CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

This chapter is aimed to find out whether any difference between the effect of engage study activate method on students listening skill at eleventh grade of SMA PAB 2 Helvetia. This chapter presents the result of research findings which is intended to answer the problem of the study and research discussion. This chapter is divided four subheadings: data,the fulfillment of statistical assumptions,hypotheses testing,research findings, and discussion Besides, this chapter analyzes statistically the data gained from the result of pre-test and post-test of both experimental and control group. For this case, the t-test was applied.

4.1. Data

This listening problem is used to improve students' listening skills in the learning process. This study was conducted to determine whether there is a difference between students who are taught using active learning methods and those who are taught without using methods. This study used a quasi-experimental design consisting of two subjects, namely the experimental group and the control group. One class, XI mia 1, consists of 30 students, namely the experimental sample class. And class XI mia 2 consists of 33 students, this class as a control sample.

This research was conducted to find out use this method in teaching and learning English, how this method improves students' listening skills and whether students taught through the engage study activate

method have better listening and speaking skills than those who are not taught through the method. Data were collected from pretest and posttest scores. Pretest was carried out first in the experimental and control groups. The results of the pretest provide information about the ability of the two groups to listen to the lesson. The posttest was then given to both groups after the experimental group received treatment and the control group was taught through conventional teaching.

4.1.1. Score of Pre-Test and Post-Test Students in Experimental Class

In collecting data on students' listening skills in the experimental group using the engage study activate method, the writer gave a paper test, to test students' abilities. The test is divided into pre test and post test. The purpose of this study was to determine the mastery of stories in English for the students of SMA PAB 2 Helvetia Medan taught by using Engage Study Activate method or not. The results of the study on the ability to listen to stories in English in the group and control can be seen in the following table.

Table 4.1.
Score of the Experimental Class

No	Name	Pre-Test	Post-Test	Gained Score
1	AS	40	70	30
2	AW	20	40	20
3	AR	30	30	0
4	CD	60	90	30
5	DNS	40	60	20
6	DA	50	70	20
7	DS	60	70	10
8	DA	50	70	20
9	ES	20	50	30
10	HZL	70	80	10

11	KF	40	50	10
12	MRP	80	100	20
13	MQ	90	100	10
14	MRP	60	90	30
15	MAP	30	90	60
16	MNP	30	60	30
17	MS	80	90	10
18	NS	50	50	0
19	NA	40	50	10
20	NH	70	80	10
21	PR	70	80	10
22	RS	20	30	10
23	SF	50	60	10
24	SNH	90	100	10
25	SSG	70	90	20
26	WA	60	80	20
27	YDA	80	100	20
28	RRK	50	60	10
29	IPM	50	60	10
30	VI	50	70	20
Total		**1600**	**2120**	**520**
Mean		**53,33**	**70,67**	**17,33**

Table 4.2.
Score of the Control Class

No	Nama	Pre-Test	Post-Test	Gained Score
1	AAP	50	60	10
2	AUS	40	50	10
3	AP	50	50	0
4	AP	30	40	10
5	AZ	50	60	10
6	BDF	70	70	0
7	DRA	70	80	10
8	DSA	50	60	10
9	FMH	20	30	10
10	FY	60	70	10
11	EDS	60	70	10
12	FS	70	70	0
13	HKS	70	80	10
14	I	20	30	10
15	JM	40	50	10

16	MFR	50	50	0
17	NF	80	80	0
18	MZT	50	60	10
19	MZ	50	60	10
20	MS	40	50	10
21	MO	80	90	10
22	MAP	80	80	0
23	MAF	40	50	10
24	NZ	30	40	10
25	NA	30	40	10
26	NS	70	80	10
27	N	50	60	10
28	NZ	40	50	10
29	RP	60	60	0
30	RN	60	70	10
31	SA	60	70	10
32	S	80	90	10
33	YA	50	60	10
Total		**1750**	**2010**	**260**
Mean		**53,03**	**60,91**	**7,88**

4.2. Fulfillment of Statistical Assumptions

Before conducting the research, the writer tested the validity and reliability. The writer tested validity and reliability by using *spss 25* (Statistical Package for the Social Science).

The validity of the test was measured from t-table of Correlation Pearson Product Moment that to find out the significant level. There were 10 questions that was tested which consist of ten items that to measured students' vocabulary ability and to tested the validity of the data pre-test and post-test.

4.2.1. Validity Test

Table 4.3.
Validity Pre-Test

No Item	R. Count	R Table (N-2)	Interpretation
1	0,411	0,3610	Valid
2	0,414	0,3610	Valid
3	0,371	0,3610	Valid
4	0,366	0,3610	Valid
5	0,406	0,3610	Valid
6	0,428	0,3610	Valid
7	0,428	0,3610	Valid
8	0,464	0,3610	Valid
9	0,405	0,3610	Valid
10	0,436	0,3610	Valid

Table 4.4.
Validity Post-Test

No Item	R. Count	R Table (N-2)	Interpretation
1	0,365	0,3610	Valid
2	0,466	0,3610	Valid
3	0,448	0,3610	Valid
4	0,431	0,3610	Valid
5	0,389	0,3610	Valid
6	0,389	0,3610	Valid

7	0,432	0,3610	Valid
8	0,643	0,3610	Valid
9	0.513	0,3610	Valid
10	0.431	0,3610	Valid

The results of data analysis of each test score can be obtained with the total score. The value was compared with the r-table value in the 5% significant table with a 2-sided n = test and the r table can be seen as 0.3610. Based on the table above, there are 30 students who have been tested using 10 questions. And from the 10 questions, there ware 10 questions ≥ r-table (0.3610), and in the post-test table there are 10 questions that are valid ≥ r-table (0.3610). T-table shows that the level of significance to the validity of the study is t-count ≥ r-table (0.3610). It can be concluded that the instruments used in this study are valid pre-test and post-test.

4.2.2. Reliability Test

In this study, the writer used SPSS 25 to find the reliability of test instruments. It can be seen in the following table:

Table 4.5.
The Result of Reliability of Pre-Test

Reliability Statistics

Cronbach's Alpha	**Part 1**	**Value**	,107
		N of Items	5[a]
	Part 2	**Value**	,257
		N of Items	5[b]

	Total N of Items	10
Correlation Between Forms		,454
Spearman-Brown Coefficient	**Equal Length**	,625
	Unequal Length	,625
Guttman Split-Half Coefficient		,624

a. The items are: Pertanyaan 1, Pertanyaan 2, Pertanyaan 3, Pertanyaan 4, Pertanyaan 5.

b. The items are: Pertanyaan 6, Pertanyaan 7, Pertanyaan 8, Pertanyaan 9, Pertanyaan 10.

Table 4.6.
The Result of Reliability of Post-Test

Reliability Statistics

Cronbach's Alpha	**Part 1**	**Value**	,114
		N of Items	5[a]
	Part 2	**Value**	,355
		N of Items	5[b]
	Total N of Items		10
Correlation Between Forms			,631
Spearman-Brown Coefficient	**Equal Length**		,774
	Unequal Length		,774
Guttman Split-Half Coefficient			,771

a. The items are: Pertanyaan 1, Pertanyaan 2, Pertanyaan 3, Pertanyaan 4, Pertanyaan 5.

b. The items are: Pertanyaan 6, Pertanyaan 7, Pertanyaan 8, Pertanyaan 9, Pertanyaan 10.

From the results of the analysis, there was significant results in the pre-test and post-test where the Guttman Split-Half reliability must be more than 0.60. Based on the table above, the results of the pre-test and post-test reliability tests show .624 in table 4.5 and .771 in table 4.6. it means that the data from each pre-test and post-test are reliable.

4.2.3. Normality of Data

Table 4.7.
The Result of Normality Pre-Test and Post-Test
Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	**Df**	**Sig.**	**Statistic**	**Df**	**Sig.**
Experiment	.132	30	.192	.956	30	.249
	.127	30	.200	.945	30	.125
Control	.146	33	.071	.947	33	.111
	.129	33	.179	.957	33	.208

Based on the data above, it can be seen that the data from the pre-test results from the experiment and control are normal. The author uses data from Kolmogorov-Smirnov and Shapiro-Wilk to determine normality. And the result was higher α (alpha): 0.05 then the data is normally distributed. Based on the table above shows that the pre-test significant value of Colmogorov-Smirnov for the experimental class is .192 ≥ 0.05. From Saphiro Wilk .249 ≥ 0.05 and for the control class .071 ≥ 0.05 and from Saphiro Wilk .111 ≥ 0.05. It can be concluded that the data from Kolmogorov-Smirnov and Shapiro-Wilk, pre-test experimental and control classes were normally distributed. Above, it can be seen that the pre-test data from the experimental and control classes were normal. The author uses data from Kolmogorov-Smirnov and Shapiro-Wilk to determine normality. And the result was higher α (alpha): 0.05 then the data is normally distributed. Based on the table above shows that the pre-test significant value of Colmogorov-

Smirnov for the experimental class is . 200 ≥ 0.05. From Saphiro Wilk .125 ≥ 0.05 and for the control class .179 ≥ 0.05 and from Saphiro Wilk .208 ≥ 0.05. It can be concluded that the data from Kolmogorov-Smirnov and Shapiro-Wilk, the pre-test of the experimental and control classes were normally distributed.

4.2.4. Homogeneity Data

Table 4.8.
Homogeneity Test

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Post_Test	**Based on Mean**	2,494	1	61	,119
	Based on Median	2,510	1	61	,118
	Based on Median and with adjusted df	2,510	1	59,195	,118
	Based on trimmed mean	2,605	1	61	,112

Based on the data above, significance was obtained from two classes of pre-test and post-test. The significance is .112 ≥ 0.005. Therefore, the data becomes homogeneous. From the results of the analysis above, the value obtained from the pre-test contributes to normality. And in the homogeneity test the value was homogeneous.

4.3. Hypotheses Data

Table 4.9.
T-Test
Independent Sample T-Test

Independent Samples T-Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
The result of the test	Equal variances assumed	2.494	.119	-2.122	61	.038	-.976	.460	-1.895	-.056
	Equal variances not assumed			-2.097	54.563	.041	-.976	.465	-1.908	-.043

Based on the data above, it was obtained the sig. (2-tailed) was 0,000 < 0,05. So that, it can be concluded that there was a significant differences between students score were taught by using Engage Study Activate Method and students were taught by using conventional method. To see how much difference in student learning outcomes based on the mean score. Look at the following table:

Table 4.10.
Group Statistic

Group Statistics					
	Kelas	N	Mean	Std. Deviation	Std. Error Mean
Hasil Belajar Siswa	Post-Test Kelas Experiment	30	7.07	2.050	.374
	Post-Test Kelas Control	33	6.09	1.588	.276

After looking on the table of group statistic above, it has been obtained the value mean of exsperimental class from post-test was 7.07 > 6.09 in post-test control class. It denotes that T-test is higher than T-table.

Hence: The null hypotheses (Ho) is rejected

The alternative hypotheses (Ha) is accepted

It means that there is a significant difference between students' ability to listen to English story telling in the experimental group using the engage study activate method and students' ability in English using the engage study activate method in the control group using the conventional method.

4.4. Research Finding

In this research, there are two classes that the researcher used as the samples of the research in this research. There are two classes, namely XI MIA 1 which is an experimental class which was taught using the engage study activate method. The control class in this study is XI MIA 2 which was taught by conventional methods. In this study, the writers found many differences in results

between the pre-test and post-test scores for the experimental and control classes which included gainscore test, validity, reliability, normality, homogeneity, and independent sample t-test. The average gainscore result of the experimental class students was higher than the average gainscore of the control class. (17.33 > 7.88). This shows that there was a significant difference between the two classes. From the results of the average value obtained the average value of the experimental class from the post-test is (17.33 > 7.88) in the control class post-test. This means that there was a significant difference between the ability to listen to story telling in English students in the experimental group by using the engage study activate method and the ability to listen to story telling in English students in the control group using the conventional method.

4.5. Discussion

In the teaching and learning process, teaching methods can affect learning outcomes. Actually there are many strategies that can be applied in the classroom. Teachers must be able to choose the right strategy that can make students understand the material. The strategy that can be used is the engage study activate method. The engage study activate m ESA method is like a computer system where everything is interconnected. The Engaged stage is carried out to provoke students to think and speak in English, as well as the first step towards learning. During the Engage phase, the teacher tries to arouse students' interest and engage their emotions. This can be done through games, the use of pictures, sound recordings, videos, stories, or funny anecdotes. The aim is to arouse students'

interest, curiosity, and attention. At the Study stage, usually most of the lessons focus on the core of the lesson. At the Activate stage, exercises and activities are carried out that aim to provoke students to use communicative language according to their respective abilities. By doing this strategy in the classroom, students will find it easy to convey their ideas or some information in their environment. The statistical data shows that the sample group data of students' ability in English vocabulary in the experimental group using the engage study activate method shows that the average value is 17.33. And the data of the sample group of students' ability to listen to story telling in English in the control group with the conventional method showed an average of 7.88. This means that there was a difference in the effect between using the engage study activate method and using the conventional method on the students' ability to listen to a story telling in English. And the students' ability to listen to story telling in English using the engage study activate method is better than the ability of students to listen to story telling in English using the conventional method.