Teaching Reading Comprehension through Survey, Question, Read, Recite, Review (SQ3R) Strategy

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Abstract

This study was a quantitative research about the implementation of Survey, Question, Read, Recite, Review (SQ3R) a strategy for solving specific questions individually and for helping students to memorize teaching materials, in teaching reading descriptive text. It was intended to find out whether or not SQ3R strategy could improve students’ reading comprehension. The subject of this study was all students of class VIII-5 of SMP Negeri 8 Banda Aceh which was chosen by using simple random sampling. The reason for conducting this study was due to the fact that students’ reading comprehension was still low. Moreover, the design used in this study was one group pre-test post-test design. In this study, the data was collected through pre-test, treatment and post-test. From the result of the study, it is found that mean of post-test (60) was higher than mean of pre-test (30.95). It indicated that the students’ post-test scores were increased from their pre-test scores. Moreover, based on t-test formula, the result of t-score (7.83) was higher than t-table (2.086). It means that the alternative hypothesis (H1) was accepted, while the null hypothesis (H0) was rejected. Hence, it can be concluded that SQ3R strategy can improve the students’ reading comprehension in descriptive text.

Key Words : Reading comprehension, SQ3R, Descriptive text

1. INTRODUCTION

Reading is one of the most important skills that should be mastered by students in learning English as a foreign language (EFL). Reading is one important way to improve your general language skills in English. Reading will help you to think in English, it enlarge your vocabulary, and improve your reading and writing skill in English (Mikulecky and Jefferies, 1996, p.1). The most common goal of reading is text comprehension, the construction of meaning that in some way corresponds to the author’s intended meaning (Ruddell, 2005, p.88).

Based on Curriculum 2013, the goal of teaching reading at eight grade of Junior High School is the students are expected to comprehend a simple short functional text in the form of descriptive, recount, and narrative based on its
context (Departemen Pendidikan Nasional, 2013). It means that the students are expected to comprehend some kinds of English texts.

Nowadays many techniques and strategies can be applied to solve this problem and increase students’ reading comprehension. One of the appropriate strategies is SQ3R (Survey, Question, Read, Recite, and Review in reading) as strategy that suggested by Robinson in 1940’s such supposed in Ruddell (2005, p.264). SQ3R is an effective active reading strategy to better understand written content, the learning process would be done in five steps, they are survey, question, read, recite, and review in reading. The main point of this strategy is the students perhaps have high motivation because they are given a chance to active in teaching learning process.

Furthermore, SQ3R is a complex strategy; the learners must have cognitive resources and knowledge before they become experienced (Li, Chen, Fan, & Huang, 2014, p. 320). In addition, SQ3R focuses on improving students’ comprehension when reading complex materials and serves as a foundation for many reading strategies (Khaghaninejad, Saadabadimotlagh, & Kowsari, 2015, p. 101). Moreover, SQ3R will help students in reading process to understand text well step by step. As said by Ghazo (2015, p. 94) SQ3R presents a detailed step by step outline at what a reader should accomplish while reading.

Based on explanation above the researcher is interested in conducting the research entitle “Teaching Reading Comprehension through SQ3R”

2. LITERATURE REVIEW

2.1 The Definition of Reading

Reading is an essential component of academic learning as well as a foundation for becoming an informed member of the broader community. Failure to achieve adequate reading proficiency denies students access to the essential tool for further learning (Koda and Zehler, 2008, p. 1). Although reading and listening are often referred to as ‘passive’ or receptive skills, in reality both involve complex mental processing in order for the listener to make sense of material (Hurd and Murphy, 2005, p. 80). Reading is a complex process that must be modelled, taught, practiced, and evaluated on daily basic (Stone, 2009, p. 40).

Furthermore, McDonough, Shaw, and Masuhara (2013, p. 110) said that as a skill, reading is clearly one of the most important. Many evidence shows that, reading is the most important language skills, especially for students have to read their material for their subject in English. English has also been the main driving language or dominant language of the internet. People who cannot read will not be able to acquire new information from written media. According to those views, it can be inferred reading help people to gain knowledge.

2.2 Descriptive Text

Descriptive text is a text which describes about the features and characteristics of a certain thing in detail (a person or a thing). Its purpose is to describe and reveal a particular person, place, or thing.

The generic structures of descriptive are:

a. Identification (introduction); the part of paragraph that introduces who, where, or what is being described the story.

b. Character description; the part of paragraph that describes the characteristic, parts and qualities of the subject being described.
The language features of descriptive texts are Pronouns, Nouns, Noun phrases, Adjectives, Preposition, Adverbs, Linking verbs, Present tense, and Attributive has and have.

2.3 SQ3R

SQ3R which stands for survey, question, read, recite/recall, and review- is a system that has been practiced for many years (Richardson and Morgan, 2003, p. 361). In addition, Francis P. Robinson, the education psychology as a creator of SQ3R, spent years teaching both college students and military personnel how to learn from text books. His system, if used consistently, can still produce big rewards (Flemming, 2009, p. 2). SQ3R is a step to decrease forgetting and raise reader comprehension. There are explanations each step of SQ3R according to Flemming, (2011, p. 2-31)
S = Survey
Survey is the step to get general overview and make predictions. It has four goals give reader following
1.) a general overview of material
2.) a feeling for researcher style and organization
3.) a sense for what’s important
4.) an idea of the text natural break or decisions

Q = Question
Ask and answer question while reading. Raising and answer question during a study session help you remain mentally active throughout your reading. Using question to maintain your concentration can also keep your alert to key points address in the chapter.

R = Read
Read difficult material in sections or chunks. In this step while reading you may write such as identify main point or list some specific use to explain the point. It helps you really understand what you read. It also excellent way to support you in remembers the point.

R = Recall/ Recite
Summarize and repeat to yourself what you have just read and take notes in your own word. See how much you can recall right after reading. It is become important because of two reasons: first, it is a way to monitoring your understanding before you going to next section, and second, it shows the rate of forgetting and increase your chance or remembering what the author of text actually said

R = Review
Review right after completing the assignment. Check the accuracy of your note against the text and connect any inaccuracies. The goals of this step are to get sense of how the parts of a section connect and to confirm or revise you initial predictions about sections content.

3. METHODS

In this study, the researcher will use quantitative research. According to Arends (2004, p. 495) quantitative research is an approach to research that assumes a goal reality that studies conducted in an objective way and uses statistical methods to investigate data. This study used experimental research design that was intended to answer research problem. The research employed a pre experimental design. The model of this experiment design was called one group
pretest – posttest design. The design consists of a pre-test, followed by treatment, and then a post-test.

This research was conducted in SMP Negeri 8 Banda Aceh. Meanwhile, as the sample of this research was class VIII-5. This class had 21 students which consisted of 11 male students and 10 female students. This class was selected by using simple random sampling.

After the result of pre-test and post-test collected, to analyze the result of the tests, the researcher used the following scoring system:

| One correct answer = 10 |
| The sum of the questions = 10 |
| Total score = 10 x 10 = 100 |
| The sum of the student’s score = the correct answer x 10 |

| Student’s score = \( \frac{obtained\text{score}}{maximum\text{score}} \times 100 \) |

Additionally, the researcher used quantitative analysis to analyse the data. First, the researcher calculated the average score (mean) of the students. Ary, Jacobs, Sorensen and Razavieh (2010, p. 108) have described the formula of mean as follows:

\[
\bar{x} = \frac{\sum x}{N}
\]

Where:
- \( \bar{x} \) = mean
- \( \sum \) = sum of
- \( N \) = number of students
- \( x \) = scores

Then, the researcher used the formula of standard deviation to investigate the variability of the study. The formula of standard deviation that has been defined by Ary et al. (2010, p. 177) as follows:

\[
s_{D} = \sqrt{\frac{\sum D^2 - (\sum D)^2}{N - 1}}
\]

Where:
- \( s_{D} \) = standard deviation
- \( \sum \) = sum of
- \( D \) = difference between pre-test and post-test scores
- \( N \) = number of students

Finally, the researcher used t-test to find out the significant difference between pre-test and post-test. The t-test formula as stated by Ary et al. (2010, p. 177) is:

\[
t = \frac{D}{\sqrt{\frac{\sum D^2 - (\sum D)^2}{N(N - 1)}}}
\]

Where:
- \( t \) = t ratio
- \( \sum \) = sum of
- \( D \) = difference between pre-test and post-test scores
- \( N \) = number of students
4. FINDINGS AND DISCUSSION

4.1 Findings

The result is about students’ learning outcomes after being taught by using SQ3R. As explained in the previous chapters, this study aims to determine the significant effect of SQ3R towards students’ performance in reading comprehension. To find out the effectiveness of SQ3R, the following sections elaborate the process of teaching implementation along with the data analysis of the students’ reading score which was collected through pre-test and post-test. Then the results of the research were analyzed by using some statistical analysis. Moreover, the explanation of the results of the research will be deeply explained in the following section.

4.1.1 The Result of Pre-test

Before applying SQ3R in teaching reading, it was necessary to know the students’ ability in comprehending descriptive text. In the first meeting, pre-test was given to the students of class VIII-5 to get the data needed. The result of the pre-test is shown in table 4.1.a

<table>
<thead>
<tr>
<th>Class Interval (Students Score)</th>
<th>Frequency (Students)</th>
<th>Percentage of Student (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10 – 19)</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>(20 – 29)</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>(30 – 39)</td>
<td>7</td>
<td>33</td>
</tr>
<tr>
<td>(40 – 49)</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>(50 – 59)</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>(60 – 69)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>(70 - 79)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(80 - 89)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(90 - 90)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Moreover, to make it clearer, the researcher presented the data in figure 4.1.a to illustrate the students’ pre-test scores. The X axis represents the score of pre-test, while the Y axis represents the number of students.
Figure 4.1.a The Students’ Pre-test Scores

From table 4.1.a and figure 4.1.a, it can be seen that the students got various scores in which the lowest score was 10 and the highest score was 60. In addition, there were four students (19%) who got the lowest score (10), and there were only one student (5%) who got the highest score (60). However, most students (33%) got 30 score. So, it can be concluded that the students’ reading comprehension was still low. Furthermore, it also revealed that no student could reach KKM which was 75.

4.1.2 The Result of Post-Test

The researcher gave post-test as a final test to determine the students’ ability in reading comprehension after accomplishing treatment. The result of the post-test is exposed in table 4.1.b

Table 4.1.b The Distribution Frequency of Post-test Score

<table>
<thead>
<tr>
<th>Class Interval (Students Score)</th>
<th>Frequency (Students)</th>
<th>Percentage of Student (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10 – 19)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(20 – 29)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>(30 – 39)</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>(40 – 49)</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>(50 – 59)</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>(60 – 69)</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>(70 - 79)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(80 - 89)</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>(90 - 90)</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>100</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
In addition, to make it clearer, the researcher presented figure 4.1.b to illustrate the students’ post-test scores. The X axis represents the score of post-test and the Y axis represents the number of students.

![Result of post-test](image)

**Figure 4.1.b The Students’ Post-test Scores**

Table 4.1.b and figure 4.1.b show the students’ post-test scores. Furthermore, it can be seen that the highest score of post-test was 100 that was obtained by one student (5%). Whereas, 20 was the lowest score of post-test that was reached by one student (5%). In addition, most students (24%) got 60 which showed that there was an improvement of students’ reading comprehension compared to pre-test. However, referring to the school regulation, there were only seven students that reached the score of KKM. It means that SQ3R did not significantly help the students to reach KKM regulated.

**4.1.3 Students’ Pre-test and Post-test scores**

In this section, the students’ pre-test and post-test scores will be compared in one histogram, figure 4.1.c. Thus, the comparison of students’ pre-test and post-test scores can be observed in detail. In figure 4.1.c, the X axis represents the students’ scores of pre-test and post-test, while the Y axis represents the number of students.
As shown in figure 4.1.c, it can be noted that in general the post-test scores were higher than the pre-test scores. In addition, the lowest score of post-test was 20 which rose for about 10 of the lowest score of pre-test that was 10. Meanwhile, the highest score of post-test was 100 that rose for about 40 of the highest score of pre-test that was 60.

Besides, the most frequent score in pre-test was 30 that were obtained by seven students. Otherwise, the frequent score in post-test was 60 that were achieved by five students. Hence, most students’ scores changed significantly in the post-test.

### 4.1.4 Mean of Pre-test and Post-test

Mean was necessary to measure the students’ pre-test scores and the students’ post-test scores. The formula of mean is total score of the students (ΣX) divided by total number of the students (N). Moreover, the mean of pre-test and post-test scores can be compared to indicate the improvement of students’ reading comprehension.

The calculation of mean of students’ pre-test scores is as follows:

\[
\bar{x} = \frac{\sum X}{N} = \frac{650}{21} = 30.95
\]

While, the calculation of mean of students’ post-test scores is as follows:

\[
\bar{x} = \frac{\sum X}{N} = \frac{1260}{21} = 60
\]
Based on the results of both mean, it can be seen that mean of post-test was higher than mean of pre-test. The difference between two mean was about 29.05. Hence, in average, the students’ pre-test scores increased significantly to the students’ post-test scores. This could be concluded that the use of SQ3R could enhance the students’ reading comprehension.

4.1.5 Standard Deviation

After comparing mean of students’ pre-test and post-test scores, the researcher calculated the standard deviation. It was used to measure variability or dispersion of students’ pre-test and post-test scores. The calculation of standard deviation is as follows:

\[
s_D = \sqrt{\frac{\sum D^2 - (\sum D)^2}{N - 1}}
\]

\[
= \sqrt{\frac{23500 - (610)^2}{21 - 1}}
\]

\[
= \sqrt{\frac{23500 - 372100}{21}}
\]

\[
= \sqrt{23500 - 17719.05}
\]

\[
= \sqrt{5780.95}
\]

\[
= \sqrt{289.05}
\]

\[
= 17
\]

Based on the calculation above, it can be concluded that the dispersal or range of students’ pre-test and post-test scores was 17.

4.1.6 T-test

After processing standard deviation, the researcher calculated t-test in order to find out the hypothesis testing. The calculation of t-test is as follows:

\[
t = \frac{D}{\sqrt{\frac{\sum D^2 - (\sum D)^2}{N(N - 1)}}}
\]

\[
= \frac{5780.95}{\sqrt{21(20)}}
\]

\[
= \frac{5780.95}{29.05}
\]

\[
= \frac{5780.95}{29.05}
\]

\[
= \sqrt{13.76}
\]
From the data calculation of t-test above, it can be seen that t-score was 7.83. In addition, to test the hypothesis, the t-score must be compared with t-table (refers to appendix 12). If t-table > t-score, this means the alternative hypothesis (H_a) is rejected, and the null hypothesis (H_0) is accepted. Otherwise, if t-table < t-score, this means the alternative hypothesis (H_a) is accepted, and the null hypothesis (H_0) is rejected.

In this research, the degree of freedom of t-table was 20. It was gained from formula N-1 = 21-1 = 20. In addition, for the significance level, the researcher used α 0.05. Thus, the critical value for df 20 at level significance 0.05 is 2.086. Furthermore, because t-score value was higher than t-table (7.83> 2.086), it means that the alternative hypothesis (H_a) was accepted while the null hypothesis (H_0) was rejected. Thus, all these analysis of data indicated that the implementation of SQ3R improved the students’ reading comprehension.

4.2. Hypothesis Testing

In analysing the hypothesis, it is referred to the t-table at level significance α 0.05. The testing criterion used for hypothesis result is; if t-test > t-table, it means that the difference is significance and the alternative hypothesis (H_a) is accepted and null hypothesis (H_0) is rejected. Furthermore, the t-table with the level significance of α 0.05 of freedom (df) n-1= 21-1=20 is 2.086.

4.3 Discussion

The researcher would like to discuss about hypothesis testing. In this research, the researcher used level of significant α = 0.05. Moreover, for the testing criterion of the hypothesis: if t-score >t-table this means that the alternative hypothesis (H_a) is accepted, and the null hypothesis (H_0) is rejected, while if t-table> t-score this means that the alternative hypothesis (H_a) is rejected, and the null hypothesis (H_0) is accepted.

Furthermore, the researcher would like to present the statistical data of the improvement of students’ pre-test and post-test scores in table 4.3

<table>
<thead>
<tr>
<th>Test</th>
<th>Total score</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T-Test</th>
<th>T-Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>650</td>
<td>30.95</td>
<td></td>
<td>17</td>
<td>7.83</td>
</tr>
<tr>
<td>Post-test</td>
<td>1260</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the table 4.3, it can be concluded that pre-test to post-test score had an improvement. It could be seen from mean of both tests. The mean of pre-test was 30.95, while in post-test was 60. If we compare the two means of the tests, it
was seen that the mean of post-test was higher than pre-test. It proved that the treatment by using SQ3R could improve students reading comprehension.

5. CONCLUSION AND SUGGESTIONS

After completing this study, the researcher illustrated some conclusions and suggestions in terms of the use of Survey, Question, Read, Recite, and Review (SQ3R) strategy in improving the students’ reading ability in comprehending text. The data obtained in second grade students of SMP Negeri 8 Banda showed that using SQ3R improve students’ achievement. Furthermore, the improvement of students’ reading comprehension can be seen from some statistical data. First, the mean of post-test was higher than pre-test (60 >30.95). This indicated that there was significant difference among two mean scores. In addition, based on the t-test analysis, the t-test score of the students was 7.83, while the table was 2.086. Because t-test (7.83) was higher than the t-score measurement table (2.086), it can be concluded that the result was significant which means that the alternative hypothesis (Hₐ) was accepted and the null hypothesis (H₀) was rejected. In short, SQ3R was effective to improve students’ ability in reading comprehension.

Regarding to teach reading comprehension by Survey, Question, Read, Recite, and Review (SQ3R), the researcher gives some suggestions teachers and the students as follows.

a. For the teacher
   The teacher must be creative to used SQ3R strategy in order that students are interested and are not bored in the teaching and learning process.

b. For the student
   Students should be brave and active in reading text because it is one of the best practices that can improve students’ reading comprehension.

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