

CHAPTER IV

RESULT OF RESEARCH AND DISCUSSIONS

A. Description of Research Finding

The Implementation of Learning

This study used experimental design of the use of English song as medium on students' grammar achievement in MAN 2 Pekalongan on 29 October 2010 until 12 November 2010.

The implementation of this study was divided into two classes, namely the experiment class (XI.A2) and the control class (XI.A4). Before the activities were conducted, the materials and lesson plan were determined to the process of learning. Learning in the experiment class was conducted by using English song as a medium in teaching simple past, while the control class using the conventional method (without using English song technique).

The test of this research is taken from English grammar book, it took from Understanding and using English Grammar by Betty Schramper Azar, and then this research there was not try out test, so the validity and reliability of the questions are obligated from the book writer

In this research, there were two tests namely pretest and posttest. The pretest was given before the students follow the learning process that was provided by the researcher. The questions consist of grammar; due to the material is simple past.

After the learning process, posttest was given to experiment and control classes to obtain the data that will be analyzed.

B. Hypothetical Test

Hypothetical analysis is intended to process the data collected from pretest and posttest. The goal of this analysis is to prove the hypothesis whether it is received or rejected.

Table 4.1 The Score of Pretest and Posttest of The experiment and Control
Classes

	Student simple past achievement			
	Pretest		posttest	
	x_1	x_1^2	x_3	x_3^2
experiment class	70	4900	90	8100
	50	2500	70	4900
	70	4900	90	8100
	60	3600	80	6400
	60	3600	90	8100
	50	2500	60	3600
	60	3600	90	8100
	70	4900	90	8100
	60	3600	90	8100
	60	3600	90	8100
	60	3600	80	6400
	50	2500	80	6400
	60	3600	90	8100
	60	3600	90	8100
	60	3600	100	10000
	60	3600	80	6400
	20	400	80	6400
	60	3600	90	8100
	60	3600	90	8100
	70	4900	100	10000
	70	4900	80	6400
	50	2500	90	8100
	60	3600	70	4900
	70	4900	100	10000
	60	3600	100	10000
	60	3600	90	8100
	60	3600	100	10000
	60	3600	100	10000
	50	2500	80	6400
	40	1600	50	2500
	60	3600	100	10000
	60	3600	80	6400
	40	1600	60	3600
	50	2500	90	8100

	60	3600	80	6400
	50	2500	100	10000
Σ	2070	122500	3090	246000
	x_2	x_2^2	x_4	x_4^2
control class	60	3600	80	6400
	40	1600	70	4900
	60	3600	80	6400
	50	2500	70	4900
	50	2500	70	4900
	60	3600	90	8100
	60	3600	70	4900
	50	2500	60	3600
	40	1600	70	4900
	50	2500	60	3600
	50	2500	100	10000
	40	1600	80	6400
	50	2500	100	10000
	60	3600	70	4900
	60	3600	50	2500
	60	3600	80	6400
	70	4900	70	4900
	60	3600	80	6400
	50	2500	70	4900
	40	1600	90	8100
	50	2500	90	8100
	60	3600	80	6400
	60	3600	80	6400
	70	4900	80	6400
	60	3600	90	8100
	70	4900	70	4900
	50	2500	90	8100
	60	3600	90	8100
	70	4900	80	6400
	60	3600	100	10000
	60	3600	70	4900
	60	3600	90	8100
	60	3600	70	4900
Σ	1850	106100	2590	207900

Rows	Columns		Σ_c
	x_1	x_3	
Experiment class	$\bar{x} = 57.5$ $\sum x = 2070$	$\bar{x} = 85.83$ $\sum x = 3090$	$\bar{x} = 71.67$ $\sum x = 5160$
	x_2	x_4	
Control class	$\bar{x} = 56.06$ $\sum x = 1850$	$\bar{x} = 78.48$ $\sum x = 2590$	$\bar{x} = 67.27$ $\sum x = 4440$
Σ_B	$\bar{x} = 56.78$ $\sum x = 3920$	$\bar{x} = 82.16$ $\sum x = 5680$	$\sum x_{tot} = 9600$ $\sum \bar{x} = 138.94$ $\sum x^2_{tot} = 39173.91$

Notice:

Rows : the differences between the mean of pretest (57.5) and posttest (85.83) experiment class with the mean of pretest (56.06) and posttest (78.48) control class.

Columns : the differences between the mean of pretest (57.5) experiment and pretest (56.06) control classes with the mean of posttest (85.83) experiment and posttest (78.48) control classes.

The steps adopted in analyzing the hypothetical test are:

1. Total number of square

$$\begin{aligned}
 \sum x^2_{tot} &= \sum X^2 - \frac{(\sum X)^2}{N} \\
 &= [707000] - \frac{(9600)^2}{138} \\
 &= 707000 - 667826.09 \\
 &= 39173.91
 \end{aligned}$$

2. Square number between groups

$$\sum x^2_{AK} = \frac{(\sum X_1)^2}{n} + \frac{(\sum X_2)^2}{n_2} + \frac{(\sum X_3)^2}{n_3} + \frac{(\sum X_4)^2}{n_4} - \frac{(\sum X)^2}{N}$$

$$\begin{aligned}
&= \frac{(2070)^2}{36} + \frac{(1850)^2}{33} + \frac{(3090)^2}{36} + \frac{(2590)^2}{33} - \frac{(9600)^2}{138} \\
&= 119025 + 103712.12 + 265225 + 203275.75 - 667826.09 \\
&= 23411.79
\end{aligned}$$

3. Square number inside group

$$\begin{aligned}
\sum x^2_{jdk} &= \sum x^2_{tot} - \sum x^2_{jak} \\
&= 39173.91 - 23411.79 \\
&= 15762.12
\end{aligned}$$

4. Square number between columns

$$\begin{aligned}
\sum x^2_{jkk} &= \left\{ \frac{(\sum X_{x1+x2})^2}{n_1 + n_2} + \frac{(\sum X_{x3+x4})^2}{n_3 + n_4} \right\} - \frac{(\sum X)^2}{N} \\
&= \frac{(3920)^2}{69} + \frac{(5680)^2}{69} - \frac{(9600)^2}{138} \\
&= 222701.45 + 467571.01 - 667826.09 \\
&= 22446.35
\end{aligned}$$

5. Square number between rows

$$\begin{aligned}
\sum x^2_{jkb} &= \left\{ \frac{(\sum X_{x1+x3})^2}{n_1 + n_3} + \frac{(\sum X_{x2+x4})^2}{n_2 + n_4} \right\} - \frac{(\sum X)^2}{N} \\
&= \frac{(5160)^2}{72} + \frac{(4440)^2}{66} - \frac{(9600)^2}{138} \\
&= 369800 + 298690.91 - 667826.09 \\
&= 664.82
\end{aligned}$$

6. Square number of interaction between columns and rows

$$\begin{aligned}
\sum x^2_{jki} &= \sum x^2_{jak} - (\sum x^2_{jkk} + \sum x^2_{jkb}) \\
&= 23411.79 - (22446.35 + 664.82) \\
&= 300.62
\end{aligned}$$

$$df_A = 2 - 1 = 1$$

$$df_B = 2 - 1 = 1$$

$$df_{AB} = (2 - 1)(2 - 1) = 1$$

$$df_D = 4 - 1 = 3$$

$$df_T = 4(34.5 - 1) = 134$$

Table 4.2. Two ways ANOVAs

Source of Variants	Number of square	Degree of Freedom	Mean of square	F_{count}	F_{table}
Between Columns	22446.35	1	22446.35	190.82	2.68
Between Rows	664.82	1	664.82	5.65	
Between Group interaction	300.62	1	300.62	2.56	
Between Group	23411.79	3	7803.93		
Inside group	15762.13	134	117.63		
Total	62585.71	140			

$$F_{count} =$$

$$\frac{22446.35}{117.63} = 190.82$$

$$\frac{664.82}{117.63} = 5.65$$

$$\frac{300.68}{117.63} = 2.56$$

	x_1	x_3	Σ	\bar{x}
	57.50	85.83	143.33	71.67
	x_2	x_4		
	56.06	78.48	134.54	67.27
Σ	113.56	164.31		
\bar{x}	56.78	82.16		

With $\alpha = 5\%$ and from the F distribution table, it can be concluded:

1. $F_{count}(190.82) > F_{table}(2.68)$, so it is significant
2. $F_{count}(5.65) > F_{table}(2.68)$, so it is significant
3. $F_{count}(2.56) < F_{table}(2.68)$, so it is not significant

C. Analyze of observational data

The observation refers to the activity of giving total concern to research object by the sense. In this research, from the teacher's question the researcher observed of students' understanding on English simple past. The result was taken from the students' behavior. Every class was observed. From the first statement of observation in the experimental class about students' answer teacher's question on regular verb, irregular verb, verbal form and nominal form of simple past tense correctly was 60%-80%. It means that student understood about the material. Even in the control class is lower understanding, it was for about 50%. For the second statement, students' answer the teacher's questions on regular verb, irregular verb, verbal form and nominal form of simple past tense incorrectly of experimental class 20%-40% was fewer than control group 50%, it was concluded that control class did not understood as well as experimental class. The third statement about asking clarification to teacher's instruction on simple past to ensure students' understanding was similar percentage, it few for about 20%.

The student's question was observed too, for giving answer to other student's question correctly. The result was similar of 50%. Giving answer to other student's question incorrectly of control class 20%-40% was bigger than experimental class 15%. Giving explanation on simple past correctly to other student of control class 15% was lower than experimental class 50%. Even giving explanation on simple past tense incorrectly to other student of experimental class and control class was same. It means that understanding of experimental class was higher than control class because the experimental

class was taught by using English song as medium to teach simple past, but whether control class taught by conventional technique. In the experimental class was taught by English songs medium, different with control class that taught by using conventional method. Students' achievement of experimental class' higher than students' achievement of control class, it caused using English songs was more effective than old method, the student were very happy, active, interested, not bored, the condition of class was dynamic, confident to ask and answer the teacher's questions, active to share and giving explanation to other student in the class when they taught by using English songs. This observation showed that understanding simple past in the experimental class was better than in control class. Using English songs were more effective than using not by English songs.

D. Discussion of the Research Findings

The test of this research was taken from English grammar book, it took from Understanding and using English Grammar by Betty Schramper Azar, then this research there was not try out test, so the validity and reliability of the questions pretest and posttest are obligated from the book writer.

The tests that consist of pretest and posttest were given to the experiment and control classes. The pretest was given before treatment. The treatments were given three times to experimental class and control class which taught by different teacher, the experimental class was taught by the researcher and the control class taught by English teacher of MAN 2 Pekalongan named Mr. Makmur. The first treatment in the experimental class the teacher explained the simple past regular and verbal form and gave English song about simple past that created by the researcher. The second treatment was same as first treatment, but the material was different. The teacher explained simple past in irregular and nominal form. The student listened to the song which the lyric contained simple past. The last treatment was review the first and second treatment. After treatment the posttest was given to the students. After the data was collected, it was analyzed statistically by using two ways ANOVAs

formula. Based on the table of two ways ANOVAs, the result showed that there was significant between columns, between rows, but between group interactions was not significant.

Related to the result from analyze of data, the mean of pretest and posttest of the experimental class (71.67) was higher than the mean of pretest and posttest of control class (67.27). It means that giving treatment three times made the students got more understanding about simple past than in control class. The mean of posttest of experimental class (82.16) was bigger than the mean of posttest control class (56.78). It was concluded that experimental class achievement was better than control class achievement, it caused of in teaching learning, English songs medium was effective way to teach simple past. The highest mean of all result was of experimental class (85.83). It showed that students' achievement of simple past increased because the treatment by using English song gave more understanding to the students, giving more motivations for them, and interesting way for them. In order the student were no bored in the class and active to ask about simple past to the teacher and be able to give explanation to another student in the class.

Related to the result of between columns, it showed that F_{count} (190.84) higher than F_{table} (2.68). It could be seen from the result of pretest and posttest of experiment and control classes. The mean pretest of experiment class higher (57.50) than the mean of control class (56.06). The mean of posttest of experiment class higher (85.83) than the mean of control class (78.48). So, the correlations between columns were significant.

Related to the result of between rows, it showed that F_{count} (5.65) higher than F_{table} (2.68). Based on the result of pretest and posttest, it could be seen that the mean of pretest of experiment class (57.50) lower than the mean of posttest of experiment class (85.83) after the teacher gave the treatment by using song medium to the students. The mean of pretest of control class (56.06) lower than the mean posttest of control class (78.48) after the teacher taught the students by using conventional technique.

Although both of between columns and between rows were significant, but the result of between group interactions was not significant, it was caused that $F_{count}(2.56) < F_{table}(2.68)$. So, it could be concluded that English song medium could improve the students' grammar simple past achievement of experiment class but it less effective technique to teach simple past at senior high school students with many reasons. First, the English teacher at MAN 2 Pekalongan follows the group of teachers' training every year by the Educational Institution which is purposed to improve the teachers' ability in teaching the students at Senior high School. So, the English teachers at MAN 2 Pekalongan especially have more experiences about the method, materials than the researcher has. Second, Based on the regulation of Tarbiyah Faculty, the research must be done 15 days so the treatment only was given three times.

The technique of teaching is one of the factors that influence the result of the study. In the process of teaching, the teachers have to choose appropriate technique, so the students will enjoy the lesson. Based on the result of tests, the process of learning English using English song as a grammar of simple past teaching technique in MAN 2 Pekalongan could help the students to understand about simple past easily, so they could improve their grammar achievement. Besides, the students who had been taught using English song technique felt more fun and they were not bored in the classroom during the process of teaching learning.

In the process of learning, the students in the experiment class were enjoyed and fun because they learned English by song. At the beginning of the class, the teacher explained about the simple past and gave the song that appropriate with the material of simple past. The students listened to the teacher and repeated to sing the song after the teacher sang. In the end of learning, the teacher gave the assignments to the students, and then the teacher and the students corrected the answer together. In addition, the teacher also repeated and reflected the materials that had been learned.

Meanwhile, teaching learning process in the control class was implemented through conventional technique. In the process of teaching

learning, the teacher explained about the simple past with old technique. In the end of learning, the teacher gave some assignments then collected it. So, the students felt bored with the material that is presented by the teacher.

E. Limitation of the Research

The researcher realizes that this research had not been done optimally. There were obstacles faced during the research process.

Some limitations of this research are:

1. The researcher's ability

The researcher realizes that the implementation of the research process was less smooth; this was more due to lack of the researcher's experience and knowledge.

2. Limitation of time

Based on the regulation of Tarbiyah Faculty, the research must be done 15 days. So, the relative short time made this research could not be done maximally.

3. Limitation of application

In this research, the researcher only gave three times treatment to the experiment class, so the result of the research was not maximal.

4. Limitation of the design

In this research, the researcher used short design. So the research can not be done maximally.

Considering all those limitations, there is a need to do more research about teaching simple past by using English song technique so that the more optimal result will be gained.