CHAPTER III
METHODOLOGY

This chapter presents the methodology in conducting the research which answers the two research questions previously stated in the first chapter. This chapter provides four main parts of the investigation: research method, data collection technique, research procedures, and data analysis technique and findings on pilot test.

3.1 Research Method

3.1.1 Research Design

A quantitative method in the form of quasi experimental design was employed in the study. There were two groups which were involved, the first group was the experimental group (EG) in which the suggestopedia method was applied. The second one was the control group (CG) which was treated by using conventional method. The experimental design in this study is described schematically as following:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Pre-Test</th>
<th>Treatment</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>X1e</td>
<td>T</td>
<td>X2e</td>
</tr>
<tr>
<td>Control Group</td>
<td>X1c</td>
<td>0</td>
<td>X2c</td>
</tr>
</tbody>
</table>

Notes:

X1e : students’ reading achievement of experimental group in pre-test
X1c : student’s reading achievement of control group in pre-test
X2e : student’s reading achievement of experimental group in post-test
X2c : student’s reading achievement of control group in post-test

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T : Treatment using suggestopedia method in learning process

From the table above, it can be seen that the experimental and control group got the pre-test in the beginning. It was conducted to know the initial ability of each group especially in their reading comprehension skill. Afterwards, the experimental group was given the treatment by using suggestopedia method during the teaching and learning process for four times. While, the control group used the conventional method during the teaching and learning process. After the treatment both groups were given the post test. It was conducted to know whether or not the students who were treated by using suggetopedia method had the higher score than those who were taught by using conventional method.

A variable can be defined as an attribute of a person or of an object which varies from person to person or from object to object. In research, variables can be classified as dependent and independent variables. The independent variable is the variable which is selected, manipulated, and measured by the researcher, while the dependent variable is the variable whereby the researcher observes to determine the effect of the independent variable (Hatch and Farhady, 1982). Thus, the independent variable was the use of suggestopedia method in teaching reading comprehension. In addition, the dependent variable in this research was the student’s comprehension in reading narrative text.

According to Hatch and Farhady (1982), Hypothesis is defined as a formal affirmative statement predicting a single research outcome, a tentative explanation of the relationship between two or more variables. It also limits the focus of the investigation to a definite target and determines what observations are to be made. Thus, the research was conducted to examine the hypothesis which is stated as follows:

- \( H_0 \) = There is no difference between students’ post-test scores in the experimental group and students’ post-test scores in the control group.
- \( H_A \) = There is a significance difference between students’ post-test scores in the experimental group and students’ post-test scores in the control group.
From the hypothesis above, if the null hypothesis is rejected it means that there is a difference between students in the experimental group and control group. In other words, the alternative hypothesis is accepted. Whereas, If the null hypothesis is accepted it means that there is no significant difference between both groups. It can be said that the suggestopedia method did not work well and it is not effective to be used in teaching reading comprehension on narrative text.

3.2 Data Collection

3.2.1 Population and Sample

According to (Arikunto, 2010:173), population is the whole subjects of the research. Population in this research was the second grade of junior high school students in SMP Negeri 1 Ciwidey. There were 11 classes which consist of 40 students in each class. Thus, the total of the population was about 440 students.

The sample of this study was only two classes of second grade students in SMPN 1 Ciwidey. The first class is 8.I as the experimental group and the second one is 8.G as the control group. Each class consisted of 40 students. Thus, the total of the sample was 80 students.

3.2.2 Research Instruments

Arikunto (2010:36) stated that all media used by the researcher to collect the data was the research instrument. The data were collected to answer the research question of the study. In this study, the researcher used two kinds of instruments, they are test and questionnaire. There were two types of test, pre test and post-test which were conducted to generate the score in examining the effectiveness of using suggestopedia method in teaching reading comprehension. The pre-test was conducted to both groups, experimental and control group in order to know the initial ability of the students’ comprehension in narrative text before the treatment given. On the contrary, the post test was given after the treatment in order to know whether or not there is a change on student's
comprehension ability in the narrative text. After the post-test, the students in the experimental group were given the questionnaire in order to know the response toward the use of suggestopedia during their learning process.

3.3 Research Procedure

3.3.1 Organizing Teaching Procedure
In this study, the researcher performed as teacher in both experimental and control group. As the preparation of the learning process, the researcher prepared two things such as, the materials and media for teaching and learning process, and the lesson plan for both experimental and control group.

3.3.2 Administering Pilot Test
The researcher conducted the pilot test in order to know the validity and reliability of the test. It was important to be conducted in order to know the quality of the test whether the test is appropriate or not to be used and as the reflection in making some revisions of the test items.

3.3.3 Administering Pre-Test and Post-Test
Pre-test was conducted to both experimental and control group. It was conducted to know the initial ability of the students especially in their comprehension skills of narrative text. The score between two groups was expected relatively similar to each other so that it could be assumed that the improvement of their score was the treatment. Post-test was conducted to know the improvement of the student’s score, it can be said that there was the change between the score in pre-test and post-test. Besides, it was to know that whether or not there was a significant difference between experimental and control group.

3.3.4 Conducting the treatment
The treatments were conducted after the pre-test was administered. It was given only to the experimental group in which during the teaching and learning
process the method used was the suggestopedia. It does not mean that the control group did not get any treatments, but during the teaching and learning process the control group was treated by conventional method. The treatments were conducted in four meetings.

Table 3.2

<table>
<thead>
<tr>
<th>Day/ Date</th>
<th>Activity</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues/ 20-Aug-13</td>
<td><em>Conducting instrument test to 40 students</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fri/ 23-Aug-13</td>
<td>Pre test</td>
<td></td>
<td>Pre test</td>
</tr>
<tr>
<td>Mon/ 26-Aug-13</td>
<td>Introduction of Suggestopedia, Teaching method, Class preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tues/ 27-Aug-13</td>
<td>Treatment 1: Presentation, Active Concert, Passive Concert, Practice (games and story telling)</td>
<td>(Babu and the Lion)</td>
<td>Modeling of reading text, asking and answering, playing games, reading exercise (Babu and the Lion)</td>
</tr>
<tr>
<td>Wed/ 28-Aug-13</td>
<td>Treatment 2: Presentation, Active Concert, Passive Concert, Practice (games and role playing)</td>
<td>(Jack and the Beanstalk)</td>
<td>Modeling of reading text, asking and answering, playing games, reading exercise (Jack and the Beanstalk)</td>
</tr>
<tr>
<td>Thur/ 29-Aug-13</td>
<td>Treatment 3: Presentation, Active Concert, Passive Concert, Practice</td>
<td></td>
<td>Modeling of reading text, asking and answering, playing games and role, reading</td>
</tr>
<tr>
<td>Fri/30-Aug-13</td>
<td>Treatment 4: Presentation, Active Concert, Passive Concert, Practice (games) (Goldilocks and the Three Bears)</td>
<td>Modeling of reading text, asking and answering, playing games, reading exercise (Goldilocks and the Three Bears)</td>
<td></td>
</tr>
<tr>
<td>Mon/2-Sep-13</td>
<td>Post test, Celebration (Award-giving), Reflection and Evaluation, Questionnaire (The Smarest Parrot)</td>
<td>Post test, Celebration (Award-giving), Reflection and Evaluation (The Smarest Parrot)</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3.5 Distributing Questionnaire

Questionnaire was distributed only to the experimental group. It was given at the end of the treatment. It aimed to know the student’s responses toward the use of suggestopedia in the classroom. The questions on the questionnaire related to the strengths and weaknesses of the suggestopedia method, student’s opinion and suggestion.

### 3.4. Data Analysis on Pilot Test

The pre-test and post-test were examined to find out whether or not the items were reliable and valid. In order to know the reliability and validity of the test, the test item was pilot-tested to 40 students in the same school with the subjects in this study. Firstly, the 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. In addition, it was to examine the face validity of the test. Then, the students were asked to do the test. There were two sessions with different questions in each test. After that, the students’ work in the test were examined. It was proceeded to measure the validity and reliability of the test.
3.4.1 Validity and Reliability Test

Arikunto (2010:211) stated that validity is a measurement to show whether or not the test is valid. Pearson Product Moment Correlation in SPSS 16 for windows was used in order to check the kind of validity of the instruments and to know the validity of each items.

In addition, reliability of the instrument can be measured if the instrument is trusted to obtain some data (Arikunto, 2010:221). A good instrument must be trusted and it will give the trusted data as well. Therefore, it was important to know whether the instrument was reliable or not before it was used.

3.5 Findings from the Pilot Test

Pilot test were administered to 40 students of 8 graders. They came from different classes of the same school. The test were conducted in two sessions with different questions on each session. Each test consisted of fourty multiple-choice items. Some considerations were taken in testing the research instrument, such as:

1. Validity

In order to check the validity of instrument, Pearson Product Moment was used. The items were classified into three parts, low, moderate and high item. The result of validity of instrument can be seen in Apendix C. In addition, it was found that the test item used in both two sessions possessed face validity as well as content validity. The face validity was maintained as all of the fourty students in the pilot test perceived that the test item contained understandable and clear enough instruction. None of the students were confused with the instruction. The content validity was maintained as the majority of the students in the pilot test had performed the particular language skills and areas expected in the test which was reading skill.

2. Reliability

Cronbach’s Alpa in SPSS 16 for windows was used in order to check the reliability of the instrument. Based on the computation result, the score of reliability in the first session is 0.400. It can be interpreted as moderate degree
because the Cronbach’s Alpha is greater than 0.3. Furthermore, the score of reliability test in second session is 0.848. It means that the instrument has a high degree of reliability because the value of Cronbach’s Alpa is > 0.6.

Based on the result of validity test, there were 11 unvalid items in each session. Those items were removed and revised. As a result, there were only 30 items used in the pre-test and post-test. In addition, since the result of reliability test showed that the test had a moderate and high degree of reliability, it can be said that the test was reliable and able to be used.