

## **Chapter Three**

### **Research Methodology**

In this chapter, the researcher attempts to present several points related to the methodology of the research including research design, research setting, research population and sample, data gathering technique, data gathering procedure, data analysis as well as theories to support the research methodology.

#### **Research Design**

This research used quantitative as a research method. Quantitative method used to quantify the problem which focused on gathering numerical data and analyzing it by using computational technique. According to Creswell (2012), quantitative research is used to test some objective theories by examining the relationship of the variables. In line with that, Abawi (2008) also asserted that quantitative research is the examining theory which involves some variables that are typically numeric and use statistical method in the process of analyzing the data. Based on the statements above, quantitative method was appropriate to be employed in this research because this research used experimental as a research design.

In this research, the researcher used experimental research design under quantitative approach. Experimental research was any exploration led with a logical methodology, where a lot of factors are kept consistent while the other arrangements of factors are being estimated as the subject of test. Cohen, Manion, and Marison (2011) stated that experimental design makes a change in the value of one variable. The researcher used experimental research because the researcher wanted to ascertain the effectiveness of storytelling on students' English speaking skill. Then, the researcher wanted to know the result before and after the treatment given to the

students. As designed for educational and social purposes, thus the researcher used quasi-experimental in this research. It was included in Cohen et al (2011) who stated that the quasi-experimental design is usually aimed for education and social world that is used to examine the cause of certain phenomena. In quasi-experimental design, the researcher used pre-test - post-test non-equivalent group design. It was used to compare the experimental group and control group. According to Cohen et al (2011), “the dashed line separating the parallel rows in the diagram of the non-equivalent control group indicates that the experimental and control groups have not been equated by randomization- hence the terms “non-equivalent (p.323)”. Thus, the main reason why the researcher used this design was because the researcher wanted to prove that students who were taught by using storytelling was better than students who were not taught by using storytelling technique in terms of speaking skill.

### **Research Setting**

This research was conducted in State Junior High Schools in Yogyakarta. The researcher conducted this research there because there was one subject that implemented narrative material and storytelling activity in the learning process. For this reason, it would give the advantage for the researcher in terms of accessibility to conduct the study at the school. Besides, it was based on the English subject syllabus where the students were taught by using narrative material. This research was conducted during February and March 2019.

### **Research Population and Sample**

The participants of this research were all of students of eight grades in one State Junior High School in Godean, Yogyakarta in academic year 2018.2019. The research was conducted in this class based on several considerations which were: a) their speaking score was the lowest

among of English language skills b) the teaching learning process used repetition and translation. It meant that the students learn storytelling using narrative text. Then, the students found some unfamiliar words; they will translate it to know the meaning of the words. The students also rewrite the story using their language included the character, place, setting of time and plot. Furthermore, the same material was given both experimental and control class so that there was no differentiate to the students.

A population is a group of people who has the same characteristic that differentiates them from other groups (Creswell, 2012). The population of this research was the whole eight graders of one State Junior High School in Godean, Yogyakarta. There were four classes involved in this research which are class A, B, C and D. All of them consisted of 128 students. Every class had difference number of students including male and female. The researcher chose this population based on syllabus where narrative was taught for eight graders. Furthermore, the researcher had elaborated the teaching learning process by using storytelling technique to improve students' speaking skill.

In this research, the researcher used purposive sampling. Purposive sampling is a technique used to take samples based on criteria that have been determined. Purposive sampling is chosen for a specific purpose, to achieve representativeness, focus on specific, uniqueness issues or case (Cohen et al., 2011). The researcher selected the samples using simple purposive sampling from target population of the students of eight grade class. In selecting the sample, the researcher used the suggestion from English teacher at the school. The researcher had worked together with the teacher to decide which one the experimental class and control class were. From four classes, it was decided to take VIII C and VII D as experimental and control class.

The researcher did a test (speaking test) to decide which one the control class and the experimental class were. The researcher did a speaking test by using storytelling technique. The researcher used storytelling because the researcher wanted to prove the effectiveness of storytelling in teaching speaking skill and also the theories that showed the effectiveness of storytelling. Then, the researcher used narrative text (fable) to do the test (speaking test). The task material was same as the material in the syllabus that the students learned. The result of speaking test showed that the mean score of VIIC 68.88 and VIId 66.93. From the result of the speaking test, the researcher decided that VIII C became the control class and VIII D became experimental class. There were 30 students in experimental class consisting of 14 male and 16 female. Then, there were 32 students in control class consisting of 14 male and 18 female. Thus, the total participants of this research were 62 students.

### **Data Gathering Technique**

In this research, the researcher used speaking test as the instrument. The speaking test form taken from Inten Mujizat (2016) in his undergraduate research. The test was already used to test students' English speaking skill for eleven graders of MAN 1 Bekasi in academic year 2016/2017. He taken the speaking test scoring form from Harris (1969) in his book entitled *Testing English as A Second Language*. The objective of the test was to find out the difference of students' English speaking before and after given the treatment by using storytelling activity. In collecting the data, he used oral test in pre and post-test. In the pre-test, he used topic about last holiday. Then, in the post-test he used topic about next holiday. The components of the test included pronunciation, grammar, vocabulary, comprehension, and fluency. The researcher used the speaking test from it was because the suggestion from the teacher and the speaking test form

was easier to understand. In this research, the researcher used three components in speaking test scoring form. The speaking test form can be seen as follows:

Table 2 <i>Speaking test scoring system</i> <i>Taken from David P. Hariis's Book (Testing English as A Second Language 1969)</i>				
No	Aspects	Description of Indicator	Score	
1	<b>Pronunciation</b>	• Have few traces of foreign Accent.	5	(95-100)
		• Always intelligible, though one is conscious of a definite accent.	4	(85-94)
		• Pronunciation problems necessitate concentrated listening and occasionally lead to misunderstanding.	3	(75-84)
		• Very hard to understand because of pronunciation problems. Frequently be asked to repeat.	2	(65-74)
		• Pronunciation problems to severe as to make speech virtually unintelligible	1	(below 65)
2	<b>Fluency</b>	• Speech as fluent and effortless as that of a native speaker.	5	(95-100)
		• Speed of speech seems to be slightly affected by language problems.	4	(85-94)
		• Speed and fluency are rather than strongly affected by language problems.	3	(75-84)
		• Usually hesitant; often force into silence by language limitations.	2	(65-74)
		• Speech is so halting and fragmentary as to make conversation virtually impossible	1	(below65)
3	<b>Comprehension</b>	• Appears to understand everything without difficulty	5	(95-100)
		• Understands nearly everything at normal speed, although occasional repetition.	4	(85-94)
		• Understands most of what is said at slower-than-normal speed with repetitions.	3	(75-84)
		• Has great difficulty following what is said. Can comprehend only 'social conversation' spoken slowly and with frequent repetitions.	2	(65-74)
		• Cannot be said to understand even simple conversational English.	1	(below 65)

## Data Gathering Procedure

In this research, there were some steps that the researcher conducted in doing research. Those were research permission, pre-test, treatment, and post- test. In this research, the researcher gave the pre-test before giving a treatment. Then, the researcher gave the post-test after giving the treatment. The result of pre and post-test was examined to see their achievement after giving the treatment.

**Research permission.** Before conducting this research, the researcher needed to get permission from English Language Education Department. After getting the permission, the researcher decided the figure of research design .The researcher used quasi experimental design to gather the data. It was because there was no randomization in choosing the participant. Then, the figure of quasi experimental design can be seen as follows:

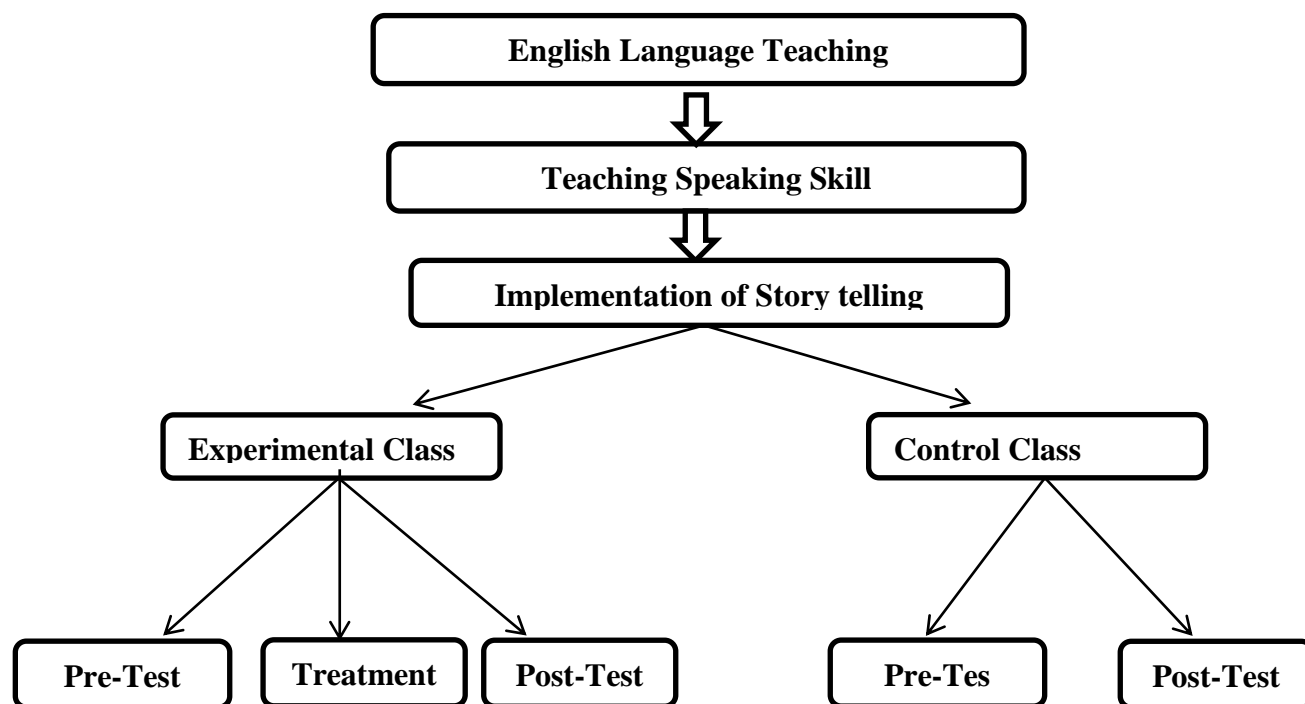


Figure 2. A quasi Experimental design

The figure above, *figure 2*, is the illustration of pre-test and post-test non-equivalent group according to Cohen, Manion, and Morrison (2011). There were two groups in quasi-experimental, they were experimental and control group. The researcher gave pre-test and post-test to both experimental and control group. The pre-test was used to know the students' prior knowledge and the post-test was used to know the students' improvement. In experimental group, the pre-test was conducted before the treatment and the post-test after the treatment. It was the same as control group, pre-test was and post-test were also given to the control group. However, what made them different was the control group was not given the treatment.

**Pre-test.** Pre-test was a test that was conducted before doing a treatment. The researcher conducted the pre-test before doing any teaching and learning. This pre-test was conducted for both of experimental and control group. In doing a pre-test, the researcher distributed a text about narrative text entitled "*The Owl and Nightangle*". In doing a pre - test, the students practiced to tell the story in front of the class based on the text material they got. In addition, the same topic was given to both of group.

**Treatment.** In collecting the data, the researcher used quasi experiment. The researcher divided the participants into two groups which were experimental and control class. In experimental class, it consisted of 30 students from VIII D. They got specific treatment by using storytelling as a tool to teach speaking skill. On the other hand, there were 32 students from VIII C involved in control class who were **taught by using** storytelling but there was no special treatment given to the students. The researcher taught storytelling using narrative text material for both classes. In experimental class, the researcher taught about the generic structure of narrative text, kinds of narrative text, language feature, and main character of the narrative text

as well as the exercises. Then, the researcher asked the students to re-tell a story that they have made without script. Furthermore, in control class the researcher taught the same material. The difference was only the exercises. In control class, the researcher asked students to answer some guideline questions. Then, the researcher asked students to make a story based on the guideline questions that they had answered. After that, the students re-told the story in front of the class with script. In control group, the students answered the questions guidelines, and there was only two days given to the students for practicing to make a story. The treatment was conducted around one month in teaching and learning process. The treatment had five meetings for each class. Then, each meeting had 80 minutes time allocation.

***Experimental group.*** Students of VIII D are chosen as the experimental group. The students got a pre-test in advance then continued given a treatment and the last was giving a post test. The pre-test was conducted on Wednesday, February 13<sup>rd</sup>, 2019. The time allocation to teach was 2x40 minutes. There was no student who looked stand out in the class when the researcher conducted the pre-test. The researcher distributed the text for the students and asked the students to read in front of the class. In doing the pre-test, the researcher gave the reading material entitled “*The Owl and Nightingale*”. Thus, after doing a pre-test, the researcher did the first teaching and learning process on Friday, 15<sup>th</sup> 2019. The teaching process was conducted 2 times for pre-test and post-test and 5 times for each group (treatment) . The schedule of conducting the research can be seen as follows:



**Table 3**

*Teaching schedule of experimental group in VIII D*

<b>Pre-Test</b> Wednesday, February 13 <sup>rd</sup> , 2019 08.20-09.30 WIB	<b>Objective</b> investigated students' English speaking skill before given the treatment	<b>Official Statement</b> Students did pre-test and used the story of <i>The Owl and Nightingale</i> ". Time allocation was 2 x 40 minutes.
<b>First Meeting</b> Friday 15 <sup>th</sup> , 2019 07.00-08.20	<ol style="list-style-type: none"><li>1. Identified the purpose of Narrative text.</li><li>2. Analyzed the generic structure and language feature of Narrative text.</li><li>3. Identified kinds of Narrative text.</li><li>4. Analyzed the characters of the story of Narrative text.</li></ol>	<ol style="list-style-type: none"><li>1. Students learned about generic structure, and language features of narrative text.</li><li>2. The teacher divided the activity into three parts:<ol style="list-style-type: none"><li>a. Activity one: The students analyzed the generic structure of the text in Cinderella, Fox and A Cat, and The Legend of Prambanan Temple.</li><li>b. Activity two: The students answered the questions provided by the teacher about the story of Cinderella, Snow White, Fox and A Cat, and The Legend of Prambanan Temple.</li><li>c. Activity three: The teacher provided some texts and the students identified which includes of kinds of Narrative</li></ol></li></ol>

		text.
<p><b>Second Meeting</b> Wednesday, February 20<sup>th</sup>, 2019 08.20-09.20 WIB</p>	<p><b>Objective</b></p> <ol style="list-style-type: none"> <li>1. Found the basic/main point of the story of Narrative text ( Legend)</li> <li>2. Made a story based on question guidelines provided by the teacher.</li> <li>3. Re-told a story that they had made in front of the class.</li> </ol>	<p><b>Official Statement</b></p> <ol style="list-style-type: none"> <li>1. The teacher gave the students text about The Legend of Prambanan Temple and The Legend of Lake Toba.</li> <li>2. The teacher asked the students to find out the basic point of the story.</li> <li>3. The Teacher asked the students to answer the questions guidelines.</li> <li>4. The students made a story and re-tell in front of the classroom without reading the script.</li> <li>5. The teacher and students worked together to discuss their pronunciation error.</li> </ol>
<p><b>Third meeting</b> Friday 22<sup>nd</sup>, 2019 07.00-08.20</p>	<ol style="list-style-type: none"> <li>1. Found out the basic/main point of the story of Narrative text (Fable)</li> <li>2. Made a story based on questions guidelines provided by the teacher.</li> <li>3. Re-told a story that they have made in front of the class.</li> <li>4. Understood about the meaning of storytelling, benefits, and a good ways to re-tell a story.</li> </ol>	<ol style="list-style-type: none"> <li>1. The teacher gave the students text about <i>The Ant and the Dove for Male students and The Wolf and The Stork for female students.</i></li> <li>2. The researcher explained about storytelling and benefits of storytelling.</li> <li>3. The researcher gave the students a paper on how to re-tell a story well.</li> <li>4. The teacher asked the students to find out the basic point of the story.</li> <li>5. The Teacher asked the students to answer the questions guideline.</li> <li>6. The students made a story and re tell in front</li> </ol>

		<p>of the classroom without reading the script.</p> <p>7. The teacher and students worked together to discuss pronunciation error and the students' comprehension.</p>
<p><b>Fourth meetings</b> Wednesday, 27<sup>th</sup> February 2019 08.20-09.20 WIB</p>	<ol style="list-style-type: none"> <li>1. Found the basic/main point of the story of Narrative text (Fable)</li> <li>2. Made a story based on questions guidelines provided by the teacher.</li> <li>3. Re-told a story that they had made in front of the class.</li> <li>4. used body language, eye contact, intonation, and pacing.</li> </ol>	<ol style="list-style-type: none"> <li>1. The teacher gave the students text about the story of <i>The Ant and The Dove</i> for male students and the story about <i>The Wolf and The Stork</i> for female students.</li> <li>2. The teacher asked the students to find out the basic point of the story.</li> <li>3. The Teacher asked the students to answer the guideline question.</li> <li>4. The students made a story and re-told in in front of the classroom without reading the script, and practice to used body language, eye contact, intonation, and pacing</li> <li>5. The teacher and students worked together to discuss pronunciation error, students' comprehension, and students' fluency.</li> </ol>
<p><b>Fifth meetings</b> Friday, 01<sup>st</sup> March 2019 07.00-08.20</p>	<ol style="list-style-type: none"> <li>1. The students watched video of storytelling related to the fable.</li> <li>2. Storytelling practice</li> </ol>	<ol style="list-style-type: none"> <li>1. The teacher showed the students a video of storytelling.</li> <li>2. The teacher asked the students some questions related to the video.</li> <li>3. The teacher and students discussed together about body language, tools, facial expression, and intonation</li> </ol>

<p><b>Sixth meetings</b>  <b>Post-Test</b>  Wednesday, 06<sup>th</sup> March  2019  08.20-09.45 WIB</p>	<p>Investigated the students' English speaking skill after being given the treatment</p>	<p>Students did post-test and used the story of "<i>The Ant and The Dove</i>" for the male students and the story "<i>The Wolf and The Stork</i>" for female students. Time allocation was 2 x 45 minutes</p>
---	--	---

In the teaching and learning process, the researcher used two kinds of narrative text (fable and legend). That material was suggested by the English teacher at the school and also based on the syllabus in which only fable provided in the syllabus. Before doing a treatment, the researcher did a pre-test to investigate the students' English speaking skill. The researcher used fable text in doing a pre-test. The participant of the pre-test was 30 students of VIII D. Then, in the next meeting the researcher divided the students into six groups. They worked in the same group until the post-test. After that, the researcher explained about narrative text; meaning, generic structure, language feature used, kinds of narrative text, and the main character of the story. In every exercise, the researcher gave the guideline questions based on the story to help the students made a story easier. The researcher asked the students to memorize the story that they have made. The researcher also asked the students to write unfamiliar words in their worksheet. Then, the researcher explained the meaning of storytelling, benefits of storytelling, and some good ways to re-tell a story. At the end of the lesson, the researcher asked the students to retell the story that they have made without script. The researcher used some teaching media to teach storytelling such as video, picture, and power point slide. In addition, the researcher used media to deliver the materials. The media was a printed story taken from the internet. The researcher worked together with the English teacher to teach storytelling except for the second meetings. Furthermore, the researcher worked together with the English teacher to correct the pronunciation error, comprehension, and also the fluency of the

students. The researcher gave the feedback for the students after the students finished retelling their story.

In the seventh meeting, the researcher distributed a post-test in the class. The purpose of doing a post-test was to find out the students' speaking skill after given a treatment in the teaching and learning process. The post-test was conducted on Wednesday, March 6<sup>th</sup>, 2019. The participants of the post-test were all of the VIII D students consisting of 30 students. The researcher also used fable text in doing the post-test

**Control group.** students of VIII C were selected as the control group of the research. The control group consisted of 32 students. The control group did a pre-test on 11<sup>th</sup> February 2019. The participants of the pre-test were the students of VIII C consisting of 32 students. In doing the pre-test, the students came in front of the class and told the story about "*The Owl and Nightingale*". Then, it was continued to teach speaking by using storytelling , and the last was doing the post-test. The researcher taught the lesson by himself without a help from the English teacher at that school. The teaching and learning proces were conducted 5 times, and the time allocation for each meeting was 2x40 minutes. In the teaching and learning process, the researcher taught by using story about legend and fable. The researcher only used text and video as the teaching media. The researcher divided the students into eight groups. The researcher distributed the reading material (legend and fable) to the students. Then, the researcher asked the students to answer some questions guidelines. After that, the students practiced to make a story . Furthermore, the students re-told the story in front of the class by using script. The researcher did not ask the students to memorize the story that they had made. The researcher taught the students about the meaning and benefits of storytelling without telling some good ways to retell a story. In addition, the researcher did not teach the students on how to use body language, eye-contact,

facial expression, intonation, and pacing. Then, the researcher distributed the post test. The post test was conducted on Sunday, March 4<sup>th</sup>, 2019. The participants of the post-test were 32 students of VIII D. The story of the post-test was “*The Ant and The Dove*” for male students and the story of “*The Wolf and The Stork*” for female students. Time allocation was 2 x 45 minutes. Below was the schedule of conducting the research:

Table 4		
<i>Teaching schedule of control group in VIII C</i>		
<b>Pre-Test</b> Sunday, February 11 <sup>th</sup> , 2019 12.20-14.00 WIB	<b>Objective</b> investigated the students’ English speaking skill before being given the treatment	<b>Official Statement</b> Students did pre-test and used the story of <i>The Owl            and Nightingale</i> ” Time allocation was 2 x 40 minutes
<b>First Meeting</b> Thursday 14 <sup>th</sup> , 2019 08.20-09.20 WIB	<ol style="list-style-type: none"> <li>1. Identified the purpose of Narrative text.</li> <li>2. Analyzed the generic structure and language features of Narrative text.</li> <li>3. Identified kinds of Narrative text.</li> <li>4. Analyzed the characters of the story of Narrative text.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students learned about generic structure, and language features of narrative text.</li> <li>2. The teacher divided the activity into three parts:               <ol style="list-style-type: none"> <li>a. Activity one: The students analyzed the generic structure of the text of Cinderella, Fox and A Cat, and The Legend of Prambanan Temple.</li> <li>b. Activity two: The students answered the questions provided</li> </ol> </li> </ol>

		<p>by the teacher about the story of Cinderella, Snow White, Fox and A Cat, and The Legend of Prambanan Temple.</p> <p>c. Activity three: The teacher provided some texts and the students identified what kinds of Narrative text were.</p>
<p><b>Second Meeting</b> Sunday, 18 February 2019 12.20-14.00 WIB</p>	<p>1. Found out the basic/main point of the story of Narrative text (Fable) 2. The students did the exercises.</p>	<p>1. The teacher gave the students text about The legend of Prambanan Temple and The Legend of Lake Toba. 2. The Teacher asked the students to answer the guideline question.</p>
<p><b>Third meeting</b> Thursday, 21<sup>st</sup> 2019 08.20-09.20 WIB</p>	<p>1. Found out the basic/main point of the story of Narrative text (Fable) 2. Did the exercises. 3. Practiced to make a story.</p>	<p>1. The teacher gave the students text about the story of The Ant and The Dove for male students and the story of The Wolf and The Stork for female students. 2. The teacher asked the students to find out the basic point of the story. 3. The Teacher asked the students to answer the questions guidelines.  4. The teacher asked the students to practice make a story based on the questions guidelines.</p>

<p><b>Fourth meetings</b>  Sunday, 25<sup>th</sup> February 2019  12.20-14.00 WIB</p>	<p>1. Made a story based on questions guidelines provided by the teacher.  2. Re-told a story that they had made in front of the class.</p>	<p>1. The teacher gave the students text about the story of The Ant and The Dove for male students and the story about The Wolf and The Stork for female students.  2. The students continued making a story and re-told it in front of the classroom by using script.</p>
<p><b>Fifth meetings</b>  Thursday, 28 February 2019  08.20-09.20 WIB</p>	<p>1. Watched the video related to the story of fable and legend.  2. Watched the video about storytelling.</p>	<p>1. The teacher showed the students a video of fable and legend.  2. The teacher only showed the video about storytelling without discussion section.</p>
<p><b>Sixth meetings</b>  <b>Post-Test</b>  Sunday, 04<sup>th</sup> March 2019  12.20-14.00 WIB</p>	<p>Investigated the students' English speaking skill after being given the treatment</p>	<p>Students did post-test and used the story of "<i>The Ant and The Dove</i>" for male students and the story of "<i>The Wolf and The Stork</i>" for female students. Time allocation was 2 x 45 minutes.</p>

**Post-test.** The researcher did a post-test after doing a treatment at the end of teaching and learning process. The post test was speaking test and the title was about "*The Ant and The Dove*" for male students and the story of "*The Wolf and The Stork*" for female students. Time allocation was 2 x 45 minutes. In this test, the students re-told a story based on their ownwords. Both of the class (experiment and control class) had a same title of the test.



## **Data Analysis**

In this research, the researcher used descriptive statistics and inferential statistics to analyze the data. In descriptive statistics, the researcher used mean score to answer the first and second research questions. In inferential statistics, the researcher used normality test, homogeneity, and paired sample t-test.

**Descriptive statistics.** To answer the first and second research questions, the researcher used descriptive statistics. Cohen et al (2011) argued that descriptive statistics is the description of the data such as frequencies, measure of dispersal, measure of tendency, standard deviation, crosstabulation and standardized scores. Then researcher analyzed the data from the result of pre-test and post-test from the speaking test in experimental and control group. It was presented the mode, mean, and minimum, maximum of the data.

**Normality.** In inferential statistics, the researcher did normality test. Cohen et al ( 2011 ) argued that normality test is used to determine whether or not sample data was normally distributed . Then, the researcher used Kolmogorov-Smirnov test to know whether or not the data was normally distributed. After that, the researcher looked at the significance value ( $\alpha$ ). If the significance was higher than significance level ( $\alpha > 0.05$ ), it means that the data distribution was normal.

**Homogeneity.** Homogeneity was used to describe properties of dataset. The researcher used One-Way ANOVA in SPSS to know whether or not the data was homogeneous. The researcher looked at the significance value ( $\alpha$ ). The data distribution was indicated homogeneous if the significance value was higher than significance level ( $\alpha > 0.05$ ).

**Inferential statistics.** To answer the third research questions, the researcher used inferential statistics. Inferential statistics was used to know the result of t-test and t-table through

computation of the correlation of the two mean scores. Furthermore, the researcher had to find the mean scores in which the researcher calculated the gain scores of two groups to measure the significance difference between two groups. There were two ways in checking the hypothesis. The first was comparing the t-value and t-table. It was indicated significant if the t-value was higher than t-table. The second was the researcher analyzed the number of significance. The significance value should be lower than 0.05. Then, the researcher used T-test by using independent samples test to know whether the null hypothesis ( $H_0$ ) in this research was rejected or accepted.