

CHAPTER IV

RESULT OF FINDINGS AND DISCUSSION

In this chapter the researcher presents the result of the research in the field. The researcher present consists of description of data, hypothesis testing, and discussion.

A. Presentation of Data

Presentation of data purpose to presentation the data after collected that is gotten by researcher in field of research. The data that will be presents must be real data and the data based on the research instruments that used. And the researcher in this research used test (pre-test and post-test) and documentation to collect the data.

1. The result of data test

The data of this study are the students' score of pre-test and post-test they have run on their reading comprehension ability especially for descriptive text. In this research conducted at Senior High School 1 Galis from September 16th, 2021, to requested permission to do research for the tenth grade at Senior High School 1 Galis and this accepted at the same day. Then, the researcher continues the real research from September 29th, 2021, up to October 13th, 2021. In this research, the researcher uses Experimental design exactly Pre-experimental design which is going want to measure whether there will be better or not by using Team Word Webbing as X variable (independent variable) and the students' reading comprehension as Y variable (dependent variable). And also, in this

research want to know do the students taught by Team Word Webbing the better their reading comprehension or not. The researcher needs students test score as data to measure students' reading comprehension and documentations which relate with this research.

For the test the researcher used multiple choice test, that are consists of 5 questions of pre-test and 5 questions of post-test. The question of the test between pre-test and post-test are different question, but still based on the topics that have been taught. The test based on the topics that have been taught is descriptive text describe about famous people.

Then the scoring of the test, the researcher gives 20 points for 1 question if that the right answer. But for the wrong answer the researcher gives 0 point. So the students will get 100 scores if they answer five questions correctly.

2. The result of pre-test

The researcher conducted the pre-test to the students to know the students' score about multiple choice descriptive text before the teacher given treatment. The researcher gave the pre-test to the tenth-grade students on September 29th, 2021, for class X Ipa 1 on 07.00 a.m. and for class X Ips 2 on 08.15 a.m. There are 34 students conducting the pre-test as sample in this research. That 34 students, consist of 26 students of X Ipa 1 and 8 students of X Ips 2. The reason why just takes 8 students of X Ips 2 it is because those 8 students just completely the weakness of the sample in class X Ipa 1 to complete 34 students as sample. The researcher used

initial name to keep the privacy of the sample. The result of pre-test is present in the following table:

Table 1

The result of Pre-test Score

X Ipa 1

No	Name	Score
1	A L A	40
2	A N	60
3	A F M	40
4	A T N I	20
5	A K W	60
6	A A	60
7	B P	40
8	D L A W	40
9	D F	40
10	F A D P	60
11	H	40
12	H A H	60
13	I M	60
14	K K	20
15	K A	20
16	L A	40
17	M	40
18	M T H	20
19	M F A	40
20	N I A	40
21	P A A	60
22	R L S	40
23	S L R	40
24	S A M	40
25	T W	40
26	W K	20

X Ips 2

No	Name	Score
27	A R	20
28	F	20
29	F A	20
30	M	20
31	M D S	20
32	M L R	20
33	W S	20
34	Y D A	20
SUM		1240

In that table above (Table 1) was score of pre-test of X Ipa 1 and X Ips 1 before taught by using Team Word Webbing technique in reading comprehension exactly in descriptive text. The total score was 1240.

3. The presentation of treatment

In this research, the teacher applied three times for treatments to the students of the tenth grade at Senior High School 1 Galis. After getting the score of pre-test of 34 students as sample, the research conduct the treatment by the teacher which is taught the students by using techniques namely Team Word Webbing.

- a. In the first treatment, the researcher starts the research on Thursday on September 29th, 2021. It was started on 07.00 a.m. in X Ipa 1 and started on 08.15 a.m. in X Ips 2. Each time duration in each class is 50 minutes (2 JP @25 minutes). The process of giving treatment is same between X Ipa 1 and X Ips 2. There are some steps by the teacher in giving the treatment to the students as follow:

1) Pre-reading

The students must make a group first two or three in one group because it is still on Covid-19 pandemic. The teacher instructed the students to open their book at the page 58-59. Asked to pay attention to descriptive text with title Taj Mahal. Then, the teacher instructed them to make prediction text based on graphic organizer but still about Taj Mahal text.

2) During-reading

Next activities in applying team word webbing technique, the teacher asked the students to write the important information of Taj Mahal text what they have read. The information must be conform with their prediction based on graphic organizer. This information must be detail conform on every oval of word.

3) Post-reading

After the students write the information in graphic organizer, they must make summary. Then, the teacher asked them to present their work in front of class.

- b. The second treatment is little different than the first treatment. The second treatment starts on Thursday on October 6th, 2021. It was started on 07.00 a.m. in X Ipa 1 and started on 08.15 a.m. in X Ips 2. Each time duration in each class is 50 minutes (2 JP @25 minutes). The process of give treatment is same between X Ipa 1 and X Ips 2. There are some steps by the teacher in giving the treatment to the students as follow:

1) Pre-reading

The students must make a group first two or three in one group because it is still on Covid-19 pandemic. The teacher give a descriptive text about famous person (Agnes Mo). As usually, before read the text, the students must be make prediction text based on graphic organizer but still about famous person (Agnez Mo).

2) During-reading

Next activities in applying team word webbing technique, the teacher asked the students to write the important information of Agnez Mo text what they have read. The information must be conform with their prediction based on graphic organizer. This information must be detail conform on every oval of word. In this stage, focused on extracting and grasping the topics, explicit and implicit information of that famous person based the content of the text.

3) Post-reading

After the students write the information in graphic organizer, they must make summary. Then, the teacher asked them to present their work in front of class. But in this meeting, it is like game, because when the teacher asked the students the information of one ovals of graphic organizer. When the students answer correctly, they will get 1 point.

c. The third treatment or last treatment starts on Thursday on October 13th, 2021. It was started on 07.00 a.m. in X Ipa 1 and started on 08.15 a.m. in X Ips 2. Each time duration in each class is 50 minutes (2 JP @25 minutes). The process of give treatment is same between X Ipa 1 and X Ips 2. After giving the third treatment, the researcher give post-test to the students. There are some steps by the teacher in giving the treatment to the students as follow:

1) Pre-reading

The students must make a group first two or three in one group because it is still on Covid-19 pandemic. Actually, before applying this treatment, the students must be make the descriptive text about famous person by themselves. After they make the descriptive text, the teacher asked them to make prediction text based on graphics organizer about their text.

2) During-reading

Next activities in applying team word webbing technique, the teacher asked the students to write the important information of the text what they have read. The information must be conform with their prediction based on graphic organizer. This information must be detail conform on every oval of word. In this stage, focused on extracting and grasping the topics, explicit and implicit information of that famous person based the content of the text. Maybe it is easier because they make the text by themselves.

3) Post-reading

After the students write the information in graphic organizer, they must be making summary. Then, the teacher asked them to present their work in front of class.

4. The result of post-test

After giving treatment to the students by three times treatment, the researcher gave the post-test to know how far team word webbing technique effective and make students' reading comprehension better of the tenth grade on reading comprehension exactly on descriptive text. Post-test was conducted at the same day with the last treatment on Thursday on October 13th, 2021, for X Ipa 1 and X Ips 2. But the researcher give post-test after giving treatment time. It is not different from the pre-test, the students must be answering the 5 questions in multiple choice form. Here is the table of acquired data from the post-test after giving third times treatment:

Table 2

The result of Post-test Score

X Ipa 1

No	Name	Score
1	A L A	80
2	A N	80
3	A F M	60
4	A T N I	60
5	A K W	80
6	A A	100
7	B P	80

No	Name	Score
8	D L A W	80
9	D F	80
10	F A D P	100
11	H	100
12	H A H	100
13	I M	80
14	K K	80
15	K A	80
16	L A	60
17	M	80
18	M T H	40
19	M F A	100
20	N I A	80
21	P A A	100
22	R L S	100
23	S L R	100
24	S A M	80
25	T W	80
26	W K	60

X Ips 2

No	Name	Score
27	A R	80
28	F	80
29	F A	60
30	M	60
31	M D S	80
32	M L R	60
33	W S	60
34	Y D A	60
SUM		2660

The table score of post-test of the students after taught using team word webbing on reading comprehension. The sum of post-test was 2660.

5. Documentation

Documentation is looking for data about something or variable that includes note, transcript, books, newspaper, magazine, epigraphy, notes of the meeting, agenda, etc.¹ Documentation is all written things to collect data. It is used when the researcher collects the data and make it easy in collecting data that has related with the material that will be the target of the research. Some of documentation are:

- a. Student's name list of X Ipa 1 and X Ips 2 at Senior High School 1 Galis.
- b. Lesson plan.
- c. Picture of research process during do the research at Senior High School 1 Galis.
- d. Question's sheet of pre-test and post-test
- e. Students score of pre-test and post-test
- f. The material of the topic (descriptive text).

6. Validity and Reliability

- a. Validity of the pre-test

After the researcher obtaining the pre-test and post-test score of the students as a sample. The researcher will give prove about validity of the t-test that has been conducted. Content validity is the process of determining the extent to which a set of test task provides a relevant and representative sample of the domain of the skill or knowledge to be assessed.²

¹ Suharsimi Arikunto, *Prosedur Penelitian*, 274.

² Mohammad Adnan Latief, *Research Methods on Language Learning an Introduction*, 226

The test will use the researcher in this research, used a test which has been explained by the teacher in the class. The test has the content validity since the material that has been explained in the class by the teacher.

Table 3
Validity of Pre-test

		Correlations					
		Question 1	Question 2	Question 3	Question 4	Question 5	Total
Question 1	Pearson Correlation	1	.314	-.324	-.493**	.272	.607**
	Sig. (2-tailed)		.071	.061	.003	.120	.000
	N	34	34	34	34	34	34
Question 2	Pearson Correlation	.314	1	-.566**	.054	.032	.626**
	Sig. (2-tailed)	.071		.000	.763	.855	.000
	N	34	34	34	34	34	34
Question 3	Pearson Correlation	-.324	.566**	1	-.203	-.253	.453*
	Sig. (2-tailed)	.061	.000		.251	.150	.008
	N	34	34	34	34	34	34
Question 4	Pearson Correlation	-.493**	.054	-.203	1	-.235	.438
	Sig. (2-tailed)	.003	.763	.251		.180	.000
	N	34	34	34	34	34	34
Question 5	Pearson Correlation	.272	.032	-.253	-.235	1	.585**
	Sig. (2-tailed)	.120	.855	.150	.180		.000
	N	34	34	34	34	34	34
Total	Pearson Correlation	.607**	.626**	.453*	.438	.585**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	34	34	34	34	34	34
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

As the appointment if $r_{\text{value}} > r_{\text{table}}$, it means question is valid. But if $r_{\text{value}} < r_{\text{table}}$, it means the questions is not valid. The degree of freedom of this research is 33.

Df (Degree of freedom)	Critical value "r" or significant level
33	0,344

Based on the table above we can describe are:

- 1) Question 1 = $0,607 > 0,344$
- 2) Question 2 = $0,626 > 0,344$
- 3) Question 3 = $0,453 > 0,344$
- 4) Question 4 = $0,438 > 0,344$
- 5) Question 5 = $0,585 > 0,344$

Based on the description above and appointment before, so we can conclude if all questions of pre-test are valid.

b. Reliability of the pre-test

In this research, to know the reliability of the test the researcher uses K-R 21 for the reliability of instruments. K-R 21 uses for; (a) the items on instrument are score right or wrong as categorical scores, (b) the responses are not influenced by speed, and (c) the items measure a common factor.³ This formula uses because in K-R 21 the researcher does not has to calculate the value of $\sum pq$ (proportion of how many

³ Creswell, *Educational Research*, 159

students answer each item) like the Kuder Richardson formula 20 (K-R 20).

And this is the formula of Kuder Richardson that would be uses in this research, as follow:⁴

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{kv_t} \right)$$

Note:

r_{11} = instrument reliability

k = number of the items on the test

V_t = total variances

M = mean score

Then the researcher takes calculation result of r_{11} is compare with r_{table} of product moment by 5% of significance if r_{11} is higher than r_{table} , so the item is reliable. And then, there are some steps in analyze data obtained from research (pre-test and post-test) as follow:

- 1) Firstly, make a table which contains of number of the students as a sample. Then, the students score of each item and the score of each student (X).

Table 4

Each Item of Pre-test Score

NO	Score of each item					X
	1	2	3	4	5	
1	2	2	0	0	0	4
2	2	2	0	0	2	6
3	0	0	0	2	2	4

⁴ Suharsimi Arikunto, *Prosedur Penelitian*, 232

NO	Score of each item					X
	1	2	3	4	5	
4	0	2	0	0	0	2
5	2	2	0	0	2	6
6	2	2	0	0	2	6
7	2	2	0	0	0	4
8	2	2	0	0	0	4
9	2	2	0	0	0	4
10	2	2	0	0	2	6
11	0	2	0	0	2	4
12	2	2	0	0	2	6
13	2	2	0	0	2	6
14	0	2	0	0	0	2
15	0	2	0	0	0	2
16	2	2	0	0	0	4
17	2	2	0	0	0	4
18	0	0	2	0	0	2
19	0	2	0	2	0	4
20	0	2	0	2	0	4
21	2	2	0	0	2	6
22	0	2	0	2	0	4
23	0	2	0	2	0	4
24	0	2	0	2	0	4
25	0	2	0	2	0	4
26	0	0	2	0	0	2
27	2	0	0	0	0	2
28	2	0	0	0	0	2
29	0	2	0	0	0	2
30	0	0	2	0	0	2
31	0	0	2	0	0	2
32	0	0	0	0	2	2
33	0	0	0	0	2	2
34	0	0	0	2	0	2
Σ						124

2) Secondly, calculate the mean of the total score by using this formula:

$$M = \frac{\Sigma X}{N}$$

$$= \frac{124}{34}$$

$$= 3,647$$

- 3) Thirdly, compute the variance total of the pre-test score. It is gotten from $(x-\bar{x})$ and $(x-\bar{x})^2$.

Table 5
Variance Total of Pre-test Score

NO	Score	$(x-\bar{x})$	$(x-\bar{x})^2$
1	40	3,53	12,46
2	60	23,53	553,66
3	40	3,53	12,46
4	20	-16,47	271,26
5	60	23,53	553,66
6	60	23,53	553,66
7	40	3,53	12,46
8	40	3,53	12,46
9	40	3,53	12,46
10	60	23,53	553,66
11	40	3,53	12,46
12	60	23,53	553,66
13	60	23,53	553,66
14	20	-16,47	271,26
15	20	-16,47	271,26
16	40	3,53	12,46
17	40	3,53	12,46
18	20	-16,47	271,26
19	40	3,53	12,46
20	40	3,53	12,46
21	60	23,53	553,66
22	40	3,53	12,46
23	40	3,53	12,46
24	40	3,53	12,46
25	40	3,53	12,46
26	20	-16,47	271,26

NO	Score	(x- \bar{x})	(x- \bar{x}) ²
27	20	-16,47	271,26
28	20	-16,47	271,26
29	20	-16,47	271,26
30	20	-16,47	271,26
31	20	-16,47	271,26
32	20	-16,47	271,26
33	20	-16,47	271,26
34	20	-16,47	271,26
\bar{x}	36,47	Σ	222,83

The following is the formula to calculate the variance total:

$$\begin{aligned}
 V_t &= \frac{\Sigma(x-x)^2}{N-1} \\
 &= \frac{222,83}{34-1} \\
 &= \frac{222,83}{33} \\
 &= 6,75
 \end{aligned}$$

- 4) Input the result of variance total to the KR-21 formula and counting the reliability of the pre-test:

$$\begin{aligned}
 R_{11} &= \left[\frac{k}{k-1} \right] \left[1 - \frac{M(k-M)}{k \cdot v_t} \right] \\
 &= \left[\frac{5}{5-1} \right] \left[1 - \frac{3,647(5-3,647)}{5 \cdot 6,75} \right] \\
 &= \left[\frac{5}{4} \right] \left[1 - \frac{3,647(1,353)}{33,75} \right] \\
 &= 1,25 \left[1 - \frac{4,9343}{33,75} \right] \\
 &= 1,25[1 - 0,146]
 \end{aligned}$$

$$= 1,25 [0,854]$$

$$= 1,067$$

Table of coefficient of correlation product moment "r"

Df (Degree of freedom)	Critical value "r" or significant level
33	0,344

Based on coefficient of correlation product moment "r" table above, we can see if $r_{11} = 1,067$ means value of pre-test is higher than r_{table} . It means the pre-test is reliable.

c. Validity of post-test

After the researcher obtaining the pre-test and post-test score of the students as a sample. The researcher will give prove about validity of the t-test that has been conducted. Content validity is the process of determining the extent to which a set of test task provides a relevant and representative sample of the domain of the skill or knowledge to be assessed.⁵

The test will use the researcher in this research, used a test which has been explained by the teacher in the class. The test has the content validity since the material that has been explained in the class by the teacher.

⁵ Mohammad Adnan Latief, *Research Methods on Language Learning an Introduction*, 226

Table 6

Validity of Post-test

Correlations							
		Question 1	Question 2	Question 3	Question 4	Question 5	Total
Question 1	Pearson Correlation	1	-.103	-.141	-.333	.354*	.444**
	Sig. (2-tailed)		.563	.428	.054	.040	.008
	N	34	34	34	34	34	34
Question 2	Pearson Correlation	-.103	1	-.045	-.075	.146	.442**
	Sig. (2-tailed)	.563		.801	.674	.410	.009
	N	34	34	34	34	34	34
Question 3	Pearson Correlation	-.141	-.045	1	-.111	-.259	.422
	Sig. (2-tailed)	.428	.801		.532	.139	.007
	N	34	34	34	34	34	34
Question 4	Pearson Correlation	-.333	-.075	-.111	1	-.111	.364
	Sig. (2-tailed)	.054	.674	.532		.532	.002
	N	34	34	34	34	34	34
Question 5	Pearson Correlation	.354*	.146	-.259	-.111	1	.594**
	Sig. (2-tailed)	.040	.410	.139	.532		.000
	N	34	34	34	34	34	34
Total	Pearson Correlation	.444**	.442**	.422	.364	.594**	1
	Sig. (2-tailed)	.008	.009	.007	.002	.000	
	N	34	34	34	34	34	34
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

As the appointment if $r_{\text{value}} > r_{\text{table}}$, it means question is valid. But if $r_{\text{value}} < r_{\text{table}}$, it means the questions is not valid. The degree of freedom of this research is 33.

Df (Degree of freedom)	Critical value "r" or significant level
33	0,344

Based on the table above we can describe are:

- 1) Question 1 = 0,444 > 0,344
- 2) Question 2 = 0,442 > 0,344
- 3) Question 3 = 0,422 > 0,344
- 4) Question 4 = 0,364 > 0,344
- 5) Question 5 = 0,594 > 0,344

Based on the description above and appointment before, so we can conclude if all questions of post-test are valid.

d. Reliability of the post-test

- 1) Firstly, make a table which contains of number of the students as a sample. Then, the students score of each item and the score of each student (X).

Table 7

Each Item of Post-test Score

NO	Score of each item					X
	1	2	3	4	5	
1	2	2	2	0	2	8
2	2	2	0	2	2	8
3	2	0	0	2	2	6

NO	Score of each item					X
	1	2	3	4	5	
4	2	0	2	0	2	6
5	2	2	0	2	2	8
6	2	2	2	2	2	10
7	2	2	2	0	2	8
8	2	2	0	2	2	8
9	2	0	2	2	2	8
10	2	2	2	2	2	10
11	2	2	2	2	2	10
12	2	2	2	2	2	10
13	2	2	0	2	2	8
14	2	2	2	0	2	8
15	2	2	2	0	2	8
16	2	2	0	0	2	6
17	2	2	2	0	2	8
18	0	0	2	2	0	4
19	2	2	2	2	2	10
20	0	2	2	2	2	8
21	2	2	2	2	2	10
22	2	2	2	2	2	10
23	2	2	2	2	2	10
24	0	2	2	2	2	8
25	2	2	2	2	0	8
26	2	2	2	0	0	6
27	0	2	2	2	2	8
28	2	0	2	2	2	8
29	0	2	0	2	2	6
30	0	2	2	2	0	6
31	0	2	2	2	2	8
32	0	2	2	2	0	6
33	0	2	2	2	0	6
34	2	0	2	2	0	6
Σ						266

2) Secondly, calculate the mean of the total score by using this formula:

$$M = \frac{\Sigma X}{N}$$

$$= \frac{266}{34}$$

$$= 7,823$$

- 3) Thirdly, compute the variance total of the post-test score. It is gotten from $(x-\bar{x})$ and $(x-\bar{x})^2$.

Table 8

Variance Total of Post-test Score

NO	Score	$x-\bar{x}$	$(x-\bar{x})^2$
1	80	43,53	1894,86
2	80	43,53	1894,86
3	60	23,53	553,66
4	60	23,53	553,66
5	80	43,53	1894,86
6	100	63,53	4036,06
7	80	43,53	1894,86
8	80	43,53	1894,86
9	80	43,53	1894,86
10	100	63,53	4036,06
11	100	63,53	4036,06
12	100	63,53	4036,06
13	80	43,53	1894,86
14	80	43,53	1894,86
15	80	43,53	1894,86
16	60	23,53	553,66
17	80	43,53	1894,86
18	40	3,53	12,46
19	100	63,53	4036,06
20	80	43,53	1894,86
21	100	63,53	4036,06
22	100	63,53	4036,06
23	100	63,53	4036,06
24	80	43,53	1894,86
25	80	43,53	1894,86
26	60	23,53	553,66
27	80	43,53	1894,86
28	80	43,53	1894,86
29	60	23,53	553,66

NO	Score	$x-\bar{x}$	$(x-\bar{x})^2$
30	60	23,53	553,66
31	80	43,53	1894,86
32	60	23,53	553,66
33	60	23,53	553,66
34	60	23,53	553,66
	36,47	Σ	67601,64

The following is the formula to calculate the variance total:

$$\begin{aligned}
 V_t &= \frac{\Sigma(x-\bar{x})^2}{N-1} \\
 &= \frac{67601,64}{34-1} \\
 &= \frac{67601,64}{33} \\
 &= 2048,53
 \end{aligned}$$

- 4) Input the result of variance total to the KR-21 formula and counting the reliability of post-test:

$$\begin{aligned}
 R_{11} &= \left[\frac{k}{k-1} \right] \left[1 - \frac{M(k-M)}{k \cdot v_t} \right] \\
 &= \left[\frac{5}{5-1} \right] \left[1 - \frac{7,823(5-7,823)}{5 \cdot 2048,53} \right] \\
 &= \left[\frac{5}{4} \right] \left[1 - \frac{7,823(-2,823)}{10242,65} \right] \\
 &= 1,25 \left[1 - \frac{-19,761}{10242,65} \right] \\
 &= 1,25[1 - (-0,001)]
 \end{aligned}$$

$$= 1,25 [0,999]$$

$$= 1,248$$

Table of coefficient of correlation product moment “r”

Df (Degree of freedom)	Critical value "r" or significant level
	5%
33	0,344

Based on coefficient of correlation product moment “r” table above, we can see if $r_{11} = 1,248$ means value of post-test is higher than r_{table} . It means the pre-test is reliable.

7. Data Analysis

After apply giving the treatment to the students and obtain the score of pre-test and post-test, then the researcher would be analyzing the data of this research. The use the t-test formula. Here the steps in calculating the score of t formula:

- a. Firstly, make a table which contains of pre-test and post-test score of the students and determines the differences (D) of both by alleviate of post-test and pre-test score of the students. The table would be described below:

Table 9

Differences score of pre-test and post-test

NO	PRE-TEST	POST-TEST	D
1	40	80	40
2	60	80	20
3	40	60	20

4	20	60	40
NO	PRE-TEST	POST-TEST	D
5	60	80	20
6	60	100	40
7	40	80	40
8	40	80	40
9	40	80	40
10	60	100	40
11	40	100	60
12	60	100	40
13	60	80	20
14	20	80	60
15	20	80	60
16	40	60	20
17	40	80	40
18	20	40	20
19	40	100	60
20	40	80	40
21	60	100	40
22	40	100	60
23	40	100	60
24	40	80	40
25	40	80	40
26	20	60	40
27	20	80	60
28	20	80	60
29	20	60	40
30	20	60	40
31	20	80	60
32	20	60	40
33	20	60	40
34	20	60	40
Σ	1240	2660	1420

Based on the table above, the result of pre-test is 1240 and the post-test is 2660. So, the conclusion is the score of post-test is higher than the score of pre-test.

- b. Determine the Md (Mean of differences) using this formula:

$$M = \frac{\Sigma D}{N}$$

$$= \frac{1420}{34}$$

$$= 41,764$$

- c. Calculate the deviation (xd) by using formula $X_d = D - M_d$. The table below the result of calculate of find value of X_d :

Table 10

Score of deviation (X_d)

NO	D	X_d
1	40	-1,764
2	20	-21,764
3	20	-21,764
4	40	-1,764
5	20	-21,764
6	40	-1,764
7	40	-1,764
8	40	-1,764
9	40	-1,764
10	40	-1,764
11	60	18,236
12	40	-1,764
13	20	-21,764
14	60	18,236
15	60	18,236
16	20	-21,764
17	40	-1,764
18	20	-21,764
19	60	18,236
20	40	-1,764
21	40	-1,764
22	60	18,236
23	60	18,236
24	40	-1,764
25	40	-1,764
26	40	-1,764
27	60	18,236

NO	D	Xd
28	60	18,236
29	40	-1,764
30	40	-1,764
31	60	18,236
32	40	-1,764
33	40	-1,764
34	40	-1,764
$\Sigma Md=41,764$		$\Sigma Xd = 0,024$

- d. Next step is calculating the sum of quadrate score of Xd and add up the score of it to get the value of ΣX^2d (sum of quadrate deviation).

Table 11

Score of Quadrate Deviation

NO	Xd	Xd²
1	-1,764	3,11
2	-21,764	473,67
3	-21,764	473,67
4	-1,764	3,11
5	-21,764	473,67
6	-1,764	3,11
7	-1,764	3,11
8	-1,764	3,11
9	-1,764	3,11
10	-1,764	3,11
11	18,236	332,55
12	-1,764	3,11
13	-21,764	473,67
14	18,236	332,55
15	18,236	332,55
16	-21,764	473,67
17	-1,764	3,11
18	-21,764	473,67
19	18,236	332,55
20	-1,764	3,11
21	-1,764	3,11
22	18,236	332,55

NO	D	Xd²
23	18,236	332,55
24	-1,764	3,11
25	-1,764	3,11
26	-1,764	3,11
27	18,236	332,55
28	18,236	332,55
29	-1,764	3,11
30	-1,764	3,11
31	18,236	332,55
32	-1,764	3,11
33	-1,764	3,11
34	-1,764	3,11
$\sum Xd = 0,024$		$\sum X^2d = 5894,06$

- e. Input and calculating the result of score into dependent of t-test formula:

Table 12

Table of Coefficient T-test

NO	PRE-TEST	POST-TEST	D	Xd	X²d
1	40	80	40	-1,764	3,11
2	60	80	20	-21,764	473,67
3	40	60	20	-21,764	473,67
4	20	60	40	-1,764	3,11
5	60	80	20	-21,764	473,67
6	60	100	40	-1,764	3,11
7	40	80	40	-1,764	3,11
8	40	80	40	-1,764	3,11
9	40	80	40	-1,764	3,11
10	60	100	40	-1,764	3,11
11	40	100	60	18,236	332,55
12	60	100	40	-1,764	3,11
13	60	80	20	-21,764	473,67
14	20	80	60	18,236	332,55
15	20	80	60	18,236	332,55

NO	PRE-TEST	POST-TEST	D	Xd	X ² d
16	40	60	20	-21,764	473,67
17	40	80	40	-1,764	3,11
18	20	40	20	-21,764	473,67
19	40	100	60	18,236	332,55
20	40	80	40	-1,764	3,11
21	60	100	40	-1,764	3,11
22	40	100	60	18,236	332,55
23	40	100	60	18,236	332,55
24	40	80	40	-1,764	3,11
25	40	80	40	-1,764	3,11
26	20	60	40	-1,764	3,11
27	20	80	60	18,236	332,55
28	20	80	60	18,236	332,55
29	20	60	40	-1,764	3,11
30	20	60	40	-1,764	3,11
31	20	80	60	18,236	332,55
32	20	60	40	-1,764	3,11
33	20	60	40	-1,764	3,11
34	20	60	40	-1,764	3,11
Σ	1240	2660	1420	0,024	5894,06

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}$$

$$= \frac{41,764}{\sqrt{\frac{5894,06}{34(34-1)}}}$$

$$= \frac{41,764}{\sqrt{\frac{5894,06}{34(33)}}}$$

$$= \frac{41,764}{\sqrt{\frac{5894,06}{1122}}}$$

$$= \frac{41,764}{\sqrt{5,253}}$$

$$= \frac{41,764}{2,29}$$

$$= 18,23$$

Based on the calculation above of dependent t-test between result test of reading comprehension in pre-test and post-test, indicates the value of t is 18, 23. The interpretation of this value would be explained on the next discussion.

B. Hypothesis Testing

Based on the calculation in the previous explanation, we can find out that the value of t_0 . Hypothesis testing have the purpose to know whether H_a (Alternative Hypothesis) is rejected or accepted. In this research, the researcher uses 5% level of significance. If t values are higher than t table or at least has the same value, it means the alternative hypothesis is accepted. Whereas if t values are lower than t table, so the alternative hypothesis is rejected.

Firstly, determine the df (degree of freedom). While the formula to determine the df is $df = N - 1$, where is N is the number of participants of research. The participants or sample was taken by the researcher on this research is 34 students. So, the df (degree of freedom) of this research is $df = 34 - 1 = 33$. After knowing df of this research, it is consulted to t value on the level of significance 5%. It can be seen on the table below:

Critical value of t-test

Df (Degree of freedom)	Critical value of t-test on significance level
	5%
33	2,035

Then, after knowing t_0 is 18,23, next step is compared with t table. And as we can see on the table above if t_{table} is 2,035. So, the researcher concludes if alternative hypothesis is accepted because $t_0 > t_{table}$ ($18,23 > 2,035$) and the null hypothesis is rejected.

From the statement above, that alternative hypothesis is certainly accepted that team word webbing technique is effective to reading comprehension and the students who taught by using team word webbing the better their reading comprehension of the tenth grade at Senior High School 1 Galis. With level 5% significance $t_0 > t_{table}$ ($18,23 > 2,035$) the researcher concludes if the alternative hypothesis is accepted.

C. Discussion

In this point, discuss the problem of study in the first chapter. The researcher has conducted the research process from the test (pre-test and post-test) and documentation also. Present the result of the research based on finding in the field of research. The review of related theory and analyze of the data to clarify the findings.

This research has one problem of study, that is: *Do the students taught by using Team Word Webbing the better their reading comprehension of the tenth grade at Senior High School 1 Galis?* Then to know the result of the research, the researcher formulates a research problem of the study to be discussed below:

Do the students taught by using Team Word Webbing the better their reading comprehension of the tenth grade at Senior High School 1 Galis?

In this point, the researcher discuss whether the students who taught by using team word webbing the better their reading comprehension. The finding of this research use test (pre-test and post-test) and documentation. Before the teacher apply the team word webbing technique to the students, the researcher gave the pre-test to the students. After the teacher taught team word webbing technique to the students during three times treatments, then the researcher gave the post-test to the students. The researcher sees the differences of the score between pre-test (before the teacher taught by using the team word webbing technique) and post-test (after the teacher taught by using the team word webbing technique).

In this research, the researcher uses the quantitative approach, because in this research the data present by numerical data and statistical procedure. Meanwhile, the experimental design in which uses in this research is the pre-experimental design exactly one group pre-test and post-test design.

The teacher applied three times treatment to the students. Before the teacher applied the first treatment, the researcher gave pre-test to the students. The first meeting on Thursday on September 29th, 2021, at 07.00 a.m. at X Ipa 1 and at 08.15 a.m. at X Ips 2. The teacher taught these two classes and give the same treatment. For the second meeting, it is little different with the first treatment, because the teacher gives an opportunity to the students to identifying descriptive text. And for the students can answer correctly they will get the point from the teacher. Held on Thursday on October 6th, 2021, at 07.00 a.m. at X Ipa 1 and at 08.15 a.m. at X Ips 2. And for third or last meeting, apply on Thursday on October 13th, 2021, at 07.00 a.m. at X Ipa 1 and at 08.15 a.m.

at X Ips 2. After the teacher apply the last treatment, the researcher gives the post-test to the students to get the data.

The team word webbing technique is one of ways that can be used the teacher teach in reading comprehension to make the students understanding the content of the descriptive text, make the students enjoy, enthusiastic, and active in teamwork. Some expert states that webbing technique is a reading comprehension technique that can help the students understand the text in the following way in constructing meaning. According to Starko, word webbing is often used to organize such idea and information on a topic.⁶ Denton recommends the teachers to implement a set of procedures of team word webbing technique to help students understand in reading stages. These reading stages are:⁷

- 1) Pre-reading includes activities as showing the team word webbing technique to the student's prior knowledge, a part of team word webbing must be to making a group first, as a tool to preview chapter or text and asks the student to make prediction text based on graphics organizer or ovals. Then, the focus of the activities is focused on the student's vocabulary and background or prior knowledge by questioning and some ovals or webbing.
- 2) During-reading includes activities asking the students to write the important information as they read the text and conform with their

⁶ Starko, *Creativity in the Classroom, fourth edition*, (New York: Routledge, 2009), 187

⁷ Denton, *Effective Instruction for Middle School Students with Reading Difficulties*, (Dallas: The University of Texas, 2007), 115

prediction. In this stage focused on extracting and grasping topics, explicit and implicit information.

- 3) Post-reading includes activities the students must be written the summary of the text by using webbing technique as a guide, asking the students to use webbing the technique to present content orally to peers, tutors, or mentors and asking the students write guide or test question based on team word webbing.

Because the teacher in the process of applying treatment of team word webbing the teacher follows these three stages, so the process of applied the treatment go well and this research is **accepted** because suitable with the theory in Chapter II. It is certain that team word webbing technique can make the students reading comprehension better than before.

In this research, the researcher took 34 students as sample that were investigated by using test as instrument. And the researcher using t-test in analyzing data. To obtain the data, the researcher used two data in test, there are: pre-test and post-test. T obtained valued which is gotten by researcher using t-test formula is 18,23. So that 18,23 is the value describe the degree of effectiveness of treatment which is given by the researcher to the students as sample. In other word, 18,23 is the value of the effectiveness degree of treatment or of using team word webbing to the students' reading comprehension of the tenth grade at Senior High School 1 Galis.

Consistently main purpose of this research wants to observe the result of the treatment which is done by researcher. To know t obtained value 18,23

is higher or lower, the researcher must be compared that value with t-table value.

The researcher must be calculating the number of df (degree of freedom by formula $df = N - 1$, so we can calculate with $34 - 1 = 33$, and 33 is df of this research. Based on the table, the t-table of $df = 33$ with significance level 5% is 2,035. And based on the data analysis in the previous explanation, it is showed the data **higher** than the value of t table with the result is $18,23 > 2,035$.

And suitable with the problem study of this research, the students taught by using team word webbing get the **better** in their reading comprehension of the tenth grade at Senior High School 1 Galis. Because based on the data exposure at the previous point, the post-test score is higher than pre-test score of the students as sample of the tenth grade at Senior High School 1 Galis. In this case, alternative hypothesis is **accepted** and null hypothesis is rejected, because the result of research significance of correct is 5%.

So, based on the data above, team word webbing makes the better reading comprehension for the students of the tenth grade at Senior High School 1 Galis to make their reading comprehension be better than before. Team word webbing has advantages in teaching and learning process. The general advantage of team word webbing that can increase motivate of the students and make the students active interaction with each other students because, in team word webbing technique the students must work together.⁸ By using team word webbing the students do not feel bored and enthusiastic to

⁸ Hermita, "Using Team Word Webbing To Increase Students' Reading Comprehension At First Grade Of SMA Negeri 14 Makassar" A Thesis, (Makassar: Alauddin State Islamic University of Makassar, 2017), 17

follow reading comprehension activities in the classroom with this technique. The students do not feel lazy to read the text because they have a new technique to understanding the meaning of the text. And the last, the students not having any trouble or difficult of has limited vocabulary because they work in teamwork, and they can ask to each other.