A COMPARATIVE STUDY OF PQRST AND TPS STRATEGIES TO IMPROVE READING COMPREHENSION

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Abstract: This study aimed to find out whether or not there was any significant (1) achievement on students' reading comprehension who were taught by using PQRST strategy, (2) achievement on students' reading comprehension who were taught by using TPS strategy, and (3) difference on students' reading comprehension achievement between students who were taught by using PQRST strategy and students who were taught by using TPS strategy. This study used a quasi experimental method. The population of the study was the tenth graders with the total number of 232, where sixty-two students were taken as the sample by using purposive sampling by considering the students' reading achievement. The data were collected by using reading comprehension tests and analyzed statistically by using paired-sample and independent sample t-test to find out the improvement of students' reading comprehension by using PQRST. The results of pretest and post test were applied by using paired t-test. It was found out that the value of $t_{obtained}$ (10.662) was higher than critical value of $t_{table}$ (2.042). To find out the improvement of students' reading comprehension by using PQRST, paired sample t-test was applied, the results showed that the value of $t_{obtained}$ (10.000) was higher than critical value of $t_{table}$ (2.042). The result obtained in independent sample t-test for reading test and the value of $t_{obtained}$ (1.193) was higher than critical value of t-test (2.000). This means that there was no significant difference on students' reading comprehension achievement between students who were taught by using PQRST Strategy and students who were taught by using TPS Strategy to the eighth grade students of SMPN 33 Palembang.

Keywords: PQRST strategy, TPS strategy, reading comprehension

INTRODUCTION

One of the important language skills is reading. Reading is a language skill used as one of the ways of gaining information. According to Mikulecky & Jeffries (2008) that some reasons showed the reading English text is important, as follows: (1) assisting students learn to think in English, (2) building the students' vocabulary, (3) constructing students more comfortable in English writing.

That is why reading can increase their knowledge and ability in English and also develop their cultural awareness of English. As stated in the Competency-Based Curriculum (CBC) (Depdiknas, 2011), English mastery is one of the skills to answer the global challenges. Everybody, society, even the nation should master English. Otherwise, we will lose many opportunities because of a lack of English ability. English mastery can be
achieved through various programs, but learning English at school is the main way for Indonesian people to master it. Unfortunately, the ability of Indonesian students to read English texts is very low (Hamra & Syatriana, 2012). Most high school graduates are not fully comprehend English text. They encountered some obstacles to grasp the ideas or to obtain information from the text given, so the students are not able to answer the questions dealing with the passage given in the school textbook. It is clear that Indonesian students' reading achievement needs ways to solve this problem. In the School-Based Curriculum (Depdiknas, 2006), the reading skill for secondary level students emphasizes on the ability to read and understand the nuance of meaning and the elements of various written text as suggested by the curriculum. The problem which occurs to most of the students in Indonesia is the lack of comprehension in reading. It can be seen from the students' reading comprehension that is still far from what is expected.

Based on the observation, students' difficulty in reading comprehension was caused by the following problems, they are (1) the students were not able to identify the meaning of individual word, so they were not able to acquire the information (2) the students were unable to integrate ideas, (3) the teacher was incapable of encouraging the students to be active and involve the reading activities because of the big class, (4) the students had inadequate time to read English text, as a result, the students had lack of vocabulary and do not comprehend the text well. In line with the reading problems, one of the studies was conducted by Komang, et al. (2013) who found that the factors that can result in the students' low competency in comprehending reading texts and in achieving the competencies of reading include incomprehensible input, the English teachers, the materials of reading that are used, time consumed in teaching reading, and teaching strategies.

Reading is the central role in education and it is necessary for the students to have proficiency in reading to succeed both in the academic environment and real-life situation. Reading comprehension can be enhanced by applying certain strategies. There are some strategies that are widely used to increase the students' comprehension especially in content area reading namely Preview-Question-Read-Summarize-Test strategy (PQRST) and Think-Pair-Share strategy (TPS).

PQRST is one of the strategies that has been proven to effective in enhancing the students' comprehension and improving their ability to generate ideas. Haeryanto (2012) conducted in the classroom action research (CAR) and found out that the PQRST strategy could improve the reading comprehension of the eleventh graders. PQRST stands for Preview, Question, Read, Summarize, and Test. PQRST is beneficial to stimulate the students' prior knowledge, encourage the students to be more active and thoughtful in grasping the ideas and to improve their abilities to recall information (Atkinson, 2002).

Moreover, TPS strategy is also suitable for teaching reading. TPS is a strategy to encourage the students to verbalize their ideas and to compare them with the ideas and feelings of other students (Killen, 1996). TPS involves three steps of cooperative structure (Lyman, 2005), there are: 1) thinking: the teacher gives the students' time to think and answer the problematic question and allows the students to solve problems or answers a question about an assigned reading. 2) pairing: after thinking, the teacher asks the students to pair their answer to their pairs. This step allows the students to ask another pair to enrich the answer or solution posted by the teacher before sharing with the whole class. 3) sharing: the teacher asks the students to present a solution and answer individually or cooperatively to the class as a whole class. Similarly, Kagan (1992) mentioned the steps of TPS as follows: the students first try to answer a question or
learn material by themselves, then discuss their though and understandings with their partners, and finally share with the whole group or the class.

This research focused on the descriptive text which is refers to the syllabus of the school-based curriculum (KTSP) this kind of text is taught at the eighth graders of SMPN 33 Palembang. On the basis of the discussion above, this study investigated whether or not there was any significant achievement on students' reading comprehension who were taught by using PQRST strategy, whether or not there was any significant achievement on students' reading comprehension who were taught by using TPS strategy, and whether or not there was any significant difference in students' reading comprehension achievement between students who were taught by using PQRST strategy and students who were taught by using TPS strategy.

The research objectives were drawn as follows:
1. To find out whether or not there was any significant achievement on students' reading comprehension who were taught using PQRST strategy.
2. To find out whether or not there was any significant achievement on students' reading comprehension who were taught using TPS strategy.
3. To find out whether or not there was any significant difference in students' reading comprehension achievement between students who were taught by using PQRST strategy and students who were taught using TPS strategy.

**METHODS**

In this study, the writer used one of the quasi-experimental methods, in which there were variables to be studied. The first independent variables that were PQRST strategy (X1) and TPS strategy (X2). The second dependent variable that was reading achievement (Y). In this study, the two-comparison groups were applied to both groups which were given treatment by different strategies. It was to investigate whether one treatment is more effective than the other.

The experiment was implemented for ten meetings sessions including pre-test and post-test. In treatment, the groups treated by using PQRST and TPS strategies that used to improve the students' reading comprehension in descriptive text.

**Population and Sample**

The population of the study was all the eighth-grade students at SMPN 33 Palembang. The total number of population is 232 students. There were eight classes in the eighth grade of SMPN 33 Palembang. In this study, purposive sampling was used to select the samples. The sample of this study consisted of 62 students. Each of the class had 31 students for the experimental group that was treated by PQRST strategy and 31 students for the control group that was treated by TPS strategy. In determining the control group and the experimental group, they were selected randomly.

**Data Collection**

The instrument for collecting qualitative data for testing the hypothesis consisted of the reading comprehension test, try-out the instrument, content validity, and reliability of the test.

The test used in this study was objective test adapted from English book from Intan Pariwara Company which was appropriate with the school-based curriculum (Kurikulum 2013) of junior high school for the eighth grade and basic competency. The written test consisted of 30 items, in which there were four options for each item. It was scored 1 for correct answer and 0 for the wrong answer. before distributing the test to the sample.

The test was considered reliable. After trying out, from the result, the writer found that the reliability coefficient of the reading test was 0.732. Since the reliability coefficient of the test was higher than 0.700, the test was considered reliable.
After post-test was done, the data were analyzed by using two forms of statistical analysis, namely descriptive statistical analysis, and inferential statistical analysis. The descriptive statistical analysis was done by analyzing the group data of the students who were taught by PQRST strategy and those who were taught by TPS strategy solely in the descriptive way. Descriptive statistic analysis was done to measure the central tendency of the scores which includes means, median, and mode and standard deviation.

The normality test was done to know whether or not the data obtained were normally distributed. In achieving that objective, the Kolmogorov-Smirnov statistic was used to investigate the normality of the data. The data could be categorized as normally distributed when the significance value exceeds the value of 0.05. Based on the result of the normality testing by using Kolmogorov-Smirnov analysis, the data of the group in this research were higher than 0.05. In this case, it can be concluded that all of the group data in this research were normally distributed.

In investigating whether the variance of the data was homogeneous or not, Levene's Test of Equality of Error Variances was applied in this research. If the significance value was higher than 0.05, it could be assumed that the variances of the groups are equal. After the sample was determined, the test of homogeneity of the class was done prior to the research. It was needed to ensure that all of the groups in the sample were homogeneous to each other. Thus, the samples in the groups were suitable for the research. The result of the analysis showed that the two classes were, in general, homogenous or equal (Test of Between-Subject Effects sig. value 0.344, a=0.05). In other words, the samples that were used in this research were homogeneous. After the data are proven to be normal and homogeneous, then paired sample t-test was administered to measure the improvement of the students' reading comprehension before and after the treatment and Independent sample t-test would be conducted to measure the differential effect between the means of the students' reading competency of the students who were taught by using PQRST strategy with those who were taught by using TPS strategy. All the analyses were conducted using SPSS 16.0 windows.

The Procedures of Teaching Reading Comprehension by Using PQRST Strategy

According to Thomas & Robinson (1995), the steps were taken in teaching reading comprehension by using PQRST strategy cover Preview, Question, Read, Summarize, and Test.

1) Preview

By previewing the text, the students would be able to determine how it relates for which the students are reading, and from which they want to learn and it makes the reading more efficient. After reviewing the text, the students can answer the questions. For example:
- What is the reading text about?
- What main points will be discussed?

2) Question

The students can make questions themselves by making questions about the headings of each section and subsection and use the standard who, what, why, which, when, where or how. With specific questions in mind about a reading assignment, the students will know exactly what information to look for and they will be motivated to find it.

3) Read

As they are reading the assignment, look for the answers for questions they have made. Their preview and questions have prepared them to read carefully and actively. The students should remember also that each paragraph contains the main idea and supporting ideas that elaborate on this. Therefore, the students should underline or highlight them.
4) **Summarize**

Self-recitation requires the students to try to remember the main points of each section. In this step, you summarize for yourself what you just read. This allows you to check your understanding of the material and will aid retention of it. The students can recite in their head or aloud. This, of course, also makes it much easier to review later.

5) **Test**

In this final step of PQRST, the students make certain that they know and remember what they read. Testing themselves into their long-term memory and every time they test themselves. The students should test themselves of reading the material without this, they are likely to forget most of it. Starting by recalling as much as they can without looking at the reading text or their recitation notes.

**Procedure of Think-Pair-Share (TPS) Strategy**

According to Lyman (2005), the whole pattern of this method is divided into 3 steps, which are thinking, pairing, and sharing.

1. **Thinking**

   The teacher poses a question or an issue associated with the lesson and asks students to spend a few minutes to thinking alone about the answer or the issue. Students need to be explained that talking is not a part of thinking time.

2. **Pairing**

   Next the teacher asks students to pair off and discuss what they have been thinking about. Interaction during this period may become ideas to answer questions if a question has been posed or sharing ideas if a specific issue was identified. Usually, teacher gives no more time than four or five minutes for pairing.

3. **Sharing**

   In the final step, the teacher asks the pairs to share what they have been talking about with the whole class. It is effective to simply go around the room from pair to pair and continue until about a half of pairs have had a chance to report.

   From the explanation above, teachers can know the procedure of using Think-Pair-Share (TPS) strategy in the classroom as follows (Lyman, 2005);

   1) Students are grouped. Each of group consists of two or four students.
   2) The teacher gives an assignment to each group.
   3) Each group thinks and does the individual task first.
   4) Group members are paired. Each pair discusses the individual task.
   5) The second pair met again in each group to share the results of discussions.

**RESULTS**

**Descriptive statistical Analysis**

The data of reading achievement recapitulation of mean, median, modus, standard deviation can be seen on the Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Mean ($\bar{x}$)</td>
<td>57.23</td>
<td>79.39</td>
</tr>
<tr>
<td>Min.Score ($x_{min}$)</td>
<td>33</td>
<td>63</td>
</tr>
<tr>
<td>Max.Score ($x_{max}$)</td>
<td>77</td>
<td>97</td>
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</tbody>
</table>

The data of post test of students' reading achievement who were taught by using PQRST strategy that were taken from 31 samples show minimum score = 63, maximum score = 97, mean score 79.39, standard deviation 9.047. Meanwhile, the data of post test students' reading achievement who were taught by using TPS strategy that were taken from 31 samples show minimum score = 60, maximum score = 93, mean score 76.74, standard deviation 8.398.
samples show minimum score = 60, maximum score = 93, mean score 76.74, standard deviation 8.398.

Based on the Table 1, it can be concluded that the group of students who were taught by using PQRST strategy shows better achievement than the group of students who were taught by using TPS strategy.

**The Inferential Statistical Analysis**

The hypotheses testing in this research was conducted using a t-test. All analyses were administrated by using SPSS 16.0. However, before analyzing the data, there were some requirements needed to be fulfilled. There were normality of the data and the homogeneity of the variance data. The normality testing aims to find out whether or not the data normally distributed.

Based on the result of the normality testing by using the Shapiro - Wilk analysis, the data of the group in this research was higher than 0.05. In this case, it can be concluded that all of the group data in this research were normally distributed.

Homogeneity testing was administrated to make sure that the samples of this research have homogeneous or similar. Based on the result of Levene's Test of Equality of Error Variances the entire of analysis of the data shows that the significance level was > 0.05, then it could be concluded that the variances data of the group were entirely homogeneous. After completing the requirements of the homogeneity testing and the normality testing, Paired sample statistical analysis was administrated to answer the hypotheses.

The Table 2 showed that the mean difference between pre-test and post-test in the experimental group was 22.161. The standard deviation was 11.573, standard error mean was 2.079. The value of t-obtained (10.662) at the significance value 0.05 (2-tailed) with the degree of freedom (df) was 30, and the critical value of t-table 2.042. Since 0.000 (sig. 2-tailed) was lower than alpha value 0.05. Since t-obtained 10.662 was higher than 2.042. It could be inferred that the students who are taught PQRST strategy were significant to improve the students' reading comprehension achievement. The table showed that the mean difference between pre-test and post-test in the experimental group was 19.839. The standard deviation was 11.046, standard error mean was 1.984. The value of t-obtained (10.000) at the significance value 0.05 (2-tailed) with a degree of freedom (df) was 30, and the critical value of t-table 2.042. Since 0.000 (sig. 2-tailed) was lower than alpha value 0.05. Since t-obtained 10.000 was higher than 2.042. It was inferred that the students who are taught TPS strategy were significant improve the students' reading comprehension achievement.

In order to find out whether or not there was a significant difference in achievement between the experimental group and control group, independent sample t-test was applied to compare the results of the posttest in the experimental group with those in the control group. It is displayed in Table 3.

**Table 2. Paired sample test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>tobtain</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group Pret test- post test</td>
<td>22.161</td>
<td>11.573</td>
<td>10.662</td>
<td>30</td>
<td>0.000</td>
</tr>
<tr>
<td>Control Group Pret test- post test</td>
<td>19.839</td>
<td>11.046</td>
<td>10.000</td>
<td>30</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The result of independent sample t-test showed that the value of $t_{\text{obtain}}$ was 1.193 and the value of $t_{\text{table}}$ was 2.000. At the sig (2-tailed) was 0.238 < 0.05. The result of analysis of the research shows the value of $t_{\text{obtain}}$ is higher (1.193) than the value of $t_{\text{table}}$ (2.000). The table also showed that the $p$-output of students’ skill in writing descriptive paragraph in both groups was lower than the level of significant 0.05. It means that there was a difference in both groups. It claims that there was a difference in both groups. It claims that the null hypothesis (Ho) was rejected and alternative hypothesis (Ha) was accepted. It can be concluded that there was no significant difference on students' reading comprehension achievement between students who were taught by using PQRST Strategy and students who were taught by using TPS Strategy to the eighth grade students of SMPN 33 Palembang.

**Interpretation**

Basically, both strategies are quite similar, in which both strategies are found as effective strategies for teaching students’ reading texts. Moreover, the students who were taught by using PQRST strategy had higher reading competency than those who were taught by using TPS strategy.

It is assumed that PQRST strategy assisted the students to enlarge stock of their vocabulary and build their **Prior knowledge** after preview stage, in the second step is **Question** where the students were asked to construct their own question, it is to stimulate the students to have critical thinking considering the text given, in **Reading** step, the students get the information of text given and comprehend the text well by combining their prior knowledge, in **Summarize** step, the students were encouraged to obtain the information dealing with the text, it is to improve the students high of their thinking, in **Test** step, the students were measured by their reading competency, it is to make the students feel responsible to do this task and more active in engaging reading activities. The result above was also supported by Komang, et al (2013) who stated that the PQRST strategy is beneficial to stimulate the students’ prior knowledge, construct their creative thinking by making their own question, the students could combine their prior knowledge with the information and ideas got from the short story develop their competency to find the main idea of the short story, the students would be more motivated to learn and more focus on the learning activity. In line with this the effectiveness of this strategy, Agbebire (2012), who states that PQRST strategy is universal study strategy that promotes better result and performance of the students.

Moreover, TPS strategy is to assist to improve the students’ reading competency. In the first step, Think, it is to stimulate the students to activate their mind to think of what text is given, and found the problems that they were encountered when they read the text. In the second step, Pair, the students were encouraged to work with their pairs cooperatively in encountering the problems, it is to make the students more communicative in a learning process and increase their realization of how to solve the problems of the text given with their pairs. In the third step, Share, the students share what they read, it is to make the students remind what text is given and to grow their self-confidence to report what

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean difference</th>
<th>$t_{\text{obtain}}$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post test (Experiment-Control)</td>
<td>2.645</td>
<td>1.193</td>
<td>60</td>
<td>0.238</td>
</tr>
</tbody>
</table>
they read in front the other students. It is proved by Lyman (2005), this is a smart academic teaching technique model for promoting critical thinking and articulate communication in the classroom.

These strategies above are students learning-centered in a way that reading instruction which is suitable for implementing in teaching reading class. By using these strategies to engage the students are cooperative in a learning process and they feel interested and motivated to improve their reading achievement.

CONCLUSION AND SUGGESTIONS

From the analysis of the data gathered from the research, it can be concluded as follows: (1) there was a significant achievement on students' reading comprehension who were taught by using PQRST strategy, (2) there was significant achievement on students' reading comprehension who were taught by using TPS strategy, and (3) there was no a significant difference on students' reading comprehension achievement between students who were taught by using PQRST strategy and students who were taught by using TPS strategy to the eighth grade students of SMPN 33 Palembang.

The teachers are suggested to solve the students' problems in reading competency by implementing the various strategies; some of them are PQRST strategy and TPS strategy. Based on the previous research and the results of this study, these strategies were effective to stimulate the students' motivation in learning and involving reading activities. These are ways to enhance students' reading competency. These strategies should be emphasized to achieve the learning objectives of the eighth grade of SMPN 33 Palembang as suggested in their curriculum.

REFERENCES


