A Survey at English Department of State University of Padang, 2010

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Abstract

This study is aimed at finding the relationship between knowledge of schemata and text comprehension. It was conducted at English Department of State University of Padang on the fifth semester in the academic year of 2009/2010. There were 38 students as the sample using cluster sampling technique. The instruments used were multiple choice tests. The quantitative data were analyzed by using simple correlation and regression. It was found that there is a relationship between knowledge of schemata and text comprehension. It means that someone who has good knowledge of schemata will have good text comprehension. The equation is \( \hat{Y} = 13.39 + 0.95X_1 \). Its correlation coefficient is 0.6962. The knowledge of schemata gives contribution 48.47\% to text comprehension. The findings can be beneficial for the teachers as a consideration that they can help students to activate their schemata in order to get good text comprehension.

Key words/phrases: knowledge of schemata, text comprehension

A. INTRODUCTION

English Literature and Language Education has become a program at English Department of State University of Padang (UNP). The vision of English Education Program is to prepare professional English teachers that are able to educate students and teach English sincerely in the name of Allah, and have good manner and relevant knowledge, have an ability to develop family, society, and country (Dikti, 2006).

Being professional teachers’ means being able to master four English skills, namely listening, speaking, reading and writing. Among these four English skills, reading skill is more important. Language learners pay special focus on reading. According to Brown (2001), there are two reasons for that. First, many English learners want reading as one of their important aims. Second, written texts provide pedagogical purposes. It is implied that reading is a way to get education. Reading makes someone know what happened and what is happening. By reading, someone can get and add knowledge, and know expert’s thought and opinion from various discipline. Besides, written texts can make someone smile, happy, or sad. As said by Brown (2001) “The written text confuses us and enlightens us, it depresses us and amuses us, it sickens us and heals us”. In other words, reading is a key to get knowledge and entertainment.

Unfortunately, based on the research done by Nugroho (2009), reading interest of our society is still low. The people around prefer watching TV to reading. As a result the people do not have time to read because they spend their time watching. It also gives impact to students’ reading interest. In addition, based on researcher’s observation as a lecturer at English Department of UNP and writer’s colleague’s report, reading skill of students was still low. They still faced many problems in understanding the written text.

Actually, comprehending the text needs supporting factors. In other words, if a learner has supporting factors, s/he will not get difficulties in comprehending the text well. Nunan (1993) states that reading can be defined as an activity that processes of decoding written symbols that work from
individual letter to words, clauses and sentences. The activity processing the information will be successful if the learner has enough vocabularies, understands the structure, has reading techniques, and relates text content with his/her own background knowledge.

Background knowledge influences text comprehension. A cognitive psychologist, Ausubel, believes that learning a language must be meaningful in order to be effective and long lasting. For material of learning language to be meaningful, it must be related to existing knowledge that a learner has already. This existing knowledge must be organized in such a way that the new information is easily attached to the learner’s cognitive structure. To facilitate the learning Ausubel emphasizes that teachers must provide “advance organizers”, that is devices that activate relevant background knowledge (Hadle, 1993).

The role played by background knowledge in text comprehension is explained and formalized in a theory known as a schema theory. According to this theory, a text does not have meaning if it stands alone. It, however, gives directions for readers so that they can construct meaning from their own cognitive structure. The previously acquired knowledge structures accessed in the comprehension process are called schemata. Wadima (2009) also says that schema theory is a theory about knowledge, how the knowledge is presented and how that presentation helps in comprehending that knowledge. According to this theory, all knowledge organized is called schemata.

Based on the assumption that text comprehension needs an organized and structured conceptual framework, it is hypothesized that there a positif relationship between knowledge of schemata and text comprehension. This study is therefore based on an exploration of the question “Is there a relationship between knowledge of schemata and text comprehension?”

B. BRIEF REVIEWS OF RELATED THEORIES

Reading is a means to get a language, a means to communicate, and a means to share information and ideas. According to Zainil (2008), reading is a basic thing to learn. It enables someone to develop his/her listening skill, speaking skill, and writing skill. Nunan (1993) defines reading as a process of decoding written symbols that work from smaller units (letters) into larger units (words, clauses and sentences). Reading can also be defined as a process of making meaning of a text. As Hadle (1993) states that reading is an activity involving visual and non visual information as a comprehensive process. In this activity, readers try to catch the meaning inside the text or visual information and outside the text or non visual information.

A level of reader’s understanding in order to get deep meaning from information conveyed in written form by the writer is called reading comprehension. This understanding involves an intellectual mental activity, interpreting, evaluating and finding the answers of the cognitive questions from the text. Reading comprehension can also be defined as the interactive thinking process in which a reader engages while reading text that enables his or her understanding to develop (Mantiaone and Sabine, 2003). A text is longer pieces of writing that is content-related sentences that appear in a fix order (James, 1980; Titscher, 2000). The text functions as what the reader reads and the text is represented what the writer expresses in a written form.

Grellet (1981) also says that text comprehension will involve recognizing the script of the language, deciding the meaning and using unfamiliar vocabularies, understanding information that is stated explicitly and understanding an implication which is not explicitly stated. Next, reading involves understanding relationship within sentences, understanding relationship between the parts of the text trough cohesive devices grammatically and lexically. Besides, identifying the main point or the
most important information, distinguishing main idea from the supporting details, extracting the main point in order to summarize, and understanding the communicative value and function of the text are needed in order to catch the writer’s intention.

Similarly, Mantione and Sabine (2003) state that the students comprehend the text when they are able to ask reflective questions or give insightful comments while making connections between the text and their own lives. Students show their ability to comprehend text by making inferences and defending their decisions and viewpoints. Strong comprehension allows readers to solve problems with text and apply text to real-life situations. Definitely comprehension is an individual’s ability to construct meaning as he or she reads.

Reading is a process of recognizing, interpreting and evaluating ideas related to mental of the readers. It depends on personality, cognitive ability, attitude toward the text and background knowledge. The readers understand what they read because they are able to take the stimulus beyond its graphic representation and assign it membership to an appropriate group of concept already stored in their memories. In other words, skill in reading depends on the efficient interaction between linguistic knowledge and knowledge of the world. The knowledge is known as schemata (Brown, 2003). Below is the explanation about schemata.

Knowledge involves memory about specific and universal things, memory about methods and process and memory about pattern, structure or setting (Sudrajat, 2009). Suriasumantri (2005) says that knowledge is generic terminology that includes everything we know, such as language, art, and math.

Making meaning of a language is one of teaching principles proposed by Brown (2001). Brown says that teachers should facilitate learners with meaningful learning. “Meaningful learning will lead toward long-term retention than rote meaning”. It means that what the learners learn in meaningful learning will last in long time. The application of the meaningful learning are: (1) maximize the meaningful learning by finding out learners’ interest, purpose and career, (2) if the teacher gives a new topic, elicit learners’ background knowledge.

When the reading process is taking place, learners use their background knowledge. At that time interactive process between readers and text is taking place in a cyclical; process involves readers’ mental activity with the aspects inside the text. The readers relate information, knowledge, emotion, experience and culture to the text they read. When reading, readers make connections: text-to-self, text-to-text, and text-to-world. Readers often make text-to-self connections when sharing a personal story they are reminded of when reading. Sometimes, they make text-to-text connection by comparing a text they are reading with another book they have read. Usually, they will make text-to-world connection when books remind them of events, issues or places from around the world, (Mantione and Sabine, 2003).

There are two kinds of schemata. They are content and formal schemata. Content schemata refer to what we know about people, the world, culture, and the universe; while formal schemata refer to our knowledge of about discourse structure (Brown, 2003).

A good example of the role of schemata in reading is found in the following anecdote taken from Brown (2001):

A fifteen-year-old boy got up the nerve one day to try out for the school chores, despite the potential ridicule from his classmate. His audition time made him a good fifteen minutes late to the next class. His hall permit clutched nervously in hand, he nevertheless tried surreptitiously to slip into his seat, but his entrance didn’t go unnoticed.

“And where were you?” bellowed the teacher.

Caught off guard by sudden attention, a red-faced Harold replied meekly, “Oh,
uh, er, somewhere between tenor and bass, sir.”

For the above anecdote, the content schemata are a prerequisite to understanding its humor:
1. Fifteen-year-old boys might be embarrassed about singing in a choir.
2. Hall permits allow students to be outside the classroom during the class hour.
3. Teenagers often find it embarrassing to be singled out in a class.
4. Something about voice ranges.
5. Fifteen-year-olds’ voices are often “breaking.”

Formal schemata also reveal some implied connections:
1. The chorus tryout was the cause of potential ridicule.
2. The audition occurred just before his class period.
3. Continuing to “clutch” the permit means he did not give it to the teacher.
4. The teacher did indeed notice his entry.
5. The teacher’s question referred to location, not a musical part.

From the explanation and example above it can be concluded that schemata is the knowledge posed by someone, how the knowledge is presented, and how it help readers understand the text. When reading the interaction between readers and a text is taking place. The readers relate what they know about people, the world, culture, the universe, and knowledge of about discourse structure.

Reading is one of receptive language skills. The main purpose of reading is to get information. In order not to get wrong information, text comprehension is needed. To comprehend the text, there are factors that must be mastered. One of them is existing knowledge structure or knowledge of schema.

Schemata is knowledge structure about how knowledge is presented, and how that presentation helps to comprehend that knowledge itself, and data structure representing generic concept stored in memory. While, process text comprehension process is a process of finding schemata configuration that offers sufficient explanation about the text.

Referring to Bloom taxonomy, it is stated that comprehension or also called understanding is intellectual mental activity that organizes the new or old material. The findings, such as definition, information, events and facts, are organized in cognitive structure. The findings are accommodated and assimilated to existing cognitive structure to form new cognitive structure. While reading, a reader’s background knowledge, such as information, ideas, experience and culture will be related with the text that is being read.

However, the reader sometime fails to comprehend the text well. It can be because:
(a) The reader does not have appropriate schemata.
(b) The reader has appropriate schemata but the clues given by the writer is not enough to give suggestion to the reader about those schemata.
(c) The reader gets text interpretation but he does not find what the writer wants.

By doing so, it is assumed that there is relationship between knowledge of schemata and text comprehension.

C. RESEARCH METHOD

Based on the purpose of the research, that is to find out the relationship between variables, this research used correlation technique of survey method. This research did not give treatment to the respondents, but the respondents were given tests in order to get scores of text comprehension and knowledge of schemata.

The population of the research was all the fifth semester students of English Department in 2009/2010 academic year. These students had taken Vocabulary, Structure 1-3, and Reading 1-3. Since the students were already grouped into four classes: A, B, C, and D, cluster sampling technique was used to take the sample. Class B was chosen randomly as a sample. There were 38 students in class B. The test given to the sample class was
carried out on 28th of January, 2010. In order to check the validity and reliability of the instrument, the instrument was tried first. The try out class was class C. There were 37 students in try out class. The tried out test was carried out on December 30th, 2009.

The instrument used to measure text comprehension was multiple choice tests, with possible four answers (A, B, C, or D). The aspects measured are students’ understanding of getting ideas (topic/subject or main idea), answering direct questions (unstated details and specific information), and knowing vocabularies (definition from structural clues and meaning from word part).

There were two texts that were tested. The title of the first text was The Good Language Learner Report Section One: Introduction. While, the second one was The Good Language Learner Report: Methodology and Approach. Each text consists of 16 questions. They are taken from Eric Collins. Below are the aspects being evaluated and the item numbers for each text (Table 1).

<table>
<thead>
<tr>
<th>Aspects being Evaluated</th>
<th>The Good Language Learner Report: Section One: Introduction</th>
<th>The Good Language Learner Report: Methodology and Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item Number</td>
<td>Item Number</td>
</tr>
<tr>
<td>Topic/Subject/Main Idea/Thesis statement</td>
<td>5, 7, 15</td>
<td>17, 18, 19, 20</td>
</tr>
<tr>
<td>Unstated Details</td>
<td>2, 8</td>
<td>21, 24, 30</td>
</tr>
<tr>
<td>Definition from structural clues</td>
<td>1, 3, 4, 6, 11, 13</td>
<td>22, 29, 31</td>
</tr>
<tr>
<td>Meaning from Word Part</td>
<td>9, 10, 14</td>
<td>23, 26, 27, 32</td>
</tr>
<tr>
<td>Transition</td>
<td>16</td>
<td>25, 28</td>
</tr>
<tr>
<td>Specific Information</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

To test the validity of the item test of text comprehension, $r$ point biserial correlation ($r_{pbis}$) were used because the data was biserial (0 and 1). It is found that among 32 items, 7 items were not valid. The items that were not valid were number 5, 8, 15, 17, 25, 26 and 31. So, there were only 25 items were valid. Reliability was counted from the valid items only. To test the reliability of text comprehension instrument, KR-20 formula was used. It was found that the reliability value was 0.8309. It was higher than $r$ table 0.325. The instrument, then, was reliable.

The instrument used to measure knowledge of schemata was multiple choice test. The questions were constructed from the book entitled Strategies for Success by Brown. The test was researcher made test. But, the test was consulted with the lecturer who taught English Learning Strategy at English Dept. UNP. There were 21 items before their validity and reliability tested. The specification of knowledge schemata instrument and their item number can be seen in Table 2.

To test the validity of knowledge of schemata instrument, $r$ point biserial correlation ($r_{pbis}$) was used. It was found that 4 items were not valid. They were number 2, 5, 12 and 19. The valid items were 17 items. To test more knowledge of schemata, the items were added become 20 items. By using KR-20, it was found that the reliability value was 0.6945. It was higher than $r$ table 0.325. The instrument was reliable.
Table 2. Instrumentation Specification of Knowledge of Schemata

<table>
<thead>
<tr>
<th>Aspect being Evaluated</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminology</td>
<td>3, 6, 7, 10, 11, <strong>12</strong>, 13, 15, <strong>19</strong>, 20, 21</td>
</tr>
<tr>
<td>Specific Facts</td>
<td>4, 5, 8, 9, 14, 16, 18</td>
</tr>
<tr>
<td>Concepts and Principles</td>
<td>1, 2, 17</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

The data collected were analyzed by using quantitative statistic analysis. To know the significance relationship between knowledge of schemata ($X_1$) and text comprehension ($Y$), simple regression and simple correlation techniques were used. It used Pearson product moment.

Data analysis was done in two points; they were analysis prerequisite testing and hypothesis testing. Both of them were conducted at level of significance $\alpha = 0.05$. Descriptive analysis and inferential analysis were used to analyze those two points. First, descriptive analysis was used to count the mean, modus, median and standard deviation of the three variables. Then, the results were described in frequency tables and visualized in histogram. Second, inferential analysis was used to count and test the hypothesis and generalization of the research finding. Before testing the hypothesis, normality sample test and homogeneity test were done. To test normality of the variables, Lilliefors test was used. Normality assumption determines what technique of analysis used in hypothesis testing and it gives the validity of the conclusion taken. To test the homogeneity of the variables, Bartlett test was used. Since the data were normal and homogeneous, parametric analysis, that is product moment technique, was used. Since the data of the two variables were normal and homogeneous, correlation analysis technique was used in hypothesis testing. To make sure in making conclusion, linear regression was gotten by counting the coefficient $a$ and $b$, its significance and linearity were counted by using F test. While, to test the significance correlation coefficient t-test was used.

D. FINDINGS AND DISCUSSION

1. Data Description

Below is the mean, the median, the mode, the standard deviation, the table frequency distribution and histogram of students’ scores for each variable.

a. Data Description of Text Comprehension

The data of text comprehension were taken from text comprehension tests. The highest score is 92; while the lowest is 40. It is found that the mean is 70.05, the median is 71.36, the mode is 72.80, and the standard deviation is 11.61.

The frequency distribution and histogram of students’ scores on text comprehension can be seen in table 3. Then, the frequency distribution of students’ scores on text comprehension can be visualized in figure 1.

Table 3. Frequency Distribution of Students’ Scores on Text Comprehension

<table>
<thead>
<tr>
<th>No.</th>
<th>Class Interval</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40 – 48</td>
<td>2</td>
<td>5.26</td>
</tr>
<tr>
<td>2</td>
<td>49 – 57</td>
<td>4</td>
<td>10.53</td>
</tr>
<tr>
<td>3</td>
<td>58 – 66</td>
<td>6</td>
<td>15.79</td>
</tr>
<tr>
<td>4</td>
<td>67 – 75</td>
<td>13</td>
<td>34.21</td>
</tr>
<tr>
<td>5</td>
<td>76 – 84</td>
<td>10</td>
<td>26.32</td>
</tr>
<tr>
<td>6</td>
<td>85 – 93</td>
<td>3</td>
<td>7.89</td>
</tr>
<tr>
<td>T o t a l</td>
<td></td>
<td>38</td>
<td>100,00</td>
</tr>
</tbody>
</table>
b. Data Description of Knowledge of Schemata

The data of knowledge of schemata were scores got from the test on students’ schemata test. The highest score is 80; while the lowest is 45. It is found that the mean is 59.66, the median is 60.52, the mode is 65.16, and the standard deviation is 9.51.

The frequency distribution and histogram of students’ scores on knowledge of schemata can be seen in Table 4. While, the frequency distribution of students’ scores on knowledge of schemata can be visualized in the figure 2.

The result of descriptive analysis of each variable shows that text comprehension and knowledge of schemata of fifth semester students of English department of State University of Padang is average. It can be seen from the mean of the test taken by the students. The mean of text comprehension test is 70.05, and the mean of the knowledge of schemata test is 59.66. The highest mean is text comprehension and the lowest is knowledge of schemata. It indicates that students’ understanding about terminology, specific facts, and concepts and principles about the good language learner strategy is considered lower than text comprehension. It may be influenced by some factors. First, the students may not activate their background knowledge before reading the text. They do not relate what in the text with the knowledge their already have. Second, the students do not have background knowledge about the topic of the text. They know nothing about the topic because the topic given may not catch their interest or they never hear about the topic given. Third, they think that text comprehension is nothing to do with their knowledge. They rush to read the text and answer the questions.

2. Analysis Prerequisite Testing

a. Normality Test

To test normality of the variables, Lilliefors test was used. Normality assumption determines what technique of analysis used in hypothesis testing and gives the validity of the conclusion taken.

The normality test for text comprehension (Y) shows that the \( L_0 \) maximum, that is 0.097885 is lower than \( L_t \) that is 0.144 , at significance level \( \alpha = 0.05 \) with \( n = 38 \). Since \( L_0 \) (0.097885) is lower than \( L_t \) (0.144), the null hypothesis that says data of text comprehension is normal is accepted. In other words, data of text comprehension is distributed from a normal population.
Table 4. Frequency Distribution of Students’ Scores on Knowledge of Schemata

<table>
<thead>
<tr>
<th>No.</th>
<th>Class Interval</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45 – 50</td>
<td>8</td>
<td>21.05</td>
</tr>
<tr>
<td>2</td>
<td>51 – 56</td>
<td>9</td>
<td>23.68</td>
</tr>
<tr>
<td>3</td>
<td>57 – 62</td>
<td>5</td>
<td>13.16</td>
</tr>
<tr>
<td>4</td>
<td>63 – 68</td>
<td>9</td>
<td>23.68</td>
</tr>
<tr>
<td>5</td>
<td>69 – 74</td>
<td>4</td>
<td>10.53</td>
</tr>
<tr>
<td>6</td>
<td>75 – 82</td>
<td>3</td>
<td>7.89</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Next, the normality test for knowledge of schemata (X₁) shows that L₀ maximum, that is 0.135305 is lower than Lₜ that is 0.144, at significance level α = 0.05 with n = 38. Since L₀ (0.135305) is lower that Lₜ (0.144), the null hypothesis that says data of knowledge of schemata is normal is accepted. In other words, data of knowledge of schemata is distributed from a normal population.

b. Homogeneity Test

Homogeneity test was used to see whether the data were from homogenous population. The homogeneity test of Text Comprehension on Knowledge of schemata shows that the data were from homogenous population. It was found that $\chi^2_{\text{observed}}$ was 3.5946. While, $\chi^2_{\text{table}}$ at level of significance = 0.05 and df = 7 was 14.067. In other words, $\chi^2_{\text{observed}}$ was lower than $\chi^2_{\text{table}}$ or $3.5946 < 14.067$.

3. Hypothesis Testing

The hypothesis that is being tested is null hypothesis (H₀) versus alternative hypothesis (Hₐ). Null hypothesis says there is no relationship between knowledge of schemata and text comprehension; while, alternative hypothesis says that there is a positive relationship between knowledge of schemata and text comprehension. The hypothesis was tested by using simple regression and correlation technique analyses.

The simple regression analysis between knowledge of schemata (X₁) and text
comprehension \((Y)\) generated the regression equation \(\hat{Y} = 13.39 + 0.95X_1\). After the regression equation was found, the significance and linearity tests were also constructed. It is found that the significance value, known as \(F\) observed \((F_o)\), is 33.65. While \(F\) distribution table, known as \(F\) table \((F_t)\), at level of probability \(\alpha = 0.05\) with df numerator = 1 and df denominator = 36, is 4.11.

It is also found that the value of linearity test is 1.17. While \(F\) table at the level of probability \(\alpha = 0.05\) with df numerator = 6 and df denominator = 32 is 2.42. The analysis is put into a table named ANOVA (Analysis of Variance). The ANOVA table for regression equation testing can be seen in table 10.

<table>
<thead>
<tr>
<th>Variances Resources</th>
<th>Df</th>
<th>Sum of Square (JK)</th>
<th>Mean Square (RJK)</th>
<th>F Observed ((F_o))</th>
<th>F Table ((F_t))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>38</td>
<td>193168</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression a</td>
<td>1</td>
<td>187321.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression ((b/a))</td>
<td>1</td>
<td>2824.50</td>
<td>2824.50</td>
<td>33.65</td>
<td>4.11</td>
</tr>
<tr>
<td>Interaction Square</td>
<td>36</td>
<td>3021.82</td>
<td>83.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between column</td>
<td>6</td>
<td>572.84</td>
<td>95.47</td>
<td>1.17</td>
<td>2.42</td>
</tr>
<tr>
<td>Within Column</td>
<td>32</td>
<td>2448.978</td>
<td>81.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To give meaning to the value of significance and linearity found, they are interpreted based on following criteria.

Testing Criteria for Significance and Linearity Tests:
Null Hypothesis (1): Reject \(H_o\) that is coefficient regression line is not significant if coefficient \(F\) observed is higher than \(F\) table.
Null Hypothesis (2): Reject hypothesis that is regression is linear if statistic \(F\) observed is higher than \(F\) table.

To test null hypothesis (1), \(F\) observed is compared with \(F\) table. \(F\) observed \((F_o)\) is 33.65. While at level of probability \(\alpha = 0.05\) with df numerator = 1 and df denominator = 36, \(F\) table \((F_t)\) is 4.11. It is clear that \(F\) observed is higher than \(F\) table or 33.65 > 4.11. Since \(F_o\) is higher than \(F_t\), the null hypothesis (1) is rejected. It means the coefficient regression line is real or significant.

To test null hypothesis (2), \(F\) observed is compared with \(F\) table. \(F\) observed \((F_o)\) is 1.17. While at level of probability \(\alpha = 0.05\) with df numerator = 6 and df denominator = 33, \(F\) table is 2.42. It is clear that \(F\) observed is lower than \(F\) table or 1.17 < 2.42. Since \(F_o\) is lower than \(F_t\), the null hypothesis (2) is accepted. It means that the regression that is linear is accepted.

The null hypothesis that says there is no relationship between knowledge of schemata and text comprehension is tested. To test it, simple correlation analysis was used. It is found that correlation coefficient between knowledge of schemata \((X_1)\) and text comprehension \((Y)\), written as \(r_{xy}\), is 0.6962. To test its significance, significance test of correlation coefficient was used. It used \(t\)-test. The result of the test generated the value of \(t\) observed \((t_o)\) = 5.8199. To check whether the correlation coefficient is significant, \(t_o\) is compared with \(t_t\) \((t\) table\). At level of probability \(\alpha = 0.05\) with df = 36, the value of \(t\) table is 1.697. Since \(t_o\) is higher than \(t_t\) table or 5.8199 > 1.697, correlation coefficient \(= 0.6962\) is significant. Based on the value of correlation coefficient \(r = 0.6962\), the value of determinant coefficient is \(R^2 = 0.4847\). It can be concluded that the null
The hypothesis is rejected. It means there is a positive relationship between knowledge of schemata ($X_1$) and text comprehension ($Y$).

In other words, the relationship between knowledge of schemata and text comprehension is significant and linear, and $48.47\%$ text comprehension is influenced by knowledge of schemata with model $\hat{Y} = 13.39 + 0.95X_1$. It can be predicted that a student who receives an achievement score of $X_1 = 4$ will get an achievement of $\hat{Y} = 17.19$.

E. CONCLUSION AND SUGGESTIONS

After the data were analyzed and the hypotheses were tested, it can be concluded that there is a positive relationship between knowledge of schemata and text comprehension. It means that someone who has good knowledge of schemata will have good text comprehension.

The result of this research can imply that the problem in reading is not only from the problem of the language itself, but also from knowledge of schemata of the students. In teaching learning process, knowledge of schemata should be activated. The question that may arise is how to activate the knowledge of schemata. Here are some suggestions in order the teacher can activate students’ knowledge of schemata.

Firstly, the teacher should use advance organizer to activate students’ background knowledge. The teacher can do following activities to activate students’ background knowledge. First the teacher finds the topic that is related to the students’ interest or subject. Then, the teacher explains a little bit about the text that is going to be read. Next, the teacher asks the students to mention everything they know about the topic. Besides, the teacher can give questions to the students in oral or written form about the topic given. These activities can be done as pre-reading activities.

Secondly, the teacher needs to find the topic that is relevant to the students’ interest and it is current issue. By doing so, the students are

Third, the teacher needs to do reading activities in three stages, they are pre-reading, while reading and post reading. Pre-reading can activate students’ background knowledge, while reading help students comprehend the text and post reading can check how well students comprehend the text.

Forth, since this research still has limitation, further research needs to be done. It is suggested that there is another research that concerns with any other reading strategies applied by the students before, while and after reading. And it is also suggested that the next researcher will give more texts to test the text comprehension.

Last but not least, the students will not relate their schemata with the material they are reading if they know nothing about the material that may not catch their interest or they never heard about. Because of that it is suggested that the teacher should provide the material that is current, and related to the students’ interest or subject. The teacher can also ask the students to search the material that is interested to them, and ask them to present that material in classroom.

REFERENCES


