http://infor.seaninstitute.org/index.php
JURNAL SCIENTIA, Volume 11 No 1, Agustus 2022 ISSN 2302-0059

THE EFFECT OF USING THE HERRINGBONE AND SEMANTIC MAPPING TECHNIQUES ON STUDENTS' READING COMPREHENSION SKILLS AT SMA YADIKA TORGANDA

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Article Info

Received: 30/06/2022
Revised: 20/07/2022
Accepted: 22/07/2022

Abstract

This research presents a research report on the use of Herringbone Technique and Semantic Mapping Technique for students' reading comprehension skills at SMA YADIKA Torganda. The objective is to find out the effect of using the Herringbone Technique and Semantic Mapping Technique on students' reading comprehension skills. It was by using classroom action research. The subjects of this study were grade X students of SMA YADIKA Torganda. In this study, the writers took 90 students of SMA YADIKA Torganda as the sample. They were divided into three groups. The first and the second groups are (Experimental Groups). They were taught by using Herringbone Technique and Semantic Mapping Technique in reading recount text, while the third group (Control Group) was taught without using Herringbone Technique and Semantic Mapping Technique. The technique for data analysis is quantitative research. In analyzing the data the mean of the students' score for pre-test in experimental group one (Herringbone Technique) is 59,16 the mean of the students' score for post-test in experimental group one is 91,83. The mean of students' scores for pre-test in experimental group two (Semantic Mapping Technique) is 45 the mean of the students' score for post-test in experimental group two is 69,26. The mean for pre-test in the control group is 46,66 and the mean for post-test in the control group is 56,16. The conclusion is that the use of the Herringbone Technique and Semantic Mapping Technique significantly affect on students' reading comprehension skills. The Herringbone technique is the most effective one in teaching recount text than the Semantic Mapping Technique It is suggested that teachers should apply this technique as one technique to improve students' comprehension in reading recount text.

Keywords: Herrringbone Technique, Semantic Mapping Technique, students' reading comprehension.

1. INTRODUCTION

Language is a means of communication to convey and deliver thoughts, ideas, concepts, and feelings. Every country has its own language by which everyone communicates with all people in the world. They may face some difficulties; however, one of them is different language. To solve the problem, it is necessary to understand a foreign language, especially English as an international language as an international language, it plays an important role in many aspects of life such as education, economics, technology and international relationship. Besides, English is also very important for transferring technology, researching, and career opportunities in the public places, that is why English should be learned by all people in the world as a key to facing the globalization era.

The basic skills in English divided into two types, they are receptive skills and productive skills (Harmer, 1991:265). Listening and reading are receptive skills, and writing and speaking are productive skills. These skills are usually considered as an integrated system because they support each other in order to make the learning successful. From the explanation above, both skills are very

important, but reading is a very crucial one that must be learned by the students. In reading, students can learn anything such as information about science, society, health, technology and so on. Reading is a means of language acquisition of communication and information sharing of ideas. Like all languages, it is a complex interaction between the text and the reader. Based on Hasibuan, n.d. (2007:115), reading is more than merely referring to the activity of pronouncing the printed material or following each line of written page. It involves various and mixed activities; it can be said that reading is ways of learning for students to enrich their ability and knowledge because reading is process of deriving meaning. From the opinion, it can be concluded that reading is a process interaction between the reader and the writer to transmit what the writer wanted to say in the text. In reading, the reader should understand the text to get the point from the text, in other words, reading is a process that make the students or the readers easy to get the writer's idea.

Reading is one of the ultimate skills that should be mastered because of some crucial reasons. Harmer (2007) states that reading is useful to get information, knowledge and values. Through reading, the learners will get much information about things that happen surround them and also get involved in many aspects of life such as science, technology, business, politics, as well as in sociocultural and educational. In addition, reading skill can entertain the learners because it is not only done for academic purpose, but it can help them to refresh their mind. In other words, reading is very essential for the learners.

Considering the importance of reading skill in language learning as discussed above, the Education Ministry of Indonesia include reading as the one of important skills in Curriculum 2013. Based on this curriculum, the basic competence of reading at senior high school is a skill to comprehend and understand the meaning of the text. At senior high school, there are twelve genres of texts that are learned by the students: procedure, descriptive, recount, narrative, report, news item, analytical exposition, hortatory exposition, spoof, explanation, discussion and review. In English subject, text book is used to serve students' need about language skill. The student must have capability related to four following skills; listening, speaking, reading and writing. The relationship of those skill is very closed because they can't be essentially separated each other (Sitompul, et al 2019) .

When the writer was doing observation at tenth grade of SMA YADIKA Torganda and gave some tests about recount text, she found that 50% of students got score under 60. The students may have problems in understanding passages. It is the teacher's responsibility to minimize the students' failures by choosing the appropriate technique in teaching reading so that the students can understand what they read. By applying appropriate teaching technique in teaching and learning process, the writer hopes it can help the students to improve the students' reading comprehension skill. Because of that problem, the writer wants to try techniques to improve the students' reading comprehension skill. Based on the reason above, the writer took a title of this research "The effect of using Herringbone Technique and Semantic Mapping Technique for students' reading comprehension skill at SMA YADIKA Torganda".

Based on the objectives of the research can be elaborate obviously to know the effect of using Herringbone Technique (HT) and Semantic Mapping (SM) Technique for students' reading comprehension skill at SMA YADIKA Torganda. Which is described as follows:

1. To identify the effect of the Herringbone Technique (HT) for students' reading comprehension skill.
2. To identify the effect of the Semantic Mapping Technique for students' reading comprehension skill.
3. To find out which technique is the most effective one in teaching reading comprehension.

The researchers limited the study on the effect of Herringbone Technique and Semantic Mapping Technique for students' reading comprehension skill which is applied in the tenth-grade students of SMA YADIKA Torganda at class IPA 1 (30 students), IPA 3 (30 Students),

IPA 5 (30 students). IPA 1 and IPA 3 as the experimental classes and IPA 5 as the control class. The focus of this research is recount text.

The result of the study would be significantly enriching the theory of teaching reading comprehension, to get new perspective in teaching reading techniques Practically. This study would be useful, the students would be more motivated in teaching learning process in reading comprehension. Teachers will be enriched in teaching reading comprehension technique for other researcher, they will be inspired to do further research on teaching technique.

2. Literature Review

2.3 Herringbone Technique

According to Thaler (2008:88), a useful technique for analyzing a single idea or text is the Herringbone Technique, so named because it resembles a fish skeleton. Herringbone Technique consists of a short graphic organizer and it is a concrete way of helping English learners to find the comprehensive idea in a paragraph or passage. The students answer the questions listed in the fishbone graphic organizer. This leads to the synthesis of all the information in one newly created sentence, which becomes the main idea statement.

The herringbone technique was introduced first by Tierney (1980). They say herringbone technique is a structured outlining procedure to obtain important information from a text which is read by using six basic comprehension questions (who, what, when, where, why and how). All answers are put on a provide fishbone pattern. After getting information of the text through answering those questions, the students create a topic sentence of the text. During doing the task, they work in pair in sharing their ideas. It will make the students easier to do the reading comprehension task. They add that the herringbone technique is intended to use with students in the fourth through twelve grade levels.

The herringbone pattern seems like a fishbone pattern. There are six reading comprehension questions in that bone (who, what, when, why, how and where). The explanation about the pattern will be discussed as follow:

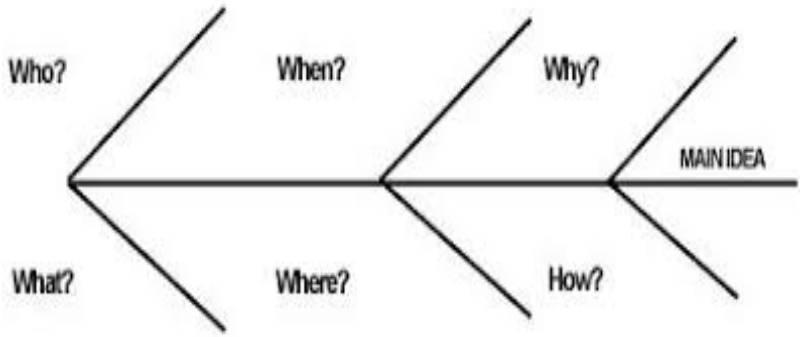

Figure 1 Herringbone pattern
(Source: Bouchard, 2005: 56)

Instructions of Using Herringbone Technique

1. Select a text for students to read.
2. Draw a diagram of the herringbone on the board or overhead. (You can also use a copy of the activity sheet)
3. Discuss how the smaller bones (details) are attached to the backbone (main idea) of the fish, which serves as the foundation. Then explain how they all work together to provide structure (comprehension) to the whole body (text)
4. Explain to students that they will be asked to look for information that answers the following questions:
   1) Who is the text talking about?

2) What did they do?
3) When did they do it?
4) Where did they do it?
5) How did they do it?
6) Why did they do it?

5. Allow time for students to read the text.
6. Give them copies of the diagram and ask them to record the answers to the questions on it. This can be done as a whole class discussion activity.
7. Show students how the information is organized around a main idea.
8. Using the information on the diagram, students formulate a main idea. The main idea is written on the diagram.
9. After the students learn the procedure, they can complete the diagram on their own. This can then be used as a basis for comparison and class discussion. It can also serve as a springboard to writing.
10. The strategy can be reversed and students can first formulate the main idea and then identify the supporting details (Bouchard, 2005: 54-55)
11. Give them copies of the diagram and ask them to record the answers to the questions on it. This can be done as a whole class discussion activity.
12. Show students how the information is organized around a main idea.
13. Using the information on the diagram, students formulate a main idea. The main idea is written on the diagram.
14. After the students learn the procedure, they can complete the diagram on their own. This can then be used as a basis for comparison and class discussion. It can also serve as a springboard to writing.
15. The strategy can be reversed and students can first formulate the main idea and then identify the supporting details (Bouchard, 2005: 54-55).

Advantages and Disadvantages of Herringbone Technique

According to Suriani (2013:5) there are some advantages of Herringbone Technique, they are: (1) The students will be more active in the class especially in reading. When they do the steps of Herringbone Technique in reading, they will have activities that make them active in the class. (2). Herringbone Technique also makes the students enthusiastic in reading a text, because they just focus on the simple question. (3). In discussion process the students can share the information of the text that they have already read. (4). The activities in reading make the students fresh and out of boring reading. (5). Herringbone Technique activities makes the students are easier to find main idea of the text. An advantage of the Herringbone Technique is to help the students for encoding the information in a manner that enhances their ability to answer essay questions. Herringbone Technique also helps the students spend a fewtimes while they are reading the text. So, the students will not get bored when they read recount text.

There are disadvantages of Herringbone Technique (1) when students learn material with the help of graphic representation, note-taking will be decreased. As a result, the lack of a comprehensive guide those students can refer to when revising material may affect their performance. (2) Impact on feedback. Some instructors find creating an answer key for a graphic organizer to be time-consuming. They use organizers to encouraged discussion but do not correct each student's organizer upon completion: as a result, student may miss out on receiving valuable feedback (Nikolai in http://www.ehow.com/facts_5522538_advantagesdisadvantages-graphic-organizer.htm retrieved on January 13th 2020)

So, disadvantages of Herringbone is when students learn material with the help of graphic representations, note-taking will be decreased. As a result, thelack of a comprehensive guide those students can refer to when revising material may affect their performance.

2.2. Semantic Mapping Technique

Semantic mapping is a form of graphic organizer, lead learners to design a visual representation of relationship among words, meanings and images. This means semantic mapping is a simple technique that can explain the topic of the text with graphic organizer. ideas relate to each other. It means, map can help students to improve their reading comprehension without difficulty, using the map students can easy to finding the main idea, or something important in the text.

In other definition about semantic mapping an excellent strategy to help students engage in higher-order thinking. Students focus on some of the core regulators that divide the main idea patters follow using semantic mapping. Semantic mapping, they state semantic mapping is closely related to reading comprehension can helps students not only focus on keyword but also text structure, it can help student's develop prior knowledge by looking at the relationship in a given topic.

From the previous statement semantic mapping can be describe as, the writer conclude mapping is a learning strategy which has the form of a diagram, a graphic that describes the word called the subject or main idea by writing sub-sub ideas that explained the subject. Semantic mapping also easy including teaching and improving students reading comprehension. The student can understand the element of the text.

The Steps of Semantic Mapping

According to Zaid (1995:9), the phases of semantic mapping are explained below:

a. Introducing the topic
   The teacher studies a unit in the syllabus and determines whether or not semantic mapping can be useful. The teacher announces the topic of the unit by drawing a large oval on the board. He states that some teachers display a picture relating to the topic to stimulate students' thoughts and to get the brainstorming procedure.
b. Brainstorming
   The teacher draws a blank map which consists of some blank ovals on the board and provides the students with a reading passage. Furthermore, the teacher asks the students to find some information in the passage that are appropriate to be filled into the blank map.
c. Categorization
   The teacher does his best to encourage students to see relationships among their ideas in order to form category cluster.
d. Personalizing the map
   Each student makes a copy of the blank map and complete it by using information found in the passage.
e. Post-assignment synthesis
   The last part of the class period is used to record students' suggestions from their personal maps to the board version of the map made by the teacher. The discussion will probably be the centre on the amount of information acquired from the reading.

The Advantages of Semantic Mapping

Semantic Mapping technique has some advantages, such as:

a. Semantic mapping is interactive
   It is interactive, because in drafting the map, students work cooperatively in group. Therefore, they can interact and share their ideas one another. Furthermore, in semantic mapping, there is also an interaction between the students and the teacher in deciding the final map. Thus, it can be concluded that there is not only interaction between student and student, but also between students and the teacher.
b. Semantic mapping can attract students' attention and interest
   As this strategy is new for the students, they are expected to be interested in following the process of reading comprehension seriously, especially in completing the diagrammatic maps which became their own creations. In learning reading, it is important for the students to make an effort

and show their interest. When the task does not involve enough effort, it can cause the students become bored and may not pay attention and enthusiasm in the teaching learning process. Therefore, semantic mapping as an effective and enjoyable strategy can be used as the students require more effort. Thus, the students can avoid the boring situation caused by a common or traditional technique which is usually applied by the teacher in the classroom.

c. Semantic mapping is helpful

Semantic mapping can be a helpful reference for students to use in sharing and clarifying confusing points as they are reading. It is because they can share their ideas in group, so that they can ask the other members of their group about some information found in the text which is not clear to them. Furthermore, they also can get the feedback from the teacher in deciding the final map, so that in the last step, they can ask the teacher about the information that they still do not understand. In addition, semantic mapping can also help the teacher to get students not only focus on the details of the text but also on the whole text. In other words, it can help the students to comprehend the whole text as well as the detail.

The Disadvantage of Semantic Mapping

Creating a map is time consuming. To overcome the disadvantage of creating the map, the researcher needed to draw the basic shapes of the map for the students. Therefore, the students did not have to spend too much time in creating the map, because the students were just invited to fill in the blank squares.

3. RESULT AND DISCUSSION

The following are the result of the pre-test and post-test of experimental groups. The function of pre-test is to know the mean score of experimental groups before receiving the treatment and the function of post-test is to know the mean score of experimental groups after receiving the treatment in order to know how significant The Herringbone Technique and Semantic Mapping Technique in teaching reading comprehension.

3.1 **Data Requirement**

Table 1. The scores of the Pre-test and Post-test of Experimental Group (Herringbone Technique)

No	Students' Initial Name	Pre- test	Post-test
1	AS	60	95
2	AFG	75	95
3	AN	55	85
4	AH	75	90
5	DGP	65	80
6	DAG	60	90
7	DL	55	85
8	ENM	80	100
9	FBR	55	100
10	FN	20	100
11	FS	60	95
12	GS	65	100
21	RPS	55	85
22	RPT	65	100
23	RP	70	95
24	SBS	65	100
25	SLM	65	90
26	VPG	60	95
27	YFS	55	85
28	YSD	70	70

29	YM	40	80
30	YDS	50	90
	Total (Σ)	1775	2755
	Mean	59.16666667	91.83333333

From the table above, it is shown that the total of pre-test of experimental group (Herringbone Technique) is 1775 and total score of post-test is 2755. The mean score of pre-test is 59.16 and the mean score of post-test is 91.83. There is a significant different score both pre-test and post-test of experimental group.

Table 2. The scores of the Pre-test and Post-test of Experimental Group (Semantic Mapping Technique)

No	Students' Initial Name	Pre-test	Post-test
1	AS	35	60
2	AP	65	80
3	AT	40	60
4	ATP	35	70
5	DS	30	60
6	DG	25	65
7	DOR	70	70
8	EM	55	85
9	ES	25	80
10	HS	35	70
11	HRM	85	60
12	IM	20	75
21	NPS	80	60
22	NCB	45	65
23	NS	40	80
24	NPM	30	60
25	SG	35	65
26	SH	35	70
27	SR	65	80
28	SUT	30	75
29	SDH	40	65
30	YCS	40	70
	Total (Σ)	1350	2075
	Mean	45	69,16666667

From the table above, it is shown that the total of pre-test of experimental group (Semantic Mapping Technique) is 1350 and total score of post-test is 2075. The mean score of pre-test is 45 and the mean score of post-test is 69.16. There is a significant different score both pre-test and post-test of experimental group.

The following are the results of the pre-test and post-test of control group. It was taken by giving the same test both pre-test and post-test. The function of pre-test is to know the mean score of the control group before receiving the treatment and post-test is to know the mean score of the control group after receiving the treatment with conventional technique.

Table 3. The scores of the Pre-test and Post-test of Control Group

No	Students' Initial Name	Pre-test	Post-test
1	ASD	45	55
2	AMN	55	50
3	AS	50	60
4	DS	30	40
5	DTH	55	70
6	DWM	60	70
7	ET	45	50
8	FAN	30	55
9	FAS	35	30
10	HA	45	60
11	IF	60	70
12	IDN	25	45
21	RSS	60	60
22	RKS	30	40
23	RLS	30	40
24	RH	70	80
25	RTBN	55	65
26	SA	25	45
27	SW	50	55
28	SLN	50	55
29	SR	55	60
30	TN	60	65
	Total (Σ)	1400	1685
	Mean	46.666667	56.1666667

From the table above, it is shown that the total score of pre-test control group is 1400 and the total score of post-test is 1685. The mean score of pre-test is 46.66 and the mean score of post-test is 56.16. The mean score of pre-test and post-test of control group is different but it is not significant.

After getting the data, the data will be analyzed and compared in order to get the outcome of this study as the way to answer the hypothesis of this study. All the data will be analyzed as the following.

Testing the Validity of the Test

The test is taken from *SPM Bahasa Inggris untuk SMA "Siap Tuntas menghadapi UN"* Each questions as according to the curriculum. Every item for the test is valid because had been used in others school.

Testing the Reliability of the Test

Reliability is one of characteristic of good test. It refers to the consistency of the measurement. So to find out the reliability, it is needed the students' score of try out in reading text. The following is the students' score of try out in reading comprehension.

Table 3.4 The Score of the Reliability Class

No	Students' Initial Name	SCORE X	X^2
1	ASMS	7	49
2	AT	13	169
3	AP	8	64
4	AA	7	49
5	DPP	6	36
6	DA	5	25
7	DPT	14	196
8	EA	11	121
9	ED	5	25
10	HP	7	49
11	HWG	17	289
12	IM	4	16
21	NPL	16	256
22	NCW	9	81
23	NL	8	64
24	NA	6	36
25	SA	7	49
26	SG	7	49
27	ST	13	169
28	ZA	6	36
29	CN	8	64
30	EP	8	64
	Total	270	2838
	Mean	9	

After getting the scores of students' reading comprehension, it is important to find mean, standard deviation before calculating the reliability of the test.

Mean

To find out the mean, the writer used this formula:

$$M = \frac{\sum x}{N}$$

Where: $\sum x$: total score

N : total of students

$$M = \frac{\sum x}{N}$$

$$M = \frac{270}{30}$$

$$M = 9$$

3.1.4 Standard Deviation

The formula to obtain the standard deviation is as follow:

$$S^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N}$$

$$S^2 = \frac{2838 - \frac{72900}{30}}{30}$$

$$S^2 = 13.6$$

The reliability can be calculated as the following:

$$KR_{21}(r) = \frac{K}{K-1}\left(1 - \frac{M(K-M)}{KS^2}\right)$$

$$= \frac{20}{20-1}\left(1 - \frac{9(20-9)}{20 \times 13.6}\right)$$

$$= \frac{20}{19}\left(1 - \frac{9(20-9)}{20 \times 13.6}\right)$$

$$= 1.05\left(1 - \frac{9\ (11)}{272}\right)$$

$$= 1.05\left(1 - \frac{99)}{272}\right)$$

$$= 1.05(1 - 0.363970588)$$

= 1.05 (0.636029412)

=0.66

From the calculation above, the reliability of the test is 0,66. The following is the range of reliability based on *Arikunto's statement*.

0.00– 0.20 = the reliability is very low
0.21 – 0.40 = the reliability is low
0.41 – 0.60 = the reliability is fair
0.61 – 0.80 = the reliability is high
0.81- above = the reliability is very high

From the analysis by using formula, the result of reliability is 0,66. It can be concluded that the reliability of the test is high, so the test used in this research is reliable.

Testing the Hypothesis

In testing hypothesis the formula of T-test and distribution table of the score are applied. These are used to see whether the hypothesis is accepted or not. The following table is the scores of pre-test and post-test of experimental groups.

Table 3.5 Calculation of the Experimental Group (Herringbone Technique)

No	Students' Initial Name	Pre-test (X1)	Post-test (X2)	Deviation (X2-X1)	D^2
1	ABS	60	95	35	1225
2	AAG	75	95	20	400
3	AP	55	85	30	900
4	AN	75	90	15	225
5	DF	65	80	15	225
6	DA	60	90	30	900
7	DP	55	85	30	900
8	EAS	80	100	20	400

9	FSB	55	100	45	2025
10	FH	20	100	80	6400
11	YA	60	95	35	1225
12	GNKS	65	100	35	1225
21	RRAP	55	85	30	900
22	RST	65	100	35	1225
23	RP	70	95	25	625
24	SSH	65	100	35	1225
25	SVP	65	90	25	625
26	VAP	60	95	35	1225
27	YAJS	55	85	30	900
28	YPG	70	70	0	0
29	YAS	40	80	40	1600
30	YP	50	90	40	1600
		1775	2755	990	3890
	Total (∑x)				0
		59.166 66667	91.8333 3333	33	
	Mean (∑x)/n				

From the table above, the mean score of experimental group (HerringboneTechnique) is calculated as the following:

$$Mx_1 = \frac{\sum x}{N}$$

$$Mx_1 = \frac{990}{30}$$

$$Mx_1 = 33$$

The deviation square of experimental group is calculated as follows:

$$dx_1^{\,2} = \sum x^2 - \frac{(\sum x)^2}{N}$$

$$dx_1^{\,2} = 38900 - \frac{(990)^2}{30}$$

$$dx_1^{\,2} = 38900 - \frac{(980100)}{30}$$

$$dx_1^{\,2} = 38900 - 32670$$

$$dx_1^{\,2} = 6230$$

Table 3.6 Calculation of the Experimental Group (Semantic Mapping Technique)

No	Students' Initial Name	Pre-test (X1)	Post-test (X2)	Deviation (X2-X1)	D^2
1	ASMS	35	60	25	625
2	AT	65	80	15	225
3	AP	40	60	20	400
4	AA	35	70	35	1225
5	DPP	30	60	30	900
6	DA	25	65	40	1600
7	DPT	70	70	0	0

8	EA	55	85	30	900
9	ED	25	80	55	3025
10	HP	35	70	35	1225
11	HWG	85	60	-25	625
12	IM	20	75	55	3025
21	NPL	80	60	-20	400
22	NCW	45	65	20	400
23	NL	40	80	40	1600
24	NA	30	60	30	900
25	SA	35	65	30	900
26	SG	35	70	35	1225
27	ST	65	80	15	225
28	ZA	30	75	45	2025
29	CN	40	65	25	625
30	EP	40	70	30	900
	Total (∑x)	1350	2075	725	29575
	Mean (∑x)/n	45	69,16666667	24.16666667	

$$dx_2{}^2 = \sum x^2 - \frac{(\sum x)^2}{N}$$

From the table above, the mean score of experimental group (Semantic Mapping Technique) is calculated as the following:

$$Mx_2 = \frac{\sum x}{N} \qquad dx^2 = 29575 - \frac{(725)^2}{30}$$

$$Mx_2 = \frac{725}{30} \qquad dx_2{}^2 = 29575 - \frac{(525625)}{30}$$

$$Mx_2 = 24.16666667 \qquad dx_2{}^2 = 29575 - 17520.83333$$

$$dx_2{}^2 = 12054.1667$$

The following table is the scores of pre-test and post-test of control group

Table 3.7 Calculation of the Control Group

No	Students' Initial Name	Pre-test (Y1)	Post-test (Y2)	Deviation (Y2-Y1)	D^2
1	ADS	45	55	10	100
2	ALM	55	50	-5	25
3	AS	50	60	10	100
4	DS	30	40	10	100
5	DP	55	70	15	225
6	DW	60	70	10	100
7	EY	45	50	5	25
8	FAH	30	55	25	225
9	FAA	35	30	-5	25
10	HA	45	60	15	225
11	IDI	60	70	10	100

12	IP	25	45	20	400
21	RPR	60	60	0	0
22	RS	30	40	10	100
23	RO	30	40	10	100
24	RA	70	80	10	100
25	RW	55	65	5	25
26	SA	25	45	15	225
27	SH	50	55	5	25
28	SL	50	55	5	25
29	SR	55	60	5	25
30	THL	60	65	5	25
	Total (∑y)	1400	1685	275	3525
	Mean (∑y)/n	46.666667	56.1666667	9,166666667	

From the table above, the mean score control group can be calculated as follows:

$$My = \frac{\sum y}{N}$$

$$My = \frac{275}{30}$$

$$My = 9.16666667$$

The deviation square of experimental group (Herringbone Technique) is calculated as follows:

$$dy^2 = \sum y^2 - \frac{(\sum y)^2}{N}$$

$$dy^2 = 3525 - \frac{(275)^2}{30}$$

$$dy^2 = 3525 - \frac{(75625)}{30}$$

$$dy^2 = 3525 - 2520.855555$$

$$dy^2 = 1004.144445$$

To find out whether that applying Herringbone Technique effect the students' reading comprehension skill significantly, t-test can be used as the formula. The T-test was calculated as the following:

$$t = \frac{Mx_1 - My}{\sqrt{\left(\frac{dx_1^{\,2} + dy^2}{(Nx_1 + Ny) - 2}\right)\left(\frac{1}{Nx_1} + \frac{1}{Ny}\right)}}$$

$$t = \frac{33 - 9.16666667}{\sqrt{\left(\frac{6230 + 1004.144445}{(30 + 30) - 2}\right)\left(\frac{1}{30} + \frac{1}{30}\right)}}$$

$$t = \frac{23.83333333}{\sqrt{\left(\frac{7234.144445}{58}\right)\left(\frac{2}{30}\right)}}$$

$$t = \frac{23.833333333}{\sqrt{(124.7266284)(0.066666667)}}$$

$$t = \frac{23.833333333}{\sqrt{8.315198602}}$$

$$t = \frac{23.833333333}{2.883593}$$

$$t = 8.26$$

To prove this hypothesis, the writer uses critical value of students distribution (t) at the level of significance: 0,05 with N table = 58

$$(df) = Nx + Ny - 2$$

$$(df) = 30 + 30 - 2$$

$$(df) = 58$$

The result shows that $t_{observe} > t_{table}$ (8,26> 1.67166) at the level of significance 0,05 for two tail and degree of freedom (df) = 58. It can be concluded that 'there is significant effect of using Herringbone technique on students' reading comprehension skill. It is really true and accepted in this research. It means alternative hypothesis (Ha) is accepted.

To find out whether that applying Semantic Mapping technique effect the students' reading comprehension skill significantly, t-test can be used as the formula. The T-test was calculated as the following:

$$t = \frac{Mx_2 - My}{\sqrt{\left(\frac{dx_2{}^2 + dy^2}{(Nx_2 + Ny) - 2}\right)\left(\frac{1}{Nx_2} + \frac{1}{Ny}\right)}}$$

$$t = \frac{24.16 - 9.16666667}{\sqrt{\left(\frac{12054.16667 + 1004.144445}{(30 + 30) - 2}\right)\left(\frac{1}{30} + \frac{1}{30}\right)}}$$

$$t = \frac{14.99333333}{\sqrt{\left(\frac{13058.31112}{58}\right)\left(\frac{2}{30}\right)}}$$

$$t = \frac{15}{\sqrt{(225.1432952)(0.06)}}$$

$$t = \frac{15}{\sqrt{13.5085977}}$$

$$t = \frac{15}{3.67540443}$$

$$t = 4.08$$

To prove this hypothesis, the writer uses critical value of students distribution (t) at the level of significance: 0,05 with N table = 58

$$(df) = Nx + Ny - 2$$

$$(df) = 30 + 30 - 2$$

$$(df) = 58$$

The result shows that $t_{observe} > t_{table}$ (4.08 > 1.67155) at the level of significance 0,05 for two tail and degree of freedom (df) = 58. It can be concluded that 'there is significant effect of using Semantic Mapping Technique on students' reading comprehension skill. It is really true and accepted in this research. It means alternative hypothesis (Ha) is accepted.

4. CONCLUSIONS

Based on the calculation, the result of the research shows that the mean score of the experimental group (Herringbone Technique) 33 is higher than control group 9.16. The difference was tested by using t-test formula. The result of t-test calculation shows that the $t_{observe}$ value (8,26) higher than t_{table} value (1.67155). The mean score of experimental group (Semantic Mapping Technique) 24.16 is higher than control group 9.16. The difference was tested by using t-test formula. The result of t-test calculation shows that the $t_{observe}$ value (4.08) higher than t_{table} value (1.67155).The mean score of the experimental group (Herringbone Technique) 33 is higher than the experimental group (Semantic Mapping Technique) 24.16. It can be concluded that there is a significant effect of applying Herringbone Technique and Semantic Mapping Technique on students' reading comprehension skill. While there is no significant improvement for control group that taught without Herringbone Technique and Semantic Mapping Technique. And also the score of students who taught by Herringbone Technique is higher than the students who taught by using Semantic Mapping Technique.

The result of test from teaching reading comprehension by using Herringbone Technique shows that students could understand the text. They feel enjoy and more active. It could be seen in the treatment process, the students are more interested when the researcher applies this technique. They fell enthusiastic and independent to find the main idea by answer WH question into the Herringbone diagram.Whereas in teaching reading comprehension by using Semantic Mapping Technique the students were active too but some of the students who have low in English, they were more depend to their friend who is smart in a group. It caused some of them could not really comprehend the text well. Then the researcher must work harder to manage the class it caused many time was wasted.The last group is the students which taught by Conventional Technique. In this class the students only learn by hearing the teacher explain what the recount text is and found some difficult words and answered the questions. The researcher found that the students felt bored with this technique and it was monotonous. In fact, Herringbone Technique can improve students' reading comprehension skill. When the teacher gave text to the students and asked them to read the text, they were able to understand the content of the text and the main idea of the text. The technique is also useful for study groups, focusing on efforts and good by proposing questions. It is line with the theory provided by Thaler (2008:88), a useful technique for analyzing a single idea or text is the Herringbone Technique, so named because it resembles a fish skeleton. Herringbone Technique consists of a short graphic organizer and it is a concrete way of helping English learners to find the comprehensive idea in a paragraph or passage. The students answer the questions listed in the fishbone graphic organizer. This leads to the synthesis of all the information in one newly created sentence, which becomes the main idea statement. Herringbone Technique helps students to encoding the information in a manner that enhances their ability to answer essay questions. Herringbone Technique also helps the students spend a few times while they are reading the text. So, the students will not get bored when they read recount text. Based on the explanation above, the Herringbone Technique is most effective one for the students on reading recount text comprehension than Semantic Mapping Technique and Conventional Technique.

ACKNOWLEDGMENT

special Honor to Professor Yinghuei Chen, from Asia University Taiwan for the contribution and guidance, that make him part of the team during the process of research.

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