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THE EFFECT OF ACTIVATING SCHEMATA IN PRE-READING ACTIVITY ON STUDENTS' READING COMPREHENSION AT MAN KOTO BARU PADANG PANJANG

Fajrilhuda Yuniko

fajrilhudayuniko@gmail.com

STIKES Syedza Saintika Padang

Abstract

This study was aimed to determine the extent of the effect of activating schemata in pre-reading activities on reading comprehension of the tenth class at MAN Koto Baru Padang Panjang. This research was an experimental study in which there were two groups given different treatments. The experimental group was taught by activating schemata in pre-reading activities while the control group was taught with conventional strategies or without activating schemata in pre-reading activities. Both groups were taught with the same material, teacher, and time allocation. To gather the research data, a reading comprehension test was used as an instrument. The findings of this study indicated that the score of the experimental group was better than the control group. It can be seen from the average score of the two groups; the average score of the experimental group was 67.88, while the average score of the control group was 60.00. The data were also analyzed by using statistical analysis. It was found that students ' scores taught by activating schemata in pre-reading activities and students' scores taught by using conventional strategies or without activating schemata in pre-reading activities had significant differences. The analysis of the t-formula showed that t-count (3.88) was higher than the t-table (2.00) with a significance level of 0.05. It showed that students taught by activating schemata in pre-reading activities had better reading comprehension skills than students taught using conventional strategies or without activating schemata in pre-reading activities in class X at MAN Koto Baru Padang Panjang.

Keywords: reading comprehension, activating schemata, conventional strategy

I. Introduction

There are four important skills that should be mastered by students when learning English. One of them is reading skill. By having a good competence in reading skill, the students can access and understand the information from the texts written in English. Although reading is an essential skill to be mastered, many students do not have enough capability to comprehend the English texts. Consequently, most of students at senior high school are uninterested in studying the reading skill. They might fail in final examination that almost all of the questions consist of reading sections.

Based on the researcher's experiences and also some interviews with teachers and some students at MAN Koto Baru Padang Panjang, it was found that many students did not have the right motivation to learn English. It was shown when they were asked to do reading exercise; they did it lazily. Furthermore, when the teacher checked the exercise, only a few of them could give the right answers, and not many of them were able to give reasons for the answers.

Moreover, based on the researcher observation, in general, the students at grade X.4 of MAN Koto Baru Padang Panjang cannot comprehend English text as what is expected. The fact showed that the students could not answer the questions well after reading the text. In the mid-semester test (January – June 2018) from thirty-nine students who followed the test, their scores were; seven students got 4, five students got 4,5, ten students got 5, four students got 5,5, ten other students got 6, and only 3 students who got 7. The average score was 5,22. Based on the conditions above, the researcher came to a conclusion there were some problems faced by the students in comprehending the text.

Firstly, it was caused by a lack of vocabulary. When a teacher gave them an English text and then asked them to read it, they seemed lazy to do it because they did not know the meaning of most of the words. Vocabulary indeed has a vital role in reading; however, it should not be an obstacle in comprehending a text. What the students thought was that they had a big problem in reading comprehension because of limited vocabulary, so that; they did not have the capability to do it. They would spend much time to read and understand it. Besides, they had to check the unfamiliar words in a dictionary more

often, and those activities made them bored. As a result, they would regard that reading was just time-consuming, and finally, they were not motivated in reading anymore.

Secondly, the problem was caused by the lack of knowledge of the students in the reading process. It means that they did not understand the process of building frameworks for connecting words to thought, connecting prior knowledge to the text, and the process of understanding and applying reading strategy. Even though their teacher had taught them the way to comprehend the text, they usually forgot to use it. They did not try to connect the words that they read to be meaningful thought. They just read word by word, not as a unity. They also forgot that to comprehend a text, they needed to make a good connection between the text and their background knowledge. As a result, the students usually fail to recall their background knowledge that they have already got about the text.

Thirdly, it was caused by reading materials or reading texts. Reading texts also have a contribution to students' reading comprehension, whether the students are interested or not in it because it will be seen from the reading process. It will be helpful for students if the teacher knows what text that the students like and also appropriate for them. Because if they feel that the text is suitable for them, whether in the difficulties of the words or in the way of the text explained, they will be motivated to do the reading process. In contrast, if the teacher gives a text that is not interesting and not appropriate with their capability, the students will feel lazy to do and put it away from them.

Lastly, another factor causing students' low reading comprehension was a teaching reading strategy. Here, a teacher as a motivator and facilitator of the students found difficulties in choosing an appropriate strategy in teaching reading. What he/she had already done was he/she just asked the students to read the text aloud one by one, just one or two sentences. Next, he/she asked the students to answer some questions related to the text. This strategy was not attractive to them. There was no pair work or group discussion in order to make the students more motivated to share out their ideas about the text. There was no discussion between the teacher and the students to solve students' problems in reading the text; the teacher just gave instruction, and

the students did all of the instructions by themselves. Besides, the teacher also forgot to activate the students' schemata before coming to reading activity, he/she directly asked the students to read the text without considering the students' schemata or the knowledge that the students already have.

After considering the problems above, teachers needed to prepare themselves with a meaningful activity enabling students to comprehend English texts. The teachers should choose a strategy where the students can be involved to read and comprehend English text. In this case, the researcher tried to solve the problem by activating the students' schemata in pre-reading activity, which was assumed to be able to improve students' reading comprehension. This kind of strategy helped the students to get a better comprehension of a text that they are reading. In order to activate the students' schemata, the researcher conducted three activities done in pre-reading; they were pictorial activator, questioning, and brainstorming.

II. Review of Related Literature

2.1 Schemata Theory in Reading Comprehension

Reading is sometimes regarded as a passive activity because in reading, a reader just reads a whole passage without involves his/her prior-knowledge; thus, this activity seems like the passive one. However, many studies have proven the reading itself is an active activity; the readers will not be able to comprehend a text if they do not involve their prior-knowledge while they are reading. For example, students comprehended texts whose contents matched the readers' content schemata more easily than texts based on less familiar content (Carrell 1981). In short, the activity that involves schemata is essential to be applied while reading.

Carrel (1983:556) states that the role of background knowledge in language comprehension has been formalized as schemata theory, which has as one of its fundamental tenets that text, any text, either spoken or written, does not by itself carry meaning. She added that the underlying assumption of schemata theory to the view of language comprehension is that the process of comprehending a text or the process of gaining a meaning is orinteractive activity between readers' background knowledge and the text that they read. Carrell and Eisterhold

(1983:556) say that a text just provides directions for readers as to how they should retrieve or construct meaning from their own, previously acquired knowledge. Based on those statements, the role of the text itself is only to provide directions for listeners or readers to regenerate meaning based on their background knowledge. Thus, in reading, the readers should have an interaction between their background knowledge and the text that they read.

In the reading process, two basics modes should be well known; they are called bottom-up and top-down processing. These two modes of processing information play an essential role in creating a meaning of what people hear and read. According to Carrel (1983:82),

> The incoming data evoke bottom-up processing; the features of the data enter the system through the best fitting, bottom level schemata. Schemata are hierarchically organized, from most general at the top to most specific at the bottom. As these bottom-level schemata converge into a higher level, more general schemata, these two become activated. Bottom-up processing is, therefore, called data-driven.

So in this step of processing information, the listeners or readers collect all information or input to be organized by considering the general and the specific information; in other words, this process is known as data-driven. The next process is called top-down. Carrel (1983:82) argues that "top-down processing occurs as the system searches the input for confirmation of predictions made based on higher-order, general schemata." This process helps readers to select or to resolve ambiguities between possible alternative interpretations of the incoming data or the data that have been collected in the bottom-up processing. This kind of processing is called conceptually-driven. In short, these two processes should be occurred simultaneously to get the meaning of a text that is being read.

In summary, involving schemata or background knowledge in reading is crucial to gain meaning or to completely comprehend a text because the text does not carry meaning without any contributions of the schemata or background knowledge. To gain the

meaning of the text, a reader has to follow two processes, which are known as bottom-up and top-down processing. These two modes of processing information will help the reader to get the meaning of the text.

2.2 Activating Schemata in Pre-Reading Activity

According to schemata theorists, all knowledge that a reader brings to the text is packaged into units called schemata. It proves schemata itself is an essential component in the reading process. Stott (2001) argues that schemata theory describes the process by which readers combine their background knowledge with the information in a text to comprehend that text. From the statement above, we can conclude that to get a better comprehension of a text, a reader has to consider schemata or background knowledge because the text does not carry meaning without the contribution of our schemata. However, we as a reader sometimes do not realize that the schemata will give an effect to our comprehension about the text.

As stated in the first paragraph, schemata are crucial in the reading process, so that we need to activate our schemata to gain a good comprehension of the text. Activating schemata can be done in pre-reading, the activities that are done before reading the text. Carrel (1988:248) says that pre-reading activities must accomplish both goals: building new background knowledge as well as activating existing knowledge. Based on what Carrel has stated, the pre-reading process will be very useful for readers in doing reading process because the main aim of the pre-reading activities is to help the readers activate their schemata that they already have and also help the readers gain new information or knowledge.

If a teacher wants to activate the students' schemata effectively, he/she must create appropriate activities that can help the students in activating their schemata. Here, several activities can be applied to activate the students' schemata:

a. Pictorial Activator

A teacher can use pictures to stimulate her/his students to express their ideas based on the pictures that are shown to them. The pictures will show the situation around and can give meaning or say something to

the viewer. By seeing the pictures, the students will be able to explore their imagination, and if they have done it, they will be quickly getting ideas about the text.

According to Tsai (2005), showing photos or pictures that are related to the content of a text will have the same function as a video. Here, he emphasizes that the picture is not just a single picture, but some pictures can guide readers to predict what the content of the text is about. By showing the pictures, it is hoped that the readers' schemata will be activated, whether it is the readers' existing schemata or new schemata. For instance, if a teacher wants to give a text of Cinderella, he/she can provide some pictures that are related to the story of Cinderella.

Besides, Porter (2007) says that pictures and other visual material can activate students' prior knowledge. By providing the students with pictures and other visual aids, it helps them to activate their schemata; it can be existing schemata or new schemata. This kind of activity will be helpful if it is applied at the pre-reading stage or before reading a text. She also illustrates that if a student has some scheme for fossils, a simple picture may serve to retrieve appropriate knowledge. Thus, a teacher may show a photograph of a fossil before the students read a science textbook chapter on fossils. In short, the pictures and other visual aids related to the content of a text which is being read are very beneficial in activating the students' schemata.

In order to be successful in activating the students' schemata, the teacher has to choose appropriate and exciting pictures. The pictures that will be used should be relevant to the students' interest, the content of a text, and the age of the students. Sutherland (1969) states that the most crucial aspect in providing pictures is that, the pictures are fun, the truly-self motivating visual aid which is capable of maintaining the students' interest and competition for their own sake. The most significant advantages of the pictures are that it can create a virtual situation for learners and strongly activate the students' schemata.

For example, when the teacher teaches a recount text, Barrack Obama Autobiography, before asking them to read the text, the teacher can show them the pictures related to Barrack Obama. This stage can activate the students' schemata by showing them the pictures of Barrack Obama and followed by some questions. It will make them more motivated and also help them to predict the content of the text.

b. Questioning

A reader's understanding of the text does not only depend on their ability, but also the contribution of other people. A teacher, in the process of teaching-learning, should be able to direct the students by questioning. According to Turner in Syofyan (2009), questions are as a teacher verbal behavior, that they can make the teachers find out something from their students' knowledge and also they can stimulate the students' thinking. In short, through questioning, the teacher can know what the students have acquired and also can activate their schemata.

The purpose of questioning is to make students focus their attention and concentration in order to activate their schemata. Tsai (2005) argues that the critical point is the close relation of them, the questions and the students' background knowledge, and set a stage for the link between related background knowledge and new information. In other words, we can say that the questions will guide the students to activate their schemata because the questions will be a bridge to connect the students' schemata with the text that they will read later on. If the teacher does it successfully, it will help the students in the reading process.

According to Nuttal (1982:128), the questions that can be used as guidance are as follow:

1. Yes/No Questions

   These questions need concise answers and do not require the students to compose full sentences

Example: Is she beautiful? (yes, she is

Alternative Questions

This kind of question gives students choices to answer the question.

Example: Is it a big or a small crocodile?

2. WH-Questions

These questions require simple answers. Where refers to a place, who refers to person, when refers to time, and what refers to things

3. How/Why Questions (open-ended questions)

These kinds of questions often require full sentence answers, and the answers are free constructed by the reader.

The teacher can choose a few of them as guiding questions in order to activate the students' schemata and guide them to comprehend the text.

For example, the students are going to read a passage about a woman's encounter with a bear while hiking in an American national park. Before asking them to read, we as a teacher can provide them some questions to activate their schemata, such as (a) Do bears live in the wild in your country? What kind of bears? (b) How would you feel if you met a bear while hiking? (c) What do you think we should do if we encounter a bear in the wild?. These kinds of questions can help the students in understanding the content of the text when they come to the reading activity itself.

c. Brainstorming

Brainstorming is a kind of activity that involves the human brain in memorizing things, events, and action which occurred or heard before. This activity will help students in activating their schemata because, in this activity, the students are asked to recall what they have known or all knowledge that they have. This kind of activity is usually done in pre-reading. According to Mikulecky (1990:18), brainstorming is a pre-reading plan intended to make readers aware of their prior knowledge about the topic to be read and to activate their

memory. It means that if the readers find problems on reading selected materials, they can do brainstorming in order to help them bring their prior knowledge to the topic which is being discussed.

Besides, Reiss (2005:85) states that brainstorming is a simple and effective strategy to introduce a new topic. It activates students' schemata and engages their interest. He also adds that background knowledge is crucial. It is fundamental to new learning. In other words, activating schemata is an essential teaching strategy. By doing that is a strategy, it will make a learning process becomes meaningful, awakens interest in the topic, and increase motivation.

Brainstorming can be conducted in a group or individually. Oluwadya (1992:12) emphasizes a group or individual brainstorming. These involve the use of leading questions to get the students thinking about the topics or ideas that are under focus. The questions can be written on a whiteboard, and each student is asked to think out answers to the questions. In this case, the teacher allows some minutes to let the students think.

Also, he adds that the goal of brainstorming is to see there are limitless solutions to the problems. It means that if the readers find a problem in reading a text, they can do brainstorming in order to help them bring their schemata to the topic which is being discussed. Brainstorming aims to explore the ideas that might not usually be considered. In other words, brainstorming is a step in solving the problems in doing the reading process and encourages people to consider solutions that might not occur to them.

Furthermore, brainstorming can be used with every language proficiency level. It also provides the teacher with reliable feedback for estimating the students' conceptual and linguistic background about the topic. Providing schema or information on a reading selection is another way that the teacher can do to facilitate successful reading comprehension.

Providing information about the content of a reading selection before reading will provide them with opportunities to gain new knowledge as recall already existing knowledge. Gebhard (1987) argues that brainstorming consists of three procedures. Those are as follow:

1. Select a keyword, phrase, or picture of the text, which will be able to stimulate group discussion. Ask the students to make associations with the words, phrases, or pictures. For example, **tell anything that comes to your mind when you hear …….?**. The teacher records or writes down the responses on the board.

2. The students are asked to tell the reactions to the associations that they have made. It is a reflection step to provide additional ideas. The question can be, **what do you think of …….. ? or can you tell me more about ……. ?.** These questions can be used for sharing ideas.

3. Ask the students to give new associations that have come to mind during the discussion and write them on board as well. Besides, the teacher leads the students to reformulate their prior knowledge. For instance, **do you have any ideas about ……...?**

Those three procedures above show that the teacher can modify the steps in doing brainstorming, these kinds of steps; it depends on the teacher's need, and also the students' interest. To make it clear, here, there is an example of how to do brainstorming in a pre-reading activity. For instance, you are going to read a passage about a man's bad experience on a camping trip in the North of England. Before coming to the reading activity, we can do the

following activities: (a) Ask the students to share their ideas about the man problems that the man could have had when he was camping, then write down those ideas on the whiteboard. (b) Look at the title of the passage and then list the words that you think will appear in the passage. For example, title: "Our Terrible New Year," words that will be appeared in the passage, holiday, happy, drove, far, camped, beautiful, night, freezing, snow, morning, engine trouble, help, ran, ice, slipped, cut, disaster, etc.

From the explanation above, it can be concluded that schemata play an essential role in teaching reading comprehension. By activating the students' schemata, it will make them more understand about the text that they are being read and also help them gain more information about the text. Furthermore, this information is the storage that will provide them new schemata or background knowledge to the reading activities in the future. Besides, activating schemata also can attract students to read more materials because the more they read, the more they are interested in.

In this research, the researcher used these three activities; they were pictorial activator, questioning, and brainstorming as indicators to activate the students' schemata. It is hoped that these three activities can improve the students' reading comprehension, especially in monolog texts.

III. Method of the Research

The design of this research was *The Posttest-Only Control Group Design*. As stated by Gay and Airasian (2000:393), this design is the same as the Pretest-Posttest Control Group Design, except there is no pretest in *The Posttest-Only Control Group Design*. In this research design, the students were selected randomly by considering that they have the same ability, and the post test was given after the researcher gave different treatment to the two groups.

In order to know the effect of activating schemata in pre-reading activity on year tenth students' reading comprehension, the researcher used the

data of the post-test score to see whether the treatment given to the experimental class gave a significant contribution to the students' ability in comprehending a text. Gay and Airasian (2000:393) state that post-test scores are then compared to determine the effectiveness of the treatment. Creswell (2003:170) also adds that both groups, the experimental and control groups, are measured on the post test. It measured how significant the treatment that has been conducted.

Table 1. Design of the Research

The design of the research may be schematized as follow:

	Group	Independent Variables	Post-Test
R	E	X	O
R	C	Y	O

Explanation:

R: Randomly selected

E: Experimental group

C: Control group

X: Treatment of experimental group (activating schemata in pre-reading activity)

Y: Treatment of control Group (without activating schemata in pre-reading activity)

O: Post-Test Result of both experimental and control group

In this research, the experimental group was taught by activating schemata in pre-reading activity, and the control group was taught by applying conventional strategy. Even though these two groups were taught differently, the materials given, the length of the time, and the teacher were the same.

The population of this research was the year tenth students of Man Koto Baru Padang Panjang registered in the 2018/2019 academic year consisting of seven classes. They were X.1, X.2, X.3, X.4, X.5, X.6, and X.7. A reading comprehension test was administered to obtain the two parallel classes. Two classes with similar average reading comprehension tests were taken as samples. The distribution of the mean scores was as follow:

Table 2. The scores of reading comprehension test

The samples were taken by using a cluster sampling technique where the two parallel classes were randomly selected as an experimental group and a control group. This technique was used because the population consisted of classes which had similar characteristic and ability. Based on Gay and Airasian (2000:129) cluster sampling technique is used when the researcher draws a sample from the population of similar characteristics. Based on the result of the test above, the samples for this research were X.2 and X.4 because these two classes almost had similar ability; it could be shown from the average scores of the two classes. Moreover, in order to determine which group belonged to the control and experimental group, the researcher flipped a coin. Furthermore, it was found that X.2 belonged to the experimental group, and X.4 belonged to the control group.

The data of this research were students' reading comprehension test scores taken from the post test given. It was constructed in multiple-choice questions. The test consisted of 20 questions, and each question of the test had four possible options. In scoring the data, each correct item was five, and the false one was zero. So, the highest possible score that the students might get was 100, and the lowest one was 0. Arikunto (1999) states that multiple-choice tests are an excellent alternative test because it may represent the content of the material, and the teacher will be more objective in assessing students' tests.

Classes	Average Scores
X.1	67,63
X.2	61,15
X.3	63,25
X.4	60,92
X.5	64,45
X.6	55,37
X.7	57,45

The test was given after conducting treatment for eight meetings. The first meeting was held on September 21, and this research ended on October 31, then the post test was given on October 30. During the research, the two groups were taught using the same materials but different treatments. The experimental group was taught by activating schemata in pre-reading activity while the control group was taught through conventional strategy.

The post-test scores gained through the reading comprehension test, then, were analyzed with statistical analysis (t-formula) in identifying whether reading comprehension from the experimental group gave significant results compared with the control group. It was analyzed by using t-formula to see the result as follow (Gay, 1987):

$$t = \frac{x_1 - x_2}{\sqrt{\left(\frac{SS_1 + SS2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Explanation:

t: the value of t-calculated

X_1: mean of the experimental group

$X_{2:}$ mean of the control group

SS_1: the sum of squares of the experimental group

$SS_{2:\ the}$ sum of squares of the control group

$n_{1:}$ number of the experimental group

$n_{2:}$ number of the control group

After calculating the test score by using the t-formula, the result was finally found. If the valuable t-calculated is equal or less than t-table at the level of significance 0.05, it may be concluded that there is no difference between teaching reading comprehension through activating schemata in pre-reading activity and without activating schemata in a pre-reading activity.

If the valuable t-calculated is bigger than t-table at the level of significance 0.05, it may be concluded that there is a difference between teaching reading comprehension through activating schemata in pre-reading activity and without activating schemata in a pre-reading activity.

IV. Findings and Discussion

4.1 Findings

The post test was given after conducting treatment to both classes for eight meetings. The students who joined the post test for the experimental group were 40, and the control group was 39. The distribution of the scores for experimental was as follows:

Table 3. Post-test scores for the experimental group

Students' code	Experimental Group
	Scores
1	80
2	80
3	70
4	55
5	45

6	70
7	75
8	80
9	65
10	70
11	75
12	75
13	70
14	75
15	75
16	70
17	65
18	70
19	75
20	75
21	65
22	65
23	65
24	55
25	50
26	70
27	65
28	60
29	80
30	60
31	60
32	70
33	60
34	80
35	70
36	70
37	60
38	60
39	75
40	60
Total	2715
Average scores	67,88

Based on the result of the reading comprehension test, it was found that the highest score was 80, and the lowest score was 45. The average score for the experimental group was 67,88. The same post test was also given to the control group, and the result of the post test could be seen, as follow:

Table 4. Posttest score for the control group

Students' code	Control Group
	Scores
1	80
2	65
3	40
4	55
5	80
6	60
7	60
8	70
9	55
10	50
11	65
12	60
13	75
14	55
15	65
16	40
17	40
18	70
19	65
20	60
21	70
22	60
23	60
24	60
25	65
26	50
27	55
28	55
29	65

30	60
31	60
32	50
33	55
34	65
35	70
36	65
37	60
38	60
39	45
40	
Total	2340
Average score	60,00

Based on the result above, it was found that the highest score was 80, and the lowest score was 40. The average score for the control group was 60,00. In short, the two groups had the same highest score, but they were different in the lowest score. They were also different in the average scores; the experimental group was 67,88, while the control group was 60,00.

The data obtained from the post test were analyzed in order to see the effect of activating the students' schemata. The data were analyzed by using the t-formula proposed by Gay (1987). The mean scores were 67,88 for the experimental group and 60,00 for the control group. The scores were gained from:

Mean of Experimental Group :

$$\bar{x}_1 = \frac{\sum x_1}{n_1}$$

$$x_1 = \frac{2715}{40} = 67{,}88$$

Mean of Control Group :

$$\bar{x}_2 = \frac{\sum x_2}{n_2}$$

$$\bar{x}_2 = \frac{2340}{39} = 60$$

To know the more precise data of the students' scores both experimental and control group, the researcher classified them into a table:

Table 6. Calculation of post-test scores

Experimental Group		Control Group	
Class Interval	Frequency	Class Interval	Frequency
40 – 45	1	40 – 45	4
46 – 50	1	46 – 50	3
51 – 55	2	51 – 55	6
56 – 60	7	56 – 60	11
61 – 65	6	61 – 65	8
66 – 70	10	66 – 70	4
71 – 75	8	71 – 75	1
76 – 80	5	76 – 80	2
Total	40	Total	39

From the table above, it can be seen that both groups had the same highest score, which was 80. However, they were different in the distribution of the students who got that highest score, for the experimental group, 5 students got the highest score, and for the control group only 2 students who got that highest score. Besides, in the experimental group, the students mostly got the score in the interval 66 – 70, 10 students got the score. On the other hand, in the control group, the students mostly got the score in the interval 56 – 60, 11 students got that score. Moreover, the last thing that could be drawn from the table above was the lowest score for both groups. More students got the lowest score in the control group rather than in the experimental group. In the experimental group, there was only 1 student who got the lowest score, but in the control group, there were 4 students who got that lowest score. Based on the data above, it can be concluded that the students who were taught by activating schemata have better reading comprehension than the students' who were taught by conventional strategy.

From the post test, it was found that the mean score for the experimental group was 67,88, while for the control group was 60,00. Furthermore, for the sum of squares of the experimental group was 2844,37, and for the control group was 3500. Then, the data were calculated by using t-formula; it was found that the t-calculated was 3,88, which was higher than t-table (2,00).

It had been mentioned that t-calculated in this research was higher than the value of t-table. Therefore, the hypothesis that states "the students who were taught by activating schemata in pre-reading activity had better reading comprehension than the students who were taught by using the conventional strategy of year tenth students of MAN Koto Baru Padang Panjang" was accepted.

4.2 Discussion

Based on the result of hypothesis testing, the students who were taught by activating schemata in pre-reading activity had better reading comprehension than those students who are taught by the conventional one. Based on the researcher observation during teaching for eight meetings, it was found that the students who were not familiar with the topic of the text were challenging in the reading process. However, this kind of condition was rarely found in students who had been

familiar with the topic of the text. Besides, the students' who were taught by activating schemata in pre-reading were more motivated and interested in the teaching and learning process; they were more active than the students' who were not activated their schemata. This condition proves that activating the students' schemata is important before asking them to read the text.

The finding of this research supports some theories that are related to the role of schemata in reading comprehension. As stated in the second chapter, the role of activating schemata is vital in gaining excellent comprehension because a text does not carry meaning without the contribution of readers' schemata. Stott (2001) argues that schemata theory describes the process by which readers combine their background knowledge with the information in a text to comprehend that text. The existence of schemata in reading comprehension is very crucial. By having appropriate schemata with a text that is being read will help a reader to comprehend the text. This kind of theory is supported by the data of this research that showed the students who were taught by activating schemata have better reading comprehension than those students who were taught without activating schemata. In short, activating schemata at the pre-reading stage is essential to improve the readers' comprehension of the text that is being read.

Besides, the finding of this research also supports a number of previous studies. For instance, a research that was done by Pressley et al., in Strangman and Hall (1992), it was found that activating schemata through questioning was able to improve reading comprehension. It has been theorized that generating answers to questions facilitates deep processing and high-level knowledge construction, which in turn facilitates learning. Another research about activating schemata was also done by King (1994), it was found that the experimental evidence in L2 reading that schemata could play the part envisioned for it in theory. He gave an extensive list of studies, to which he refers the reader. The majority of studies he cited were successful in showing that the readers who are familiar with the content have a significant effect on their performance.

Based on the previous studies and also the research that was done by the

researcher, it proves that activating schemata is necessary for gaining better comprehension. In other words, teaching reading comprehension by activating the students' schemata in pre-reading activity gives a significant effect than without activating the students' schemata in the pre-reading activity.

V. Conclusion

Based on the findings, it can be concluded that the result of students' reading comprehension test through activating schemata in pre-reading activity was better than conventional strategy or without activating schemata in a pre-reading activity. This hypothesis can be accepted based on the average scores of the students in post test, which showed the significant difference between the two groups, where the mean score of the students in the experimental group was higher than in control group. Besides, it was also proven by using statistical analysis that teaching reading comprehension by activating schemata in pre-reading activity had a significant effect on students' reading comprehension. This fact can be proven from the data that showed that the value of t-calculated (3,88) was higher than the value of t-table (2,00). Based on the data, it can be concluded that the students who were taught by activating schemata in pre-reading activity had better reading comprehension than those students who were taught without activating schemata in pre-reading activity (conventional strategy).

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