

**DEVELOPING STUDENTS' READING COMPREHENSION
BY USING SQUR METHOD**

Nina Manna Evansati
Sriwijaya State Polytechnic
Palembang
Phone: (0711) 353414
Fax: 0711-355918
Department of English

ABSTRACT

The objective of this study was to see whether or not SQUR method can give a significant contribution to develop the reading comprehension at the second semester students of Chemical Engineering of State Polytechnic of Sriwijaya. For this purpose, a quasi experimental design was used. The subjects involved in this study were 54 second semester students of Chemical Engineering, in academic year of 2007/2008. The primary data were obtained by means of tests. These data were analyzed by using t-test. The result shows that there was a significant difference of student's reading achievement before and after the treatment. The value of both groups (t_0) was higher (4.76) than the value of t-table which is 2.002. It is also found that the significant change made by the students in group 2 (experimental) was higher than group 1 (control). It can be seen that the result of the gained t of the group 2 was 8.618 whereas the gained t of the group 1 was 2.885. Both of groups' value were higher than the value of the t table.

KEYWORDS

SQUR method, quasi experimental, t-test

1. INTRODUCTION

Many college students discover that there is significantly more to read in college than there was in high school. Students frequently remark that they do not have enough time to read through all of their assignments during the week. However, many students have bad habits and practice to reading myths for examples read every word, one reading is sufficient, don't skip passages, etc.

Reading, generally, can be defined as getting the meaning from the printed page. From this new definition Rubin (1993:53-56) stated that reading is the process in which information from the text and the knowledge possessed by the reader act together to produce recognition with comprehension, she proposed that reading comprehension is a complex educational process involving a number of abilities. Two major abilities involve word meaning and verbal reasoning. Without word meanings and verbal reasoning, there would never reading comprehension; without reading comprehension, there would be no reading.

Textbooks are often read in the same way pleasure books are read-begin with the first page of the chapter and read to the end of the chapter, without stopping. While this method is fine for novels and mysteries, it is not likely to result in the level of understanding and retention needed for most textbooks. This condition makes the students become ineffective readers because they do not make the best possible use of their reading and do not apply skills that will enable them to get their best comprehension.

What the writer faced in the class is that the students have difficulties in comprehending the reading text, in this case the second semester Chemical Engineering of State Polytechnic of Sriwijaya. When they were asked some questions related to their comprehension in subject Reading where they need to read a lot of text books with detail, they cannot answer the questions because of lack of comprehension. Based on the fact, in this study the writer is interested to use SQ3R method to strengthen reading comprehension at the second semester students of Chemical Engineering of State Polytechnic of Sriwijaya.

2. RESEARCH QUESTIONS

The study intends to answer the following question: can SQ3R method give significant contribution to develop the students' reading comprehension at the second semester students of Chemical Engineering of State Polytechnic of Sriwijaya?

3. CONCEPTUAL FRAMEWORK

3.1. The Concept of Reading Comprehension

Such cited in Rubin (1993:63) divided the reading comprehension skills into four categories. Each category is cumulative in that each builds on the other. The four categories are first, **literal comprehension** which represents the ability to obtain a low level type of understanding by using only information explicitly stated. The second category is **interpretation**. It concerns with the answers that are not directly stated in the text but are suggested or implied. **Critical reading** is the third category. It involves evaluation, the making of personal judgments on the accuracy, value, and truthfulness of

what is read. The last category is **creative reading**. Creative reading uses divergent thinking skills to go beyond literal comprehension, interpretation, and critical reading level.

Moreover, Barot cited in Duguis (1989:31-32) identified four levels of comprehension. They are first, **literal recognition/recall** (level 1). This level is considered as the lowest cognitive level because the reader understands just what the words mean. The next level is **comprehension** (level 2). This level of comprehension requires the readers to understand the **new information** from level 1 and go beyond it to hypothesize about relationships, causal ideas and connection between ideas or events. The third level is **evaluation** (level 3). In this level the reader is required to make judgments which can be made about are the "accuracy, acceptability, worth, desirability, completeness, suitability, timeliness, quality, and truthfulness" of the selection. The last level is **appreciation** (level 4). Appreciation refers to the emotional responses of readers to a text.

III. The Concept of SQ3R Method

Duguis (2002) stated that SQ3R method is a simple five system developed by Professor Thomas P. Robinson at Ohio University. This strategy is used when :

- The text is fairly structured and has some basic textbook aids for the reading (boldface heading, italics, study questions, etc)
- A detailed understanding of the information is required.
- The amount of reading is intensive.
- The information must be retained over long periods of time.

The five steps of SQ3R method are:

Survey —> This step helps students gather the information necessary to focus on the chapter and formulate questions for themselves as they read the chapter. It is not necessary to have answers to the questions at this step of the process. The answers will come later in the process.

Questions —> As students have surveyed the entire chapter to build a framework for understanding the chapter, it is time to begin the reading process. This step and the next two, read and recite, are repeated over and over as students read the chapter.

Read —> Reading the section fills in the information around the mental structures students have been building by surveying the chapter and developing questions about the section.

Recite —> Reciting material as students go strains their mind to concentrate and learn as it reads.

Review —> The review step helps the students refine their mental organization of the material in the chapter and begin to build memory. They learn through repetition. This step provides another opportunity for

repetition of the material and therefore will enhance their recall of the information.

4. METHODOLOGY

4.1. The Method of The Study

In conducting this study, the writer will use a quasi-experimental design. According to Christensen (1991:305), a quasi-experimental design is an experimental design that does not meet all requirements necessary for controlling the influence of extraneous variables.

The writer will use one of quasi-experimental designs, that is, Non-Equivalent Control Group design. The design involves an experimental group and control group both gives a pretest and posttest, but in which the control group and the experimental group do not have pre-experimental sampling equivalence (Campbell and Stanley, 1971:217).

The design was as follows:

Where:

- X : treatment
- O1 : pretest of experimental group
- O2 : posttest of experimental group
- O3 : pretest of control group
- O4 : posttest of control group

Since this design requires two parallel classes to be as similar as possible in quantity and ability, the writer will divide the sample into two groups, that is, experimental and control groups. The writer will give different treatment to both experimental and control groups. However, in relation to this research, (X) refers to the treatment, that is, using SQQR method to strengthen reading comprehension.

4.2. Subject of The Study

Population is a group of elements or cases whether individuals, object or events that conform to specific criteria which we intend to generalize the result of the research (McMillan, 1992:76). The population in this study was the second semester students of Chemical Engineering of State Polytechnic of Sriwijaya in the academic year 2007/2008. The total number of population was 54 students (the afternoon classes) distributed in three classes: Class 2KJA (20 students), Class 2KJB (17 students), and Class 2KC (17 students). The writer took two classes from the population as the sample of the study, those are 2KJB and 2KC, and use simple random sampling to determine the experimental class and the control class. The distribution of the population is shown in the table 1 below :

**TABLE I
THE DISTRIBUTION OF THE POPULATION OF THE SECOND SEMESTER STUDENTS OF CHEMICAL ENGINEERING OF STATE POLYTECHNIC OF SRIWIJAYA.**

No.	Classes	Males	Females	Number of Students
1	2K1A	8	12	20
2	2K1B	6	11	17
3	2K1C	3	14	17
	Total	17	37	54

4.3. Experiment (Treatment)

Experiment refers to any action or process designed to find out that something is effective, workable, and valid (Tuckman, 1991:478). The writer carried out the experiment by teaching the sample study who was taught by using SQ3R method.

The writer taught the sample study for sixteen times, which were carried out once a week for almost four months. The procedure for teaching and learning reading by using SQ3R method that was implemented to the students was as follows:

1. Survey the chapter for the main idea by using
 - title
 - learning objectives
 - summary/introduction
 Survey the chapter by looking for and reading the
 - heading and subheading
 - boldface and italic print and marginal definition
 - example problems
 - diagrams, graphs, tables, formulae
 - conclusion
 - list key terms at the end of the chapter
2. Question: Read one section at a time. Before you start to read, make or find questions.
 - You may find questions in the learning objectives, at the end of the chapter, or in the study guide.
 - Create your own questions from heading/subheadings or the learning objectives.
3. Read the section to find the answers to your question. The questions will help you concentrate.
4. Recite the information by covering up the text and answering your questions out loud. You can also recite the answers by writing them as notes.

- Review the entire chapter as soon as you have finished. Again, for each section, cover the text or your notes and try to answer the questions. If you do not remember the answer, repeat it until it is fixed in your memory.

4.4. Technique for Collecting the Data

To measure the student's achievement in reading comprehension, the writer gave tests to the sample. According to Webster's Word Origins Dictionary (1988:382), test refers to a set of questions, problems, or exercises for determining a person's knowledge, abilities, aptitude or qualification. There were two kinds of test used by the writer as instrument, the pre-test and the post-test. The pre-test was given to measure the students' ability in reading comprehension before they were given the treatment. Then the post-test was given at the end of study in order to know the students' ability in reading comprehension after having the treatment during the study. In the pre-test and post-test, the writer gave eight passages which was followed by questions in the form of multiple choice. Each passage had five questions and every question consisted of five options.

Before doing the real study, the instrument was tried out for its reliability and validity. In this case, the instrument was field tested to 30 students of the second semester students of Chemical Engineering (the morning classes), 2KA and 2KB. The result of the try out was analyzed by using K-R Formula 21. According to Kishiyama, Tomi and Gary (1993:310) "K-R21 (Kuder-Richardson 21) is a method to measure the extent to which items within one form of the test as much as in common with one another as do the items in that one form with corresponding items in an equivalent form. The formula of KR21 is as follows:

$$R.I. = \frac{M}{M - 1} = \frac{2(V - V_t)}{V - 1}$$

In which :

- R.I. : instrument reliability
- M : the number of questions
- V : the average scores
- V_t : the total variant

$$V_t = \frac{\sum(X_i^2)}{N} - \bar{X}^2$$

In which :

- X : the students' total score
- N : the number of the students

To find out the validity, the result of the try-out test was also analyzed by using Point Biserial Correlation formula. The formula is as follows:

In which :

- R_{pbis} : the correlation coefficient
 M_p : the mean score of the students who answer each item correctly
 M_t : the mean scores of the total score
 S_d : deviation standard
 p : the proportion of the students who have the right answer
 q : 1-p

4.2. Techniques for Analyzing the Data

After collecting the data from the tests given in order to know the progress reading comprehension made by the students, the writer used a very simple statistical formula for comparing the result of post-test and pre-test. T-test was used to know whether or not there is a significant difference between the students' post-test score and their pre-test score. The data were analyzed by using the Statistical Product and Service Solution (SPSS).

5. RESULTS AND DISCUSSION

5.1. Reliability and Validity of Test

TABLE 2

THE RELIABILITY OF THE TEXT
The Score of Student's Reading Comprehension
of The Preliminary Study (Reliability)

No.	Students	X	X^2
1	S ₁	36	1296
2	S ₂	35	1225
3	S ₃	33	1089
4	S ₄	36	1296
5	S ₅	30	900
6	S ₆	36	1296
7	S ₇	36	1296
8	S ₈	35	1225
9	S ₉	35	1225
10	S ₁₀	34	1156
11	S ₁₁	34	1156
12	S ₁₂	33	1089
13	S ₁₃	33	1089
14	S ₁₄	32	1024
15	S ₁₅	32	1024
16	S ₁₆	29	841
17	S ₁₇	26	676
18	S ₁₈	25	625

19	S ₁₁	26	676
20	S ₁₁	25	625
21	S ₁₁	18	324
22	S ₁₁	18	324
23	S ₁₁	15	225
24	S ₁₁	26	676
25	S ₁₁	22	484
26	S ₁₁	22	484
27	S ₁₁	28	784
28	S ₁₁	28	784
29	S ₁₁	30	900
30	S ₁₁	13	169
		$\Sigma X = 861$	$\Sigma X^2 = 25983$
		$(\Sigma X)^2 = 741321$	

$$\begin{aligned} D_1 &= \frac{\Sigma X^2 - (\Sigma X)^2}{N} \\ D_1 &= \frac{25983 - 741321}{30} \\ D_1 &= \frac{-711438}{30} \\ &= -42.41 \\ r_{11} &= \frac{N - D_1(M_1 - m)}{M_1 - 1 - \frac{(M_1 - m)(m - M_1)}{N - 1}} \\ r_{11} &= \frac{30 - (-42.41)(18 - 22.7)}{22.7 - 1 - \frac{(22.7 - 18)(18 - 22.7)}{29}} \\ &= 0.82971024 \end{aligned}$$



From the calculation, it was found that the result of r_{11} was 0.82971024. It means that the test was reliable and could be used in the real study because r_{11} is higher than r -product moment table that was 0.254.

TABLE 3

VALIDITY OF TRY-OUT TEST

No	M _p	F	Q = 1-p	$\frac{1}{\sqrt{N}}$	M ₁₁	m	$\frac{\Sigma X = 227}{D_1}$	R _{prod}
1	32.74	0.613	0.387	1.313	28.7	6.512	0.620	0.81406
2	31.59	0.713	0.267	1.637	28.7	6.512	0.444	0.7325708
3	32.4	0.677	0.323	1.415	28.7	6.512	0.568	0.80732
4	32.05	0.7	0.3	1.527	28.7	6.512	0.514	0.784878
5	32.05	0.7	0.3	1.527	28.7	6.512	0.514	0.784878
6	31.43	0.767	0.233	1.814	28.7	6.512	0.419	0.760056
7	31.39	0.767	0.233	1.814	28.7	6.512	0.413	0.749182
8	30.52	0.767	0.233	1.814	28.7	6.512	0.279	0.506106
9	29.92	0.8	0.2	2	28.7	6.512	0.187	0.375

10	30.52	0.67	0.233	1.814	28.7	6.512	0.284	0.515176
11	28.75	0.6	0.2	2	28.7	6.512	0.068	0.0016
12	30.772	0.6	0.4	1.225	28.7	6.512	0.310	0.37973
13	30	0.7	0.3	1.527	28.7	6.512	0.199	0.348873
14	29.83	0.767	0.233	1.814	28.7	6.512	0.174	0.358158
15	31.21	0.467	0.333	0.936	28.7	6.512	0.385	0.360056
16	30.34	0.767	0.233	1.814	28.7	6.512	0.266	0.482524
17	30.43	0.767	0.233	1.814	28.7	6.512	0.266	0.482524
18	31.625	0.533	0.467	1.608	28.7	6.512	0.449	0.479532
19	29.92	0.8	0.1	3	28.7	6.512	0.187	0.375
20	26.8	0.533	0.467	1.068	28.7	6.512	6.512	0.297792
21	29.73	0.713	0.267	1.657	28.7	6.512	0.237	0.376139
22	29.33	0.7	0.3	1.527	28.7	6.512	0.097	0.148119
23	30.8	0.667	0.333	1.657	28.7	6.512	0.332	0.43593
24	32.4	0.667	0.333	1.657	28.7	6.512	0.568	0.80732
25	30	0.7	0.3	1.527	28.7	6.512	0.199	0.304857
26	30.05	0.7	0.3	1.527	28.7	6.512	0.214	0.784878
27	30.18	0.753	0.267	1.657	28.7	6.512	0.227	0.376139
28	30.68	0.167	0.633	2.233	28.7	6.512	0.212	0.473396
29	30.68	0.667	0.333	1.413	28.7	6.512	0.322	0.43593
30	30.68	0.733	0.267	1.657	28.7	6.512	0.213	0.352944
31	29.23	0.733	0.267	1.657	28.7	6.512	0.192	0.318144
32	30.57	0.767	0.233	1.814	28.7	6.512	0.287	0.529618
33	30.12	0.833	0.167	2.233	28.7	6.512	0.218	0.488794
34	31.625	0.533	0.467	1.068	28.7	6.512	0.449	0.479532
35	29.6	0.833	0.167	2.233	28.7	6.512	0.158	0.308154
36	30.52	0.7	0.3	1.527	28.7	6.512	0.279	0.426493
37	30.15	0.676	0.333	1.413	28.7	6.512	0.253	0.315345
38	30.38	0.733	0.267	1.657	28.7	6.512	0.253	0.422933
39	32.33	0.8	0.2	2	28.7	6.512	0.494	0.808
40	31.33	0.8	0.2	2	28.7	6.512	0.494	0.808
							T =	
							19.158507	
							=	
							0.47894275	

After calculating the data , from the 40 items of reading test, most of them were valid and could be used because the result of the correlation coefficient of the item was 0.47894275. The correlation coefficient of the item was higher than 0.341 (see r-product moment table).

**TABLE 4
THE STUDENT'S SCORES OF PRE-TEST AND POST-TEST
OF GROUP 1 AND GROUP 2**

Number of students	Group 1 (Control)		Group 2 (Experimental)	
	Pre - Test	Post - Test	Pre - Test	Post - Test
1	2.0	3.0	2.0	9.6
2	6.3	7.7	4.3	8.3
3	1.7	3.7	3.0	9.0
4	5.7	8.7	6.7	9.6
5	6.7	5.3	6.3	9.3
6	6.3	8.0	3.7	8.7
7	7.0	6.7	2.3	9.3
8	3.0	7.7	1.7	9.0
9	2.7	4.0	4.0	6.7
10	3.0	5.0	3.7	7.0
11	2.1	6.7	4.0	9.3
12	2.0	7.0	1.7	9.3
13	1.7	4.3	8.3	9.7
14	8.6	9.0	4.0	9.0
15	4.0	5.0	3.7	9.6
16	3.0	5.3	1.7	9.3
17	4.7	5.3	0.7	9.6
Total	70.1	104.4	62.8	145.3
Mean	4.12	6.14	3.69	8.41

Based on the analysis of the pretest, the mean score for group 1 was 4.12 while for group 2 was 3.69. In order to know whether or not there was a significant difference between the mean of those two groups, the writer analyzed the data by using SPSS and it was found that the probability was 0.214 higher than 0.05. If the probability is higher than 0.05, H_0 is accepted or it can be said that the variance of both group 1 and group 2 were the same. It means that the ability of the students in both two groups were the same before the treatment was given.

3.2. Statistical Analysis

The hypotheses of this study are (H_1) there is no significant difference between those two groups and (H_0) there is a significant difference between those two groups. To know whether the hypotheses is accepted or rejected, the t-statistics was used. If the t-statistics result is smaller than the value of the t-table, H_0 is accepted and therefore, H_1 is rejected. On the other hand, if the t-statistics result is higher than the value of the t-table, so H_0 is rejected and consequently H_1 is accepted .

In analyzing the results of the tests, in this calculation, the writer used t-test formula by comparing the means of the two groups by using Statistical Product and Service Solution (SPSS). The writer applied Paired Sample T-Test to analyze the pretest and posttest scores of the students. This analysis was used to see whether or not there is a significant difference in students' reading achievement before and after they were taught by using SQSR method.

**TABLE 3
THE RESULT OF PRE-TEST AND POST-TEST OF GROUP I**

Number of students	Pre-test			Post-test		
	X _i	S _i	S _i ²	X _i	S _i	S _i ²
1	2.0	-2.12	4.49	5.0	-1.14	1.29
2	4.3	2.18	4.75	7.7	-3.37	28.83
3	3.0	-2.42	5.86	3.7	-2.44	5.95
4	6.7	1.58	2.49	8.7	-2.56	6.55
5	6.3	2.58	6.66	5.3	-0.84	0.71
6	2.7	2.18	4.75	8.0	1.86	3.46
7	2.3	2.88	8.29	6.7	0.56	0.31
8	1.7	-1.12	1.25	7.7	1.56	2.43
9	4.0	-1.42	2.02	4.0	-2.14	4.57
10	5.7	-1.12	1.25	5.0	-1.14	1.29
11	4.0	-1.82	3.11	6.7	0.56	0.31
12	1.7	-2.12	4.49	7.0	0.86	0.74
13	8.3	-2.42	5.86	4.3	-1.84	3.79
14	4.0	3.88	15.05	9.0	2.86	8.18
15	3.7	-0.12	0.04	5.0	-1.14	1.29
16	1.7	-1.12	1.25	5.3	-0.84	0.71
17	0.7	0.58	0.34	5.3	-0.84	0.71
Total	70.1		72.12	104.4		70.72
Mean	4.12		4.34	6.14		4.16

The comparison between pre-test and post-test results within group I is as follows :

$$\begin{aligned}
 T_1 &= \frac{\bar{X}_1 - \bar{X}_2}{S_p} \\
 S_p &= \sqrt{\frac{S_1^2 + S_2^2}{2}} \\
 S_p &= \sqrt{\frac{1.29 + 1.29}{2}} = 1.29 \\
 S_p^2 &= (\bar{X}_1 - \bar{X}_2)^2 / n \\
 S_p^2 &= \frac{(4.12 - 6.14)^2}{17} = 1.29 \\
 S_p &= \sqrt{1.29} = 1.14 \\
 t &= \frac{\bar{X}_1 - \bar{X}_2}{S_p} = \frac{4.12 - 6.14}{1.14} \\
 t &= \frac{-2.02}{1.14} = -1.78 \\
 t &= -1.78 < -2.042
 \end{aligned}$$

Based on the analysis, it was found that the value of the gained of the group I was 2.885. Since the value of the gained of group I was bigger than 2.042 (the t-ratio at the .05 level),

The difference between the achievement of the students in pre and posttest within group 1 is statistically significant. After analyzing the data in the group 1, the writer then analyzed the data in the group 2.

TABLE 6
**THE RESULT OF PRE - TEST AND POST -TEST
 OF GROUP 2**

Number of students	Pre-test			Post-test		
	\bar{Y}_1	S_1	S_1^2	\bar{Y}_2	S_2	S_2^2
1	2.0	-1.69	2.86	9.6	1.17	1.37
2	4.3	0.1	0.37	8.3	-0.13	0.02
3	3.0	-0.69	0.48	9.0	0.37	0.32
4	6.7	3.01	9.06	9.6	1.17	1.37
5	6.3	2.61	6.81	9.3	0.87	0.76
6	2.7	-0.99	0.58	8.7	0.27	0.07
7	2.3	-1.39	1.93	9.3	-0.87	0.76
8	1.7	-1.99	3.93	9.0	-0.57	0.32
9	4.0	0.31	3.69	8.7	-1.37	2.99
10	5.7	2.01	6.09	7.0	1.43	3.04
11	4.0	0.31	4.04	9.3	0.87	0.76
12	1.7	-1.99	0.09	9.3	0.87	0.76
13	8.3	4.61	3.96	9.7	1.27	1.61
14	4.0	0.31	21.2	9.0	0.57	0.32
15	3.7	-0.01	0.09	9.6	1.17	1.37
16	1.7	-1.99	0.09	9.3	0.87	0.76
17	0.7	-2.99	3.96	9.6	-1.17	1.37
Total	62.8		68.82	143.3		16.97
Mean	3.69		4.02	8.43		0.99

The comparison between pre-test and post-test results within group 2 is as follows:

$$\begin{aligned} S_{\bar{Y}} &= \sqrt{\frac{S_1^2}{n}} = \sqrt{\frac{16.97}{17}} \\ &= \sqrt{1.00} = 1.00 \end{aligned}$$

$$\begin{aligned} S_{\bar{Y}} &= \sqrt{\frac{S_2^2}{n}} = \sqrt{\frac{16.97}{17}} \\ &= \sqrt{1.00} = 1.00 \end{aligned}$$

$$\begin{aligned} t &= \frac{\bar{Y}_2 - \bar{Y}_1}{S_{\bar{Y}}} = \frac{8.43 - 3.69}{1.00} \\ &= \frac{4.74}{1.00} = 4.74 \end{aligned}$$

$$\begin{aligned} t &= \frac{\bar{Y}_2 - \bar{Y}_1}{S_{\bar{Y}}} = \frac{8.43 - 3.69}{1.00} \\ &= \frac{4.74}{1.00} = 4.74 \end{aligned}$$

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s_1^2 + s_2^2}}$$

$$df = n_1 + n_2 - 2$$

= 8.618

Based on the analysis, it was found that the value of the gained *t* of the group 2 was 8.618. Therefore, the value of the gained *t* was higher than the value of the *t*-table. It means that there was also statistically significant difference in the group 2.

It can be concluded, based on the analysis above, that the significant change made by the students in group 2 was higher than group 1. It can be seen from the result of the gained *t* of the group 2 was 8.618 whereas the gained *t* of the group 1 was 2.885.

After finding out that there was progress of scores of group 1 and group 2, the writer used t-test formula to know the significant difference between the two groups. The following table consists of the data of two tests – pretest and posttest – of group 1 and group 2.

TABLE 7
THE GAIN OF GROUP 1 AND GROUP 2

No Sample	Group 1			Group 2		
	X ₁	S ₁	S ₁ ²	X ₂	S ₂	S ₂ ²
1	3.00	0.98	0.96	7.6	2.34	5.48
2	1.40	-0.62	0.38	4	-1.26	1.59
3	2.00	-0.02	0.00	6	0.74	0.55
4	3.00	0.98	0.96	7.9	2.36	5.57
5	-1.40	-3.74	13.99	3	-2.26	9.11
6	1.70	-0.22	0.10	6	0.74	0.55
7	-0.30	-1.72	2.96	7	1.74	3.01
8	4.70	2.68	7.18	7	2.04	4.06
9	1.30	-0.72	0.52	2.7	-2.56	6.55
10	2.00	-0.02	0.00	1.3	-3.96	15.69
11	4.40	2.38	5.66	5.3	0.64	0.1
12	5.00	2.98	8.88	7.6	2.34	6.69
13	2.60	0.58	0.34	1.4	-0.86	14.89
14	1.00	-1.02	1.04	5	-0.26	0.07
15	1.00	-1.00	1.04	5.9	0.64	0.41
16	2.50	0.28	0.08	7.6	2.34	5.47
17	0.60	2.98	8.88	8.9	3.64	13.28
Total	34.30		52.97	89.30		
Mean	2.02		3.11	5.26		

$$\Sigma = 7$$

$$\Sigma = 14$$

$$\Sigma = 14$$



$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} = \frac{4.1233 - 3.6941}{\sqrt{\frac{2.1233^2}{17} + \frac{2.0750^2}{17}}} \\
 &= \frac{0.4292}{\sqrt{0.4089 + 0.314}} \\
 &= \frac{0.4292}{\sqrt{0.723}} \\
 &= \frac{0.4292}{0.849} \\
 &= 0.500
 \end{aligned}$$

$t = 0.500$

T-Test**Group Statistics**

GROUP	N	Mean	Std. Deviation	Std. Error Mean
PRETEST	17	3.6941	2.0750	.5033
experiment	17	4.1233	2.1233	.5150
control				

Independent Sample Test

		PRETEST	
		Equal Variances assumed	Equal Variances Not assumed
Levene's Test for Equality of Variance	f	.433	
	sig.	.514	
t-test for equality of Means	t	-.506	-.506
	df	32	31.983
	Si (2-tailed)	.555	.555
	Mean Difference	-.4294	-.4294
	Std.Error Difference	.7201	.7201
	95% Confidence	-1.8962	-1.8962
	Lower	1.0374	1.0374
	Interval of the Mean		
	Upper		

After calculating the data, it was found that the value of both groups (t) was 0.50, the t -table value for $\alpha = 0.5$, $df = 32$ was 2.042. Since the value of the gained t was higher than t -table value of the t -table or $0.50 < 2.042$.

It means that the hypothesis of the study is accepted. There is a significance difference in achievement.

4. CONCLUSION

Based on the results of the experiment, it can be concluded that SQUR method is one of the methods that should be considered in developing students' reading comprehension. It can be proved that there is a significant difference between the mean scores of pretest and posttest. It is also proved that the use of SQUR method did not only develop their achievement but also built the students' interest and motivation in learning English. Therefore, this method of teaching is probably effective and useful in developing students' reading comprehension.

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