CHAPTER IV

FINDING AND DISCUSSION

In this section, the researcher presented the outcome and the discussion of the study. Four topics could be exposes in this stage description of the data, the result of normality and homogeneity, hypothesis testing, and discussion.

A. The Description of Data

In this sub section, the researcher exist the descriptive statistics of the students' writing achievement taught and without using schoology and scaffolding technique in writing analytical exposition text. To investigate students' writing progress taught and without using schoology and scaffolding technique, the researcher organized pre-test and post-test. In pre-test and post-test the researcher provide the different topic, but kind of analytical exposition text which was the same that was about phenomenon actual issue. Then, those were compute by using writing scoring guide.

Besides, to explore the students' progress was good or not, the researcher made a score criteria. They were *excellent, good, average, poor, and very poor*. For detail score criteria could be seen in the following table 4.1 as follows (next page):

Table 4.1 Scores' Criteria Modified from Jocobs et al citied in Weigle (2002)

Scores	Description
0-20	*Very Poor*
21-40	*Poor*
41-60	*Average*
61-80	*Good*
81-100	*Excellent*

1. The Data of Experimental Class

The experimental group was XI MIPA 4 students' of MAN one Trenggalek that contained of 34 students using schoology media and scaffolding techniques. The numbers were computed from students' pretest and post-test score which was done before and after the researcher implementing schoology media with scaffolding technique. The data was presented in table 4.2.

Table 4.2 The Result of Students' Pre-test, Post-test and Gained Score of Experimental Class

No	Students' Name	Pre-test (X)	Post-test (Y)	Gained score (X-Y)	Categorization in Post-test
1	ATF	61	77	16	Good
2	AES	64	75	11	Good
3	ARN	67	80	13	Good
4	CAS	67	80	13	Good
5	DEP	70	85	15	Excellent
6	DSA	67	86	19	Excellent
7	DWE	70	86	16	Good
8	DT	67	85	18	Excellent
9	DPP	58	77	19	Good
10	DAP	67	83	16	Excellent
11	DRS	67	85	18	Excellent
12	EEW	70	85	15	Excellent
13	EHU	67	86	19	Excellent

14	FFS	73	87	14	Excellent
15	FRA	70	86	16	Excellent
16	FDA	67	80	13	Good
17	IOR	64	85	21	Excellent
18	IAM	70	85	15	Excellent
19	ISM	67	85	18	Excellent
20	KBA	67	80	13	Good
21	MCI	67	85	18	Excellent
22	MF	67	95	29	Excellent
23	NP	66	85	19	Excellent
24	NS	67	85	18	Excellent
25	NAB	67	80	13	Good
26	NDA	61	80	19	Good
27	RYS	64	77	13	Good
28	SO	64	85	21	Excellent
29	SA	67	80	13	Good
30	SAK	67	85	18	Excellent
31	TR	67	77	10	Good
32	TS	64	80	16	Good
33	VAS	64	85	21	Excellent
34	YNRM	67	85	18	Excellent

The data showed the gain of 34 students' in XI MIPA 4, every student had different scores based on the students' ability. The lowest score of the students' in pretest was 61 and highest gain is 73. After the researcher organized gave action using schoology media and scaffolding technique, the researcher organized post-test to the students' to know whether there was differences score or not. Based on the table 4.2, the lowest score of the students' in post test was 75 and the highest score was 85. Besides, the minimum gained score was 11 and the maximum gained score was 29. It could be seen that there were important differences in the pre-test and post-test score of experimental group. So, the learners' score in post-test was higher than the students' score in pre-test. For the output of statistics calculation of pre-test and post-test data by using *SPSS 16.0 version for windows* could be seen in the table 4.3 and 4.4.

a. Computation result of the students' score of Pre-Test

The number of item in pre-test was 1 question with 2 topics was administered for 34 students. This pretest was done prior to teaching writing by using schoology media and scaffolding technique, to know the learners writing prior to they were organized the treatment. The result of pre-test scores that processing in SPSS 16.0 *versions for windows*. The descriptive statistics of pre-test gain could be seen as below:

Table 4.3 Descriptive Statistics of Students' Score Pre-Test

Experiment Class		
N	Valid	34
	Missing	2
Mean		66.59
Median		67.00
Mode		67
Std. Deviation		3.286
Variance		10.795
Range		17
Minimum		58
Maximum		75
Sum		2264

The descriptive statistics of pre-test score consisted of mean, minimum and maximum score, and standard deviation (table 4.3). The descriptive statistics functioned to explain the condition of sure group. In this study, the group was proposed to eleventh MIA 4 students of MAN Trenggalek. The table 4.3 above showed that there were 34 test takers. The mean score of pre-test was 66.59. Then, the minimum score was 58 and the maximum score was 75. The frequencies of the students' scores in pre-test were declared in the following table (see table 4.4).

Table 4.4 Frequency of Students' Pre-test Scores in Experimental Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	58	1	2.8	2.9	2.9
	61	2	5.6	5.9	8.8
	64	7	19.4	20.6	29.4
	66	1	2.8	2.9	32.4
	67	16	44.4	47.1	79.4
	70	5	13.9	14.7	94.1
	73	1	2.8	2.9	97.1
	75	1	2.8	2.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

From the table 4.4, it could be showed that the numbers that describe frequencies distribution from categorized of scoring guide:

a) There were 1 student who got score between 58-60, it meant the students' writing was average.

b) There were 33 students' who got score between 61-80, it meant the students' writing was good criteria.

After identify the outcome of pre-test, the researcher administered the treatment with the aimed possibly the students' writing could be increased. At last, the researcher administered post-test to compute the differences scores after organizing the treatment.

b. Computation Result of The Students Score of Post-Test

After giving treatment, the researcher conducted post-test with gave test was one item. There were consisted of 3 topics especially analytical exposition text. The outcomes of post-test are processing *in* SPSS 16.0 *versions for windows.* The descriptive statistics of post-test score consisted of

mean, minimum and maximum score, standard deviation, variance, range (table 4.5) could be seen below:

Table 4.5 Descriptive Statistics of Students' Score Post-Test

Experiment Class

N	Valid	34
	Missing	2
Mean		83.00
Median		85.00
Mode		85
Std. Deviation		4.015
Variance		16.121
Range		20
Minimum		75
Maximum		95
Sum		2822

The descriptive statistics of post-test score existed of mean, minimum and maximum score, standard deviation, variance and range (table 4.5). The descriptive statistics functioned to describe the certain condition of group. In this research, the group was proposed to eleventh MIA 4 students of MAN 1 Trenggalek. The table 4.5 above explained that there were 34 test takers. The mean score of was 83.00. Then, the minimum gain of was 75 and the maximum gain was 95. The frequencies of the students' gain in posttest were presented in the following table (see table 4.6)

Table 4.6 Frequency of Students' Post-test Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	75	1	2.8	2.9	2.9
	77	4	11.1	11.8	14.7
	80	8	22.2	23.5	38.2
	83	1	2.8	2.9	41.2
	85	14	38.9	41.2	82.4
	86	4	11.1	11.8	94.1
	87	1	2.8	2.9	97.1
	95	1	2.8	2.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

From the table 4.6, it could be seen that numbers of percentages of frequency distribution of post-test:

a) There were 13 students' who got score between 75-80, the writing was good criteria.

b) There were 31 students' who got score between 81-95, the writing was excellent (see table 4.1).

2. The Data of Control Class

The controlled group was XI-IPS 2 students' of MAN 1 Trenggalek that existed of 36 students' who did not taught by using schoology media and scaffolding technique. The data were computed from students' pre-test and post-test score. The data was presented in table 4.7.

Table 4.7 Students' Pre-test, Post-test and Gained Score of Controlled

Class

No	Students Name	Pre-test (X)	Post-test (Y)	Gained Score (X-Y)	Categorization in post-test
1	ABP	55	67	12	Good
2	AF	65	77	12	Good
3	ANC	61	73	12	Good
4	AM	61	70	9	Good
5	BHP	58	70	12	Good
6	CA	65	77	12	Good
7	DWMP	58	67	9	Good
8	DRA	61	67	6	Good
9	ENR	67	77	10	Good
10	EF	64	74	10	Good
11	EAD	63	70	7	Good
12	FY	67	73	6	Good
13	HR	61	66	5	Good
14	HNR	63	70	7	Good
15	HPP	64	67	3	Good
16	IK	61	69	8	Good
17	IKB	64	70	6	Good
18	LM	60	70	10	Good
19	LNF	64	68	4	Good
20	MJ	61	70	9	Good
21	MHA	64	67	3	Good
22	NWQ	63	69	6	Good
23	OFA	64	68	4	Good
24	PWA	60	69	9	Good
25	PNH	64	77	13	Good
26	RAAY	70	73	3	Good
27	RAYS	67	74	7	Good
28	REW	64	67	3	Good
29	RNA	63	73	10	Good
30	SWT	63	70	7	Good
31	SW	64	75	11	Good
32	UN	64	70	6	Good
33	VAR	63	70	7	Good
34	WMW	61	70	9	Good
35	YAF	63	70	7	Good
36	ZDY	61	64	3	Good

The data showed the score of 36 students' in XI IPS 2, the mean score of pre-test was 62.8, the lowest score of pre-test was 55 and the highest score was 70. Meanwhile, the lowest score of post-test was 64 and the highest score was 77 and the mean score of post-test was 70.5. Besides, the mean score of gained was 7.6 with the maximum gained score was 13 and the minimum gained score were 2.

The data showed the differences among the students' score in experimental and controlled class, the score of experimental class which was taught by using schoology media and scaffolding technique was higher than the score of controlled class which study with conventional technique.

a. **Computation of Pre-test Score**

Control class was class which didn't get special treatment (schoology media and scaffolding technique) from the researcher. It got the conventional treatment that conducted by the researcher as usual. Before giving conventional treatment, the researcher gave pre-test for this class. The class that became control class was XI IPS 2. It consisted of 36 students. The descriptive statistics result of pre-test scores of control class could be seen in the table 4.8 (see table 4.8).

Table 4.8 Descriptive Statistics of Students' Score Pre-Test

Controll Class		
N	Valid	36
	Missing	0
Mean		62.81
Median		63.00
Mode		64
Std. Deviation		2.816
Variance		7.933
Range		15
Minimum		55
Maximum		70
Sum		2261

The descriptive statistics of pre-test score existed of mean, minimum, maximum score, and standard deviation (table 4.8). The descriptive statistics functioned to describe the condition of certain group. In this research, the group was proposed to eleventh XI IPS 2 students of MAN 1Trenggalek. The table 4.8 above showed that there were 36 test takers. The mean score of was 62.801. Then, the minimum gain of was 55 and the maximum score was 70. The frequencies of the students' scores in post-test were presented in the following table (see table 4.9).

Table 4.9 Frequency of Students' Pre-test Scores in Control Class

Controll Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	1	2.8	2.8	2.8
	58	2	5.6	5.6	8.3
	60	2	5.6	5.6	13.9
	61	8	22.2	22.2	36.1
	63	7	19.4	19.4	55.6
	64	10	27.8	27.8	83.3
	65	2	5.6	5.6	88.9
	67	3	8.3	8.3	97.2
	70	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

The table 4.9, showed the numbers that describe about percentages of frequency distribution. The frequency after being distributed showed based on the categorized of scoring guide:

a) There were 4 students' who got gain among 55-60, it was average.

b) There were 32 students' who got gain among 61-70, it was good criteria.

   From description of frequencies above, on the whole the students' got good criteria.

b. Computation of Post-test Score in Controlled Class

After giving conventional treatment (without using schoology media and scaffolding technique), the researcher gave post-test for controlled class. The post-test was taken by 36 students. The post-test scores of controlled class could be seen in table 4.7. Then, the descriptive statistics result of pre-test scores of controlled class could be seen in the table 4.10 as follows:

Table 4.10 Descriptive Statistics of Students' Score Post-Test in Controlled Class

Controll Class

N	Valid	36
	Missing	0
Mean		70.50
Median		70.00
Mode		70
Std. Deviation		3.368
Variance		11.343
Range		13
Minimum		64
Maximum		77
Sum		2538

Table 4.10 showed that there were 36 students' took pre-test. The mean score of post-test in controlled class was 70.50. The median was 70.00. The mode of the score was 70 and the standard deviation 3.368.

From the data, it known that there was an progress in the students' capability on writing analytical exposition text without schoology media and scaffolding technique. It could be observe in their mean of pre-test scores was 62.81 and the mean score of post-test was 70.50. It meant the scores of post-test were better than scores in pre-test. The frequencies of the students' scores in pre-test were presented in the following table (table 4. 11).

Table 4.11 Frequency of Students' Post-test Scores in Control Class

Controll Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	64	1	2.8	2.8	2.8
	66	1	2.8	2.8	5.6
	67	6	16.7	16.7	22.2
	68	2	5.6	5.6	27.8
	69	3	8.3	8.3	36.1
	70	12	33.3	33.3	69.4
	73	4	11.1	11.1	80.6
	74	2	5.6	5.6	86.1
	75	1	2.8	2.8	88.9
	77	4	11.1	11.1	100.0
	Total	36	100.0	100.0	

The table 4.11 showed the frequencies distribution of post-test by considering on qualification of criteria students' score:

a) There were only 1 student who got 64 and 66 score. It was good criteria, but still needed much upgrading.

b) There were 34 students' who got score between 68-77,

It could be sum that all of students' got good criteria (see table 4. 1).

B. The Result of Hypothesis Testing

This research was organized to know whether there is major differentiation in students' vocabulary in writing analytical exposition text of eleventh grade students in MAN I Trenggalek in year academic 2019/2020 earlier than and after being taught by using schoology media and scaffolding technique. To analyze the finding data, the researcher used Paired Sample Test by using SPSS 16.0 *version for windows*. The hypothesis of this research was stated as follows:

a) If the ρ-value (significance value) was less than or equal to 0.05 ($\alpha = 5\%$), then the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. It meant that there was significant difference on students' writing analytical exposition text taught and not being taught schoology media and scaffolding technique.

b) If the ρ-value (significance value) was greater than 0.05 ($\alpha = 5\%$), then the null hypothesis (H_0) was accepted and the alternative hypothesis (H_a) was rejected. It meant that there was no significant difference on students' writing analytical exposition text by using schoology media and scaffolding technique.

Table 4.13 The Result of Hypothesis Testing

Test Statistics[a]

	SCORES
Mann-Whitney U	10.500
Wilcoxon W	676.500
Z	-7.070
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable : Class

Based on the table 4.13 it could be made interpretation that z-value was -7.070 with *p*-value 0.000 (2-tailed). Because this research used one right-tailed test, so the *p*-value has to divided into two. Thus, 0.000 : 2 equals to 0. It meant that *p*-value was smaller than significance level 0.05 (0<0.05). In consequence, the null hypothesis was rejected and alternative hypothesis was accepted. It meant that there was significant difference on students' achievement in writing analytical exposition text with and without schoology media and scaffolding technique.

C. Discussion

In this study, the researcher used two samples as subject there are the XI MIA 4 class which students' total 34 as experimental group and XI IPS 2 which students total 36 as control class. This study was done in three steps. Firstly, was giving pre-test to students; it purposed to seen the score of the students' writing in analytical exposition text before given the treatment by applying schoology media and scaffolding technique. The second steps, were given the treatment by applying schoology media and scaffolding technique. The third steps, were given

post-test to see the gain of the students' writing in analytical exposition text after given treatment by applying schoology media and scaffolding technique. To see, whether this technique was successful or not, the researcher used the score of students' pre-test and post-test then calculates both of the tests into SPSS 16.0 *version for windows.*

Based on the output Mann-Whitney U Test, the used of schoology media and scaffolding technique was effective toward students' writing analytical exposition text it was verified in hypothesis testing by gained significance value which less than 0.05 (0<0.05). It indicated that there was any significance difference score on students' writing analytical exposition text using and not using schoology media and scaffolding technique. The differences could be seen in the result of post-test score from experimental and control class. From the experimental group the mean of post test 83.00 and control group 70.50. Thus finding by using schoology media and scaffolding technique, the students' attainment in script analytical was increased.

The output of this investigate was supported by Wulandari (2018) who examined teaching narrative writing by using schoology e-learning web at the second grade students' of SMAN 1 Tulungagung. This investigated used pre-experiment research design. The pre-test score of experimental group was 65.79, than post-test was 71.95 while pre-test of control group was 63.76 than post test was 69.16 The result of the investigate shows that there is mean score of post-test in experiment group higher than control group. From the descriptions, that

teaching narrative writing by using schoology e-learning is successful. It meant that, the mean score of this research is better than previous study.

This study was also parallel to Sari (2018) who examined teaching writing analytical expository text by using scaffolding technique at the eleventh grade students of SMAN 7 Bandar Lampung. This investigate was categorized into quantitative with the experimental design. Based on the data composed from the pre-test and post-test gained from experimental class taught writing by using scaffolding technique and without scaffolding technique in analyzing the students' error in writing, it the mean score of pre-test was 57.82 while the mean score of post-test was 73.71. In short, teaching by using scaffolding technique is effective than teaching without scaffolding technique. It meant, the mean score of this research is higher than thus previous study.

Moreover, in the previous study, Crisentia (2017) conducted research to investigate the use of schoology to inspire the one grade students of SMP Kanisius Wonogiri to study English. The researcher computed the data into qualitative research design. The researcher did observation and interviewed. The output of this study, that schoology could inspire the students; it cause the schoology complicated with features that were interesting for the students to study English.

Thus, based on the previous study explanations and the result of this research, it could be said that the schoology media and scaffolding technique was

efficient to teach students writing analytical exposition text on second grade

students' at MAN 1 Trenggalek.