there are some pauses but are gaining in normal levels of continuity.
		5-6	Hesitant responses and there are many pauses in the utterance.
		<5	There are many long pauses and often incomplete responses.
2.	Grammar	10	The student uses appropriate and accurate words and conveys the information clearly.
		8-9	Almost there are no grammatical error and convey the information given.
		7	There are some grammatical errors but the information has clear meaning.
		5-6	There are frequent grammatical error and unclear meaning.
		<5	Almost all utterances are inaccurate grammar and unclear meaning.
3.	Context	10	The student gives relevant and contextual responses.
		8-9	The student conveys the contextual responses but only in general.
		6-7	There are some redundancy responses and irrelevant responses.
		<6	No context of the responses and irrelevant responses.
4.	Vocabulary	10	The student uses appropriate, varied, and relevant words to the context.
		8-9	Almost there are no irrelevant and inappropriate words to the context.
		7	There are some inappropriate and irrelevant words to the context but the information still has clear meaning.
		5-6	There are less variation of words and there are lots of inappropriate words, but the information still has clear meaning.
		<5	There are excessive repetitions, inappropriate and unclear information.

3.2.4.2 Normal Distribution Test

In order to calculate the normal distribution of a set of data, the Kolmogorov-Smirnov test was used in this research. The test compared the scores in the sample to a normally distributed set of scores with the same mean and standard deviation (Field, 2005). The test was employed through SPSS 18.0 for Windows.

Conducting the normal distribution test included three steps: stating the hypothesis and setting the alpha level; analyzing the scores using the Kolmogorov-Smirnov formula; and interpreting the output data. For the first step, the alpha level set is at 0.05 (two-tailed test) and the hypothesis is as follows:

- H_0 : The score between experimental and control group is normally distributed
- H_A : The scores between experimental and control group is not normally distributed

The output data were interpreted by this way: if the result is non-significant ($p < 0.05$) it means that the distribution of the sample is significantly different from normal distribution (probably normal). If the result is significant ($p > 0.05$) then the distribution is not significantly different from normal distribution (Field, 2005).

3.2.4.3 Homogeneity Variance

Homogeneity variance was calculated after calculating the normal distribution test between experimental group and control group. The first step in the measuring data was stating the hypothesis. In this study, the null hypothesis was stated. The null hypothesis (H_0) is that the variances of the control and experimental groups are homogenous. Afterwards, the next step was getting the level of significant 0.05, measuring homogeneity variance using Laverne's test and alpha level of significant. If Asymp. Sig < 0.05 , the null hypothesis is rejected, which means the two groups are not equal. In

contrary, if Asymp. Sig > 0.05, the null hypothesis is accepted which means the variance data of two group is equal (Hatch & Faradhy, 1982).

3.2.4.4 Independent t-test

Independent t-test was used to analyze the significant differences between the students' means score of their first draft in experimental and control groups. The first step was stating the null hypothesis in which it states that there is no significant difference of means between the control group and experimental groups. Then, the next step was setting the level of significance t-test 0.05 (two-tailed). If the significance value of students' score of the control and experimental group is smaller than 0.05, then H_0 is rejected. On the other side, if the significance value is larger than 0.05, then H_0 is retained (Hatch & Farhady, 1982, p. 88). After that, the next step was calculating t-test score using SPSS 18.0; comparing t_{obt} and t_{crit} . If $t_{obt} > t_{crit}$, it means that the hypothesis is not rejected, there is a significant difference between two groups. In contrary, if $t_{obt} < t_{crit}$, it means that the hypothesis is rejected, there is no significance difference between the two groups (Kranzler and Moursund, 1999).

3.2.4.5 Effect Size

The effect size was used to determine how significant the impact of the treatments was to the experimental groups' scores. Effect size has positive correlation to its value. The larger effect size value is the larger of treatment will be (Coolidge, 2000). The formula of effect size is described as follow:

$$r = \sqrt{\frac{t^2}{t^2 + df}}$$

Note:

r = effect size

t = t_{obt} or t value from the calculation of independent t test

df = $N_1 + N_2 - 2$

Value of effect size is described in the table below:

Table 3.5

Scale of Effect Size

Effect Size	r value
Small	.100
Medium	.243
Large	.371

(Coolidge, 2000, p. 151)

3.2.5 Data Analysis of the Questionnaire

3.2.5.1 Validity of Questionnaire

The validity of the questionnaire was employed through Ms. Office Excel 2007 using the sample of the experimental group questionnaire. The question items in a questionnaire can be said valid if $r_{ot} > r_{crit}$, while if $r_{ot} < r_{crit}$, it can be said that it is not valid (Arikunto, 1998). The result was calculated by comparing the r_{obt} to r_{crit} with $N = 10$ and $\alpha = .05$.

3.2.5.2 Likert Scale

The questionnaires were distributed to the sample after questionnaire had been ensured to be valid. The questionnaire in this study consisted of 12 statements. Each statements had five various alternative options that should be chosen by the students. The study used Likert scale with typical five-level as shown in table below.

Table 3.6

Criteria Likert Scale

No	Criteria	Score
1	Strongly Agree	5
2	Agree	4
3	Undecided	3
4	Disagree	2
5	Strongly Disagree	1

(Sugiyono, 2010)

Afterwards, the response frequencies were computed into percentages. The following presents the formula to calculate the percentages. (Ningrat, 2000 cited in Nurlaila, 2013).

$$P = \frac{Fo \times 100}{N}$$

P = Percentage

$F o$ = Frequency

N = The number of Respondent

100 = Constance

An the last, to interpret the scores by looking the following rule:

Table 3.7

Percentage Classification

No.	Score	Category
1.	0%	None
2.	1% - 25%	A few of
3.	26% - 49%	Nearly half of
4.	50%	Half of
5.	51% - 75%	Best part of
6.	76% - 99%	Nearly all of
7.	100%	All of

(Moch. Ali, 2010)