A COMPARATIVE STUDY OF GUESSING AND MAKING INFERENCES TECHNIQUES IN READING COMPREHENSION

By
Ida Bagus Made Ambara Putra, Ujang Suparman, Basturi Hasan
ibmadeambarap@yahoo.com

Abstract:
Tujuan penelitian ini adalah untuk (1) meneliti apakah ada perbedaan prestasi pemahaman membaca siswa antara mereka yang diajarkan melalui teknik menebak dan melalui teknik menyimpulkan dan (2) menentukan salah satu dari dua teknik tersebut yang lebih efektif dalam meningkatkan prestasi pemahaman membaca siswa. Peneliti menggunakan desain pretest posttest kelompok independen dalam menganalisa data. Sampel penelitian adalah siswa kelas XI IPA 4 dan XI IPA 5. Hasil penelitian mengindikasi bahwa teknik menebak lebih efektif dibandingkan dengan teknik menyimpulkan dalam meningkatkan prestasi pemahaman membaca siswa. Nilai rata-rata posttest pada kelas eksperimen adalah 73.62 sedangkan pada kelas kontrol adalah 67.80. Nilai dari dua ekor signifikan adalah 0.000 yang berarti bahwa $H_0$ ditolak dan $H_1$ diterima dimana $0.000 < 0.05$.

The objectives of the research are (1) to investigate whether there is any significant difference of students’ reading comprehension achievement between those taught through guessing and through making inferences techniques and (2) to determine which one is more effective of the two techniques. The researcher applied independent group t-test in analysing the data. The sample of the research was Natural Science 4 and Natural Science 5 students. The finding indicated that guessing technique was more effective than making inferences technique in improving students’ reading comprehension achievement. The mean score of posttest in experimental class was 73.62 while in control class was 67.80. The value of two tailed significant was 0.000 which meant that $H_0$ was rejected and $H_1$ was accepted since $0.000 < 0.05$.

Keywords: guessing technique, improving, making inferences technique, reading
INTRODUCTION

English is an important subject that should be mastered by students of Senior High School. The students should be able to master not only one language skill, but also the other skills in English, i.e. listening, speaking, reading, and writing. From the four aspects, the research focuses only on reading comprehension of students because the students do not really get a better technique to comprehend the text.

Based on pre-observation of students in SMAN 12 Bandar Lampung, it was found that there were some problems which students faced when they studied English, especially in reading comprehension. The problems covered the low motivation of the students, vocabulary mastery, structure of a sentence, finding the main idea of a text, and generic structure of a text.

The students’ low motivation might be caused by teacher who less stimulates them to learn. They were only asked to read passages and answer the questions with no explanation about it before the teaching process. Consequently, it might make them be more confused in comprehending the text. Besides, the inappropriate selection of the text which was discussed in the class might not attract the students’ attention. Therefore, the students could not reach the minimum criteria of required curriculum.

Likewise, the studies (see, e.g. Ayu, 2013; Andam, 2013; and Kurnia, 2013) indicate that SMA students experience many difficulties in their reading, such as
they tend to be passive, difficult to categorize information, difficult to identify reference and inference, and difficult to differentiate the characteristic of a text. Vocabulary mastery as a problem also make students difficult to comprehend the text given. Without understanding the words or phrases in the text, they might not understand the purpose of the whole text. This part not only becomes the students’ duty, but also the teachers’ problem. In addition, the structure of the sentence also becomes an obstacle for the students in getting the aim of passage they are reading. Therefore, if students can use appropriate technique, the problems may be eliminated.

In reading, there are several aspects that influence the reading comprehension: Hancock (1987:54) defines that the main idea is the essence of the paragraph, or rather what the author is trying to get across to the readers. Although understanding the main idea is crucial, focusing in details is also important in learning. Stewart (2007:112) states that details add color and spice to ideas and concepts in many fields of knowledge, and they help many of the readers remember information. Besides, inference is also an ability of the readers to find out the implied meaning in a sentence or paragraph of a text logically. According to Kathleen (1986:31) an inference is an educational guess or prediction about something unknown based on available facts and information. By mastering this ability, readers will keep staying on what they are reading. Another researcher, Diamond & Gutlohn (2006) state that instruction in specific types of context clues is an effective approach for teaching students to use context to infer word meanings. On the other hand, according to Latulippe (1986:20) references are
words or phrases used either before or after the reference in the reading material. When such words are used, they are signals to the readers to find the meaning elsewhere in the text.

In reality, not all students can identify those five aspects easily. Sometimes they must read the whole passage to know it. It is because they do not know the right way. Often, teachers do not explain it at the beginning before discussing the content of text. In reference to the problems, it was realized that there was should be an improvement in the way of teachers’ teaching process in reading comprehension. He has found that teachers have to help the students by introducing them to a learning technique which is appropriate to the characteristics of the text. Therefore, this study will investigate whether there is a difference in students’ reading comprehension achievement between those who are taught through guessing and those through making inference techniques.

Guessing or predictive technique is a way to understand a text by using a prediction in academic way. It will stimulate students’ brain to use their background knowledge in understanding the passage. It was proved by Smith as cited in Kurnia (2013:17) who states that guessing or prediction helps the reader to activate their awareness of the subject, and focus on their reading passage. There are several ways to help the students to get the idea of a text, for example, teacher can use an illustrative material. It is supported by Markstein, et al (1982:vi) who states that guessing or predictive technique is a technique by using illustrative material (photograph, map, and graph) and the title.
Making inferences means choosing the most likely explanation from the facts at hand. The readers can use their experiences and the informations of the text to be a conclusion. It is supported by Anne as cited in Kurnia (2013:21) who states that the ability to make inference is the ability to use two or more pieces of informations from a text in order to arrive at the third pieces of informations that is implicit. Calvo as cited in Kurnia (2013:22) also stresses the importance of the capacity of the working memory in making inferences while reading the text. If the working memory is good at holding provisional representations, it saves time integrating information as reading progresses.

Considering those findings of the pre-observation, this study wants to investigate the learning style in SMAN 12 Bandar Lampung, because in that school there is no investigation about it yet. Therefore, the researcher will organize a study entitled “A Comparative Study of students’ reading comprehension achievement between those who are taught through guessing and through making inference techniques”.

METHODS
The research is quantitative study which is intended to find out the significant difference of the students’ reading comprehension after the implementation of guessing technique and making inferences technique and to determine which of the two techniques is more effective. The design used two classes as the experimental class and control class which received the treatment of guessing technique and the other class received making inferences technique.
The design of the research was as follow:

\[
\begin{array}{c|cc|c|c}
G1 & T1 & X1 & T2 \\
G2 & T1 & X2 & T2 \\
\end{array}
\]

Notes:

G1 = The Experimental class
G2 = The Control class
T1 = Pre-Test
T2 = Post-Test
X1 = Treatment 1 (using guessing technique)
X2 = Treatment 2 (using making inferences technique)

(Hatch, E. And Farhady, H. 1982 dalam Setiyadi, Ag. B. 2006)

The population of this research will be the Second Grade of Natural Sciences students at SMAN 12 Bandar Lampung in the academic year of 2013/2014. There are five classes of Natural Sciences. The sample classes will be taken through lottery because all the Natural Sciences classes have the same opportunities to be chosen as the sample of this research. One class is as the experimental class, and the other one is as the control class.

**RESULTS AND DISCUSSION**

In this part, there will be results and discussions about reading comprehension achievement of students in both Experimental class and Control class.

**Table 1. The Comparison of Students’ Average Scores in Experimental and Control Classes**

<table>
<thead>
<tr>
<th></th>
<th>Class</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Significant Value</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest</td>
<td>Experimental Class</td>
<td>73.62</td>
<td>5.82</td>
<td>0.000</td>
<td>3.642</td>
</tr>
<tr>
<td>Control Class</td>
<td>67.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to Table 1, there were two aspects being compared. The first was mean of both classes; 73.62 for the experimental class and 67.80 for the control class. The mean difference was 5.82 points. The second was the significant value of students’ score that was 0.000 ($p = 0.000$). Based on the table above, it could be found that the students’ significant scores was lower than 0.05 ($0.000 < 0.05$). the last was $t$-ratio $> t$-table ($3.642 > 2.000$) and therefore, $H_0$ of this research was rejected and $H_1$ was accepted that there was a significant difference of students’ reading comprehension achievement between those who are taught through guessing and those through making inferences techniques.

Before conducting the treatments, researcher administrated pretest at the first meeting in both experimental and control classes in order to know the students’ basic reading comprehension achievement before they were given the treatments. The treatments were divided into three meetings. It could be elaborated as follow:

**Table 2. Comparison of Students’ Differences in Reading Comprehension Achievements**

<table>
<thead>
<tr>
<th>No.</th>
<th>Meetings</th>
<th>Experimental Class</th>
<th>Control Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pretest</td>
<td>The researcher conducted a test consisting of 30 multiple choose questions to the students.</td>
<td>The researcher conducted a test consisting of 30 multiple choose questions to the students.</td>
</tr>
</tbody>
</table>
| 2.  | Treatments | • The teacher encouraged students’ motivation by giving them some questions, such as *Do you know report text?* and *What do you think about the picture?*
  • The students were asked some questions related to the picture given before, such as *What can we know from the picture?* or *What the picture tells about?*
  • The students were asked to guess or predict the contents might be discussed in the report text | • The teacher encouraged students’ motivation by giving them a question, such as *Do you know report text?*
  • The students were given a picture and a text related to that picture. Then, they were asked to read the whole text and to find out difficult words of the text.
  • The students were asked to find out the synonym and antonym of the difficult words. |
According to Table 2, it was found that there were several differences between the treatments in experimental class who are taught through guessing technique and control class who are taught through making inferences technique. Consequently, it showed a difference achievement in the posttest scores between the two classes. In the experimental class, it was found that the result of students’ pretest average score was 53.875 increased for 19.75 points into 73.625 in the posttest. The students’ increase can be seen in the following chart:

**Chart 1. Increasing Students’ Average Score in Experimental Class**

![Chart 1](image)

While, in the control class, it was found that there was also an increasing of students’ average score. The students’ average score was 55.02 increased for
12.78 points into 67.80 in the posttest. The students’ increase can be seen in the following chart:

**Chart 2. Increasing Students’ Average Score in Control Class**

![Image of chart showing mean scores before and after treatment in the control class]

**Table 3. Comparison of Students’ Scores between Experimental and Control Classes**

<table>
<thead>
<tr>
<th>Class</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min. Score</td>
<td>Max. Score</td>
</tr>
<tr>
<td>Experimental Class</td>
<td>40.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Control Class</td>
<td>26.0</td>
<td>66.0</td>
</tr>
</tbody>
</table>

In reference to Table 3 above, it was considered that guessing technique was more effective than making inference technique. The result of experimental class showed that the lowest score was 40, the highest score was 70, and the mean was 53.87. While in the posttest, it was found that the lowest score increased into 60, the highest score was 86, and the mean was 73.62. Meanwhile, in the control class, the result of pretest showed that the lowest score was 26, the highest score was 66, and the mean was 55.02. In the posttest, the lowest score was 46, the highest score was 80, and the mean was 67.80. So, it can be concluded that guessing technique was more effective than making inference technique.
CONCLUSIONS AND SUGGESTIONS

In line with the results of the data analysis and discussion, the following conclusions are drawn:

1. There was a significant difference of students’ reading comprehension achievement between those taught through guessing and making inferences technique. The mean difference was 7.00. It means that the experimental class gain was higher than control class’s. Besides, the significant value of the posttest in both classes was 0.000 that was lower than 0.05 (0.000 < 0.05). T-value was higher than t-table (3.642 > 2.000).

2. Guessing technique was more effective than making inferences technique. It can be seen from the average score of students who were taught through guessing technique which was higher than those taught through making inferences technique. The mean of average score of post-test in the experimental class was higher than control class (73.62 > 67.80). It indicated that the increasing in the experimental class was higher than in the control class. The significant value of post-test in both classes was 0.000 (p = 0.000) that was lower than 0.05 (0.000 < 0.05). t-value was 3.642 which was higher than t-table 2.000 at the level of significant 0.05.
Suggestions

Given the conclusions above, it was recommended that teachers should use guessing technique as alternative in teaching reading comprehension and gave some suggestions as follows:

1. Based on the findings, it was suggested the teachers use guessing technique as an alternative way of teaching reading.

2. The teachers should provide some pictures to make the meeting more interesting. By using accompanied picture, the students give more attention to their lesson.

3. The teachers should be able to make an active class by giving the students a comfortable situation in the class and a chance for them to express their opinions.

4. Teachers should be able to increase students’s vocabulary by giving some exercises and motivations.

REFERENCES

Andam D, R. 2013. *The Effect of Using Pre-Questioning on Students’ Reading Comprehension at Second Grade of SMPN 1 Seputh Banyak*. Bandar Lampung: Lampung University.


Kurnia N, D. 2013. *A Comparative Study Of Students’ Reading Achievement Between Those Taught Through Predictive And Through Making Inferences At The Second Grade Of Sman 1 Kotagajah*. Lampung: The Faculty of Teacher Training and Education University of Lampung.


