

CHAPTER III

RESEARCH PROCEDURES

This chapter presents: (1) research method; (2) research variables; (3) operational definition; (4) population and samples; (5) techniques for collecting the data; (6) research instrument analysis; (7) research treatments; (8) techniques for analyzing data; and (9) pre-requisite analysis.

3.1 Research Method

Based on the problems and the objectives, this research used the pretest-posttest two treatment design. In this design, the writer has three groups of samples: the first is experimental group by using SQ3R strategy, the second is experimental study by using ETR strategy, and the third is control group. There were two experimental groups. Both of them were given pretest, treatment of SQ3R and ETR strategies, and posttest, while in control group the students were given pretest and posttest without treatment (Cohen, Manion & Morrison, 2007, pp. 278-279).

The design is as follows:

EG1	O_1	X_a	O_2
EG2	O_3	X_b	O_4
CG	O_5	-	O_6

Where :

O_1 : pre-test for experimental group using SQ3R strategy

- O_2 : post-test for experimental group using SQ3R strategy
- O_3 : pre-test for experimental group using ETR strategy
- O_4 : post-test for experimental group using ETR strategy
- O_5 : pre-test with no treatment for control group
- O_6 : post-test with no treatment for control group
- X_a : treatment for reading comprehension using SQ3R strategy
- X_b : treatment for reading comprehension using ETR strategy
- : no treatment
- EG1 : experimental group 1 using SQ3R strategy
- EG2 : experimental group 2 using ETR strategy
- CG : control group using no treatment

3.2 Research Variables

There are two kinds of research variables, they are independent variable and dependent variable. Creswell (2012, p. 116) argues that an independent variable is an attribute or characteristic that influences or affects an outcome or dependent variable. And he also argues that dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable (Creswell, 2012, p. 115).

There are three variables in this research, two independent variables and one dependent variable. SQ3R and ETR strategies are as independent variables. The students' narrative reading achievement is as dependent variable.

3.3 Operational Definition

1. Teaching

Teaching is guiding and facilitating learning, enabling the learner to learn, and setting the conditions for learning. In other words, teaching is the process of transferring the knowledge, sharing the information, and guiding the learner to do something between the teacher and students, in order to help them understand and develop their ability in learning process.

2. Reading

Reading is an activity to get much knowledge. People are blind without reading because knowledge and information get from reading. To understand what has been read, the readers need to comprehend it.

3. Narrative

Narrative text is a kind of genre aimed to entertain, to gain and hold the readers' interest in a story. Narrative text is also a sequence of events of story. Language features necessary in narrative are usually specific, often individual participants with defined identities

4. SQ3R Strategy

SQ3R strategy is one of the popular strategies that helps students to build their background knowledge of the text. Students learn best when they attach new information to previous knowledge.

5. ETR Strategy

ETR is a strategy of teaching that can be applied to improve the students' reading comprehension. This ETR method can help the students to activate their

background knowledge in drawing the meaning of a text or story. Then, relate it to the new information that they have got from the text after the reading process.

3.4 Population and Sample

3.4.1 Population

According to Creswell (2012, p. 142), a population is a group of individuals who have the same characteristic. The population of this study is the eighth grade students of MTs Paradigma Palembang in academic year 2014-2015. They are divided into five classes: those are VIII.a, VIII.b, VIII.c, VIII.d, and VIII.e. which are taught by two teachers. The total number of the students is 143; 74 male and 69 female students. The number of population is showed in the following table:

Table 1
Population of the Study

NO	CLASS	MALE	FEMALE	TOTAL STUDENTS
1.	VIII.a	14	16	30
2.	VIII.b	17	13	30
3.	VIII.c	15	15	30
4.	VIII.d	15	11	26
5.	VIII.e	17	11	28
TOTAL		78	66	144

(Source: MTs Paradigma Palembang in academic year 2014/2015)

3.4.2 Sample

Creswell (2012, p. 142) proposes that a sample is a subgroup of the target population that the researcher plans to study for generalizing about the target

population. To select the sample, the writer used purposive sampling technique.

Frankel and Wallen (2009, p. 99) also state that :

“Purposive sampling is different from convenience sampling in that researchers do not simply study who is available but rather use their judgment to select a sample that they believe, based on prior information, will provide the data they need.”

The writer chose purposive sampling because the writer tried to find the samples that were at least nearly the same result in English subject, especially in reading skill. The writer got some information from the teacher and the result of students' scores from the teacher. The writer chose the sample because they had some poor English competence, especially in reading skill and had the same number of the students as consideration. And then the writer took the sample for each experimental and control groups.

To determine experimental groups and control group, pretest was given to the students in class VIII.a, VIII.b, and VIII.c. From the results, the mean and standard deviation of pretest in class VIII.c was the highest score of all. Therefore, class VIII.a was the first experimental group, class VIII.b was the second experimental group, and class VIII.c was the control group.

Table 2
Sample of the study

No	Group	Class	Number of students
1.	Experimental Group using SQ3R strategy	VIII.a	30
	Experimental Group using ETR strategy	VIII.b	30
2.	Control Group	VIII .c	30
TOTAL			90

(Source: MTs Paradigma from academic 2014/2015)

3.5 Technique for Collecting the Data

3.5.1 Tests

In collecting the data, the writer used narrative reading test. There were two tests, pretest and posttest that were given to the sample of this study. Arikunto (2010, p. 193) defines that test is a series of questions or exercises or other means of measuring skill, knowledge, intelligence, and capacities of an individual or a group.

In constructing the test, the writer did some steps: (1) preparing the test; (2) asking the validators on the appropriateness; (3) trying out the test. The writer did the try out at SMP NU Palembang which is the same characteristic as the sample; (4) analyzing the result, whether or not it is valid and reliable; (5) producing the final test; (6) conducting the test.

The purpose of the test is to know the result of teaching narrative reading text by using SQ3R and ETR strategies. Narrative reading test in the pretest administered before treatment and post-test was administered after treatment. The test items in the post-test are the same as those of pre-test, because the purpose of giving them is to know the progress of student narrative reading achievement before and after treatment.

3.5.1.1 Pretest

Pretest is done before treatment is given. The pretest is administered to assess students' narrative reading achievement before treatment. Both control and experiment group should answer forty questions of narrative reading texts.

3.5.1.2 Posttest

The posttest is administered to control group and experiment group after pretest and treatment. The type of post-test item was the same as the pre-test. This test aim is to measure students' narrative reading achievement after treatment. The result of this test was compared with the result of pre-test in order to know effect of teaching reading through SQ3R and ETR strategies on students' narrative reading achievement. From the post-test, the writer is able to get the data that can be used to measure the students' progress taught by using SQ3R and ETR strategies.

3.5.2 Research Instrument Analysis

3.5.2.1 Validity Test

Validity refers to the appropriateness, meaningfulness, correctness, and usefulness of the inferences a researcher makes. The validity is the most important idea to consider when preparing or selecting an instrument for use (Fraenkel, Wallen, & Hyun, 2012, p. 147).

1. Construct Validity

Fraenkel, et. al, (2012, p. 148) state that construct validity refers to the nature of the psychological construct or characteristic being measured. The writer asked three lecturers as validator to estimate her instruments. They are Hilma Suryani, M. Pd., Winny Riznanda, M. Pd., and Amalia Hasanah, S. S., M. Pd. The writer asked three validators to add criteria for scoring item questions, to give

clear directions and separated each paragraph followed by questions of every text, to revise some item questions of the test and to revise a few things in lesson plan. From the validator, it can be assumed that the test instruments and lesson plan are appropriate to be used for the research study.

2. Validity of Each Question Item

In this case, the writer had already tried out her research instruments at SMP Nahdatul Ulama (NU) Palembang. The try out of the test was carried out on Wednesday, February 25th, 2015 at 10.30-11.20. The research instruments of the test were tested to 40 students of the eighth grade students (VIII.1). The writer did try out to find out the validity of each question items. There were 60 questions given to the students. According to Basrowi and Soenyono (2007, p. 24), a question item is considered valid if r -output is higher than r -table (0,312). The result analysis of validity of each question by using Pearson Correlation formula in SPSS 16 found that there were 40 questions item valid. They are questions item number 2, 3, 5, 6, 8, 9, 12, 13, 14, 21, 22, 23, 24, 27, 28, 30, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 47, 48, 49, 50, 53, 54, 56, 57, 58, 59, 60. Then, there were 20 questions item invalid. They are questions item number 1, 4, 7, 10, 11, 15, 16, 17, 18, 19, 20, 25, 26, 29, 33, 40, 46, 51, 52, 55. Therefore, since there were 40 questions item valid, so 40 question items were used. The result analysis of validity test in each questions item was displayed in the following table:

Table 3
Validity Test Result of Each Question Items

No.	Question Items	Sig. (2-tailed) of Pearson Correlation	r-table	Result
1.	Item1	1.000	0,312	Invalid
2.	Item2	0.392	0,312	Valid
3.	Item3	0.354	0,312	Valid
4.	Item4	0.042	0,312	Invalid
5.	Item5	0.408	0,312	Valid
6.	Item6	0.354	0,312	Valid
7.	Item7	0.105	0,312	Invalid
8.	Item8	0.510	0,312	Valid
9.	Item9	0.312	0,312	Valid
10.	Item10	0.274	0,312	Invalid
11.	Item11	0.105	0,312	Invalid
12.	Item12	0.599	0,312	Valid
13.	Item13	0.312	0,312	Valid
14.	Item14	0.312	0,312	Valid
15.	Item15	-0.089	0,312	Invalid
16.	Item16	0.105	0,312	Invalid
17.	Item17	0.022	0,312	Invalid
18.	Item18	0.105	0,312	Invalid
19.	Item19	0.146	0,312	Invalid
20.	Item20	0.297	0,312	Invalid
21.	Item21	0.392	0,312	Valid
22.	Item22	0.392	0,312	Valid
23.	Item23	0.354	0,312	Valid
24.	Item24	0.312	0,312	Valid
25.	Item25	0.229	0,312	Invalid
26.	Item26	0.146	0,312	Invalid
27.	Item27	0.392	0,312	Valid
28.	Item28	0.392	0,312	Valid
29.	Item29	0.131	0,312	Invalid
30.	Item30	0.354	0,312	Valid
31.	Item31	0.527	0,312	Valid
32.	Item32	0.354	0,312	Valid
33.	Item33	0.131	0,312	Invalid
34.	Item34	0.492	0,312	Valid
35.	Item35	0.316	0,312	Valid
36.	Item36	0.458	0,312	Valid
37.	Item37	0.423	0,312	Valid
38.	Item38	0.368	0,312	Valid
39.	Item39	0.328	0,312	Valid
40.	Item40	0.064	0,312	Invalid
41.	Item41	0.368	0,312	Valid
42.	Item42	0.316	0,312	Valid
43.	Item43	0.599	0,312	Valid
44.	Item44	0.368	0,312	Valid
45.	Item45	0.354	0,312	Valid
46.	Item46	0.082	0,312	Invalid
47.	Item47	0.328	0,312	Valid
48.	Item48	0.423	0,312	Valid
49.	Item49	0.392	0,312	Valid
50.	Item50	0.312	0,312	Valid
51.	Item51	0.278	0,312	Invalid

52.	Item52	0.250	0,312	Invalid
53.	Item53	0.330	0,312	Valid
54.	Item54	0.330	0,312	Valid
55.	Item55	0.146	0,312	Invalid
56.	Item56	0.328	0,312	Valid
57.	Item57	0.423	0,312	Valid
58.	Item58	0.368	0,312	Valid
59.	Item59	0.392	0,312	Valid
60.	Item60	0.316	0,312	Valid

3. Content Validity

The writer estimated the content validity. According to Fraenkel and Wallen (2009, p 148), content validity refers to the content and format of the instrument. Additional, According to Cohen, et. al. (2007, p. 137), content validity is to demonstrate this form of validity the instrument must show that it fairly and comprehensively covers the domain or items that it purports to cover. A content validity is very important since it is an accurate measure of what it is supposed to measure. In order to judge whether or not a test has content validity, a specification of the skills or structures should be made based on the curriculum and syllabus. The table of specification test including: objectives of the test, test materials, indicators, number of items, total, and answer key. In this research, the reading comprehension test comprised 40 questions in form of multiple choices including aspect in the following table

Table 4
Table of Specification Test

Objectives	Test Material	Indicators	Number of Items	Total	Answer Key
To measure the students' narrative reading	Readfeathers the Hen	- To find detail and factual information	1	40	C
			2		C
			3		C
			4		D
	Little Brother,	- To find detail and factual	5		B
			6		C

	Little Sister	information	7 8 9		C A B
	The Grasshopper and the Ant	- To find detail and factual information	10 11 12 13		D A D A
		- To find moral value	14		C
	The Lion and the Hare	- To identify detail information and factual information	15 17 18		C A D
		- To find reference word	16		A
	The Lion and the Mosquito	- To identify detail and factual information	19 20 21 22		B D D A
		- To find the reference word	23		D
		- To find main idea	24		A
	Rapunzel	- To find general information	28 32		D B
		- To identify detail and factual information	25 26 27 29 30		A C D C D
		- To find generic structure of the text	31 33		A B

	Snow White	- To identify detail and factual information	34 36 37 38 39 40		D C C B C A
		- To find reference word	35		C

3.5.2.2 Reliability Test

Reliability refers to the consistency of the scores obtained- how consistent they are for each individual from one administration of an instrument to another and from one set of items to another (Fraenkel and Wallen, 2009, p. 154).

In this design of the study, the writer has followed internal consistency method that is used to estimate the reliability which involves comparing different sets of items that are part of instrument of this study. There are several types of internal consistency methods in estimating reliability that require only a single administration of an instrument. They are Split-half Procedure, Kuder-Richardson Approach (KR21), and Alpha Coefficient.

Then, in doing this reliability test, the writer uses split-half procedure which divides the test into even and odd questions and compare the results. It is supported by Fraenkel and Wallen (2009, p. 156) that:

“The split-half procedure involves scoring two halves (usually odd items versus even items) of a test separately for each person and then calculating a correlation coefficient for the two sets of scores. The coefficient indicates the degree to which the two halves of the test provide the same results and hence describes the internal consistency of the tests.”

The writer tried out the test once to the same grade from different school. The test consisted of 60 questions items and these questions tested to the eighth grade students of SMP NU Palembang. The test was analyzed by using Split-half Procedure formula SPSS 16 program. Fraenkel and Wallen also state that the test score is considered reliable if p-output is higher that 0.70.

Therefore, it could be stated that this instrument was considered reliable for this study, because the p-output of *Guttman Split-half Coefficient* is 0.927, as shown in Table 5:

Table 5
Result of Reliability Analysis using Split-half Procedure
Reliability Statistics

Cronbach's Alpha	Part 1	Value	.948
		N of Items	30 ^a
	Part 2	Value	.916
		N of Items	30 ^b
	Total N of Items		60
Correlation Between Forms			.871
Spearman-Brown Coefficient	Equal Length		.931
	Unequal Length		.931
Guttman Split-Half Coefficient			.927

a. The items are: Item_1, Item_2, Item_3, Item_4, Item_5, Item_6, Item_7, Item_8, Item_9, Item_10, Item_11, Item_12, Item13, Item_14, Item_15, Item_16, Item_17, Item_18, Item_19, Item_20, Item_21, Item_22, Item_23, Item24, Item_25, Item_26, Item_27, Item_28, Item_29, Item_30.

b. The items are: Item_31, Item_32, Item_33, Item_34, Item_35, Item_36, Item_37, Item_38, Item_39, Item_40, Item_41, Item_42, Item_43, Item_44, Item_45, Item_46, Item_47, Item_48, Item_49, Item_50, Item_51, Item_52, Item_53, Item_54, Item_55, Item_56, Item_57, Item_58, Item_59, Item_60.

3.5.3 Research Treatment

Treatments were designed at least for fourteen meetings including pretest and posttest activities for each strategy.

3.5.3.1 Readability Test

In this study, treatments were given after pretest, it was done to know the students' scores in reading comprehension by using SQ3R strategy and ETR strategy for each pretest.

Readability test is done to know the appropriate level of reading texts for students' class level in comprehending the reading texts. It means that readability test is done to put the reading texts in an appropriate class meeting based on the difficulty level of each reading text during research treatments. Readability test is measured using online readability score test which is accessed in <http://www.readability-score.com>.

There are seven categories in reading text level. They are: (a) **very easy level** whenever the result of flesch reading ease score is within 90-100, (b) **easy text level** whenever the result of flesch reading ease score is within 80-89, (c) **fairly easy text level** when the result of flesch reading ease score is within 70-79, (d) **standard text level** when the flesch reading ease score is within 60-69, (e) **fairly difficult text level** when the flesch reading ease score is within 50-59, (f) **difficult text level** the flesch reading ease score is within 30-49, (g) **very confusing text level** the flesch reading ease score is within 0-29.

The writer determined the different level of the text from easy to difficult in the treatment because each meeting could be structured well. Besides, the students were not shocked and confused when they read the text.

There were twelve texts that the writer used in this study. These were taken by writer from five different textbooks. They were “English in Focus for Grade VIII Junior High School (SMP/MTs)” by Wardima, et. al, (2008), published by Pusat Perbukuan Departemen Pendidikan Nasional; “PAKAR Bahasa Inggris untuk SMP kelas VIII semester genap (KTSP)” by Tim Penyusun, published by Aviva; “PUPIN Modul Bahasa Inggris untuk SMP/MTs” by Tim Penyusun; “MANDIRI Practice Your English Competence” by Zaida, published by Erlangga; and “Buku Ajar Bahasa Inggris untuk SMP/MTs Semester 2” by Tim Penyusun. The writer used narrative text for the eighth grade students of junior high school based on the syllabus in the second semester

Table 6
Readability Test Formula

No	Reading Text Title	Text Statistics			Flesch Reading Ease Score	Text Level
		No. of Sentence	Word per Sentence	Character per Word		
1	The Boy Who Cried “Wolf”	25	8.0	4.1	95.5	Very easy
2	Buggy Races	9	14.0	4.1	89.9	Very easy
3	The Owl and the Nightingale	8	14.1	3.9	89.2	Very easy
4	The Ugly Duckling	37	9.5	4.2	88.2	Easy
5	The Chipmunk that Run Away	27	12.3	4.0	87.8	Easy

6	Mantu's Little Elephant	20	11.6	4.1	85.7	Easy
7	The Magic Candle	25	11.4	4.1	83.1	Easy
8	The Flowers from the Moon	5	22.2	4.1	82.3	Easy
9	Cinderella	60	11.3	4.3	77.9	Fairly easy
10	The Story of Timun Emas	56	9.3	4.2	77.9	Fairly easy
11	The Prince and His Best Friends	17	17.2	4.3	76.3	Fairly easy
12	The Singer and the Dolphin	11	21.5	4.3	66.4	Standard

3.5.3.2 Research Teaching Schedule

There were twelve narrative reading texts with different titles that the writer used as reading materials. The selected texts have been checked for their readability test. The treatments have been done in the afternoon in twelve meetings. The table of teaching materials for research treatment for eighth grade students is displayed in the following Table 7:

Table 7
Reading Materials for Research Treatments

No	Experiment Group Day / Date			Reading Text	Research Treatment Meeting	Time Allocation
	SQ3R	ETR	Control			
1	Sat/Apr 4 th (13.00-14.00)	Sat/Apr 4 th (14.00-15.00)	Fri/Apr 3 rd (13.00-14.00)	Pre-test	1 st	45'
2	Mon/Apr 6 th (13.00-14.00)	Mon/Apr 6 th (14.00-15.00)	-	The Boy Who Cried "Wolf"	2 nd	2x30'
3	Tue/Apr 7 th (13.00-14.00)	Tue/Apr 7 th (14.00-15.00)	-	Buggy Races	3 rd	2x30'
4	Thurs/Apr 9 th (13.00-14.00)	Thurs/Apr 9 th (14.00-15.00)	-	The Owl and the	4 th	2x30'

				Nightingale		
5	Sat/Apr 11 th (13.00-14.00)	Sat/Apr 11 th (14.00-15.00)	-	The Ugly Duckling	5 th	2x30'
6	Mon/Apr 13 th (13.00-14.00)	Mon/Apr 13 th (14.00-15.00)	-	The Chipmunk that Run Away	6 th	2x30'
7	Tue/Apr 14 th (13.00-14.00)	Tue/Apr 14 th (14.00-15.00)	-	Mantu's Little Elephant	7 th	2x30'
8	Thu/Apr 16 th (13.00-14.00)	Thu/Apr 16 th (14.00-15.00)	-	The Magic Candle	8 th	2x30'
9	Sat/Apr 18 th (13.00-14.00)	Sat/Apr 18 th (14.00-15.00)	-	The Flowers from the Moon	9 th	2x30'
10	Mon/Apr 20 th (13.00-14.00)	Mon/Apr 20 th (14.00-15.00)	-	Cinderella	10 th	2x30'
11	Tue/Ap 21 st (13.00-14.00)	Tue/Apr 21 st (14.00-15.00)	-	The Story of Timun Emas	11 th	2x30'
12	Thurs/Apr 23 rd (13.00-14.00)	Thur/Apr 23 rd (14.00-15.00)	-	The Prince and His Best Friends	12 th	2x30'
13	Sat/Apr 25 rd (13.00-14.00)	Sat/Apr 25 rd (14.00-15.00)	-	The Singer and the Dolphin	13 th	2x30'
14	Mon/Apr 27 th (13.00-14.00)	Mon/Apr 27 th (14.00-15.00)	Tue/Apr 28 th (13.00-14.00)	Posttest	14 th	45'

3.6 Techniques for Analyzing Data

The data from pretest and posttest were analyzed based on the students' individual scores and their mean scores in the pretest and posttest of the three groups. The result of the test compared to determine whether there was a significant difference between three groups. To test the difference of the first and second hypotheses, independent sample t-test used to analyze the data. At the end

of this analysis, the researcher applied one way annova to determine the third acceptable hypotheses. by using SPSS for windows version 16.0.

3.6.1 Data Description

Data description illustrate two analyses. They are distribution of frequency data and descriptive statistic.

3.6.1.1 Distribution of Frequency Data

In distributions of frequency data, the students' score, frequency, percentage are achieved. The distributions of frequency data are obtained from students' pretest score in control group, students' posttest score in control group, students' pretest score in experimental group, and students' posttest score in experimental group.

3.6.1.2 Descriptive Statistics

In descriptive statistic, number of sample, the score of minimal, maximal, mean, standard deviation, and standard error of mean are obtained. Descriptive statistics are obtained from student's pretest and posttest scores in control groups and experimental groups.

3.6.2 Pre-requisite Analysis

Before analyzing the data, pre-requisite analysis should be done to see whether tha data obtained are normal or homogenous

3.6.2.1 Normality Test

Normality test was done to know whether the results of the students' pretest and posttest in control and experimental groups are normal or not. In analyzing the normality, the writer used Kolmogorov-Smirnov test in SPSS 16. The data were obtained from the students' pretest and posttest in control and experimental groups. The test is considered normal whenever it is higher than 0.05.

3.6.2.2 Homogeneity Test

Homogeneity test was done to know whether the results of the students' pretest and posttest in control and experimental groups are homogenous or not. In analyzing the homogeneity, the writer used the Levene Statistics in SPSS 16. The result is obtained from the students' pretest and posttest in control and experimental groups. The test is considered homogenous whenever it is higher than 0.05.

3.6.3 Hypotheses Testings

Hypothesis testing is a procedure for making decisions about results by comparing an observed value of a sample with a population value to determine if no difference or relationship exists between the values (Creswel, 2012, p. 187).

In this study, there were some hypotheses testings. They were as follows:

3.6.3.1 Hypotheses Testing in Measuring a Significant Difference on Narrative Reading Text Between the Students' Who are Taught by Using SQ3R and Those are Not

In measuring significant difference on students' posttest scores in the first experimental and control groups, an independent sample t-test was used. A significant difference was found whenever the p-output is lower than mean significant difference at 0.05 levels and t-value is higher than t-table (Fraenkel & Wallen, 2009, p. 229).

3.6.3.2 Hypotheses Testing in Measuring a Significant Difference on Narrative Reading Text Between the Students' Who are Taught by Using ETR and Those are not

In measuring significant difference on students' posttest scores in the second experimental and control groups, an independent sample t-test was used. A significant difference was found whenever the p-output is lower than mean significant difference at 0.05 levels and t-value is higher than t-table (Fraenkel & Wallen, 2009, p. 229).

3.6.3.3 Hypotheses Testing in Measuring a Significant Difference on Students' Narrative Reading Text Between Those Who are Taught by Using SQ3R Strategy, ETR Strategy, and the Teacher's Method

In this study, one-way ANOVA was used to measure a significant difference on the eighth grade students' narrative reading text after taught by

using SQ3R, ETR and the students' posttest score in control group. A significant difference is found whenever the p-output is lower than mean significant difference at 0.05 levels and F-value is higher than t-table (Fraenkel & Wallen, 2009, p. 232).