

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

CHAPTER III

RESEARCH METHODOLOGY

A. The Research Design

This research was an experimental research. Ary et al., (2010, p. 26) stated that “experimental research involves a study of the effect of the systematic manipulation of one variable on another variable. The manipulated variable is called the experimental treatment or the independent variable. The observed and measured variable is called the dependent variable.” Besides, According to Gay (2000), experimental research is the only type of research that can test hypothesis to establish cause-and-effect relationship.

The method in this research was a quasi-experimental design. According to Ari et al., (2010), quasi experimental design involves manipulation of an independent variable but differs in the subjects are not randomly assigned to treatment group. There were two variables in this research; the independent variable (X) is STAD (Student Team Achievement Division) and dependent variable (Y) refers to students’ reading comprehension of narrative text. The students were given Pre-test at the beginning of the study in order to know their ability. After that, the researcher gave the students treatments during six meetings. At the end of the study, the researcher gave the students a post-test.

In this research, the pre-test and post-test were compared in order to determine the effect of using STAD method to improve students’ reading

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

comprehension. According to Creswell (2008, p.310), the design of this research can be illustrated as follows:

**Table III.1
Research Design**

Class VIII A (Control Class)	Pre-test	No Treatment	Post-test
Class VIII B (Experimental Class)	Pre-test	Experimental Treatment	Post-test

B. The Location and Time of the Research

This research was conducted at State Junior High School 2 Kampar Kiri. It is located on Jalan Raya Kuntu-Gema Kec. Kampar Kiri Kab. Kampar. This research was conducted from 28 April to 30 May 2017.

C. The Subject and Object of the Research

The subject of this research was the eighth grade of State Junior High School 2 Kampar Kiri and the object of this research was students' reading comprehension of narrative text.

D. The Population and Sample

The population of this research was students at the eighth grade of State Junior High School 2 Kampar Kiri. It can be seen in the following table:

**Table III.2
Population of the Research**

No.	Class	Number of students
1.	VIII A	20
2.	VIII B	20
	Total Population	40

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

From the table III.2 illustrated above, the total of population was 40 students. There were two classes. Because the total of population was less than 100, the researcher took the total sampling as a sample.

E. The Technique of Collecting Data

1. Test

In collecting the data, the researcher used multiple choice test as an instrument for pre-test and post-test. The questions were 25 items and the students were asked to answer the question based on the reading text.

Creswell (2008) mentioned that pre-test provides a measure on some attribute or characteristic that you assess for participants in an experiment before they receive a treatment. Post-test is a measure on some attribute or characteristic that you assess for participant in an experiment after the treatment.

The blueprint of reading comprehension test (pre-test and post-test) is as follows:

Table III.3
The Blueprint of the Reading Comprehension Text (Pre-Test)

Question Indicator	Number Question	Source
Identify the main idea	1, 6, 11, 16, 21	Books for Junior High School
Identify the detail information	2, 7, 12, 17, 22	
Identify the generic structure	3, 8, 13, 18, 23	
Identify the communicative purpose	4, 9, 14, 19, 24	
Identify the reference	5, 10, 15, 20, 25	

Hak Cipta Dilindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Table III.4
The Blueprint of the Reading Comprehension Text (Post-Test)

Question Indicator	Number Question	Source
Identify the main idea	5, 6, 13, 17, 25	Books for Junior High School
Identify the detail information	4, 7, 12, 17, 24	
Identify the generic structure	3, 8, 15, 16, 23	
Identify the communicative purpose	2, 9, 11, 20, 22	
Identify the reference	1, 10, 14, 18, 21	

After administering the test, the researcher took the total score from the result of the reading comprehension test. According to Arikunto (2013, p.281), there are some categories of the students' comprehension in reading text. The students' score can be seen in the table below:

Table III.5
The Classification of Student' Score

The Score of Reading Comprehension Level	Categories
80-100	Very Good
66-79	Good
56-65	Enough
40-55	Less
30-39	Fail

F. The Validity and Reliability of the Test

1. The Validity

In carrying out a test, it was important and necessary to know the validity of the instruments. According to Henning (1987), validity in general refers to the appropriateness of a given test or any of its component parts as a measure of what it is purposed to measure. It means that a test is said to be valid to the extent that it measures what it is supposed to measure. Furthermore, Bachman (1990) said that validity is

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

concerned with identifying the factors that produce the reliable variance in test scores.

In addition, Brown (2000, p, 387) mentioned that “A test actually measure what it is intended to measure. A valid test in reading ability is one that actually measure reading ability and not say, 20/20 vision, previous knowledge of a subject, or some other variable of questionable relevance.” So, in carrying out the test, the design of the test had to base on the material that the students had learned before.

Pertaining to the statement above, the researcher used content validity to measure the instrument in this research. Content validity was used to know how appropriate the content or format is. According to Brown (2003), content validity refers to the content of the test that provides samples about the subject matter being measured. It means that we have to design the tests based on the material that they have learned. Thus, the researcher gave the test based on the material that was studied by the student.

Before the tests were given to the samples, the tests were tried out in order to obtain validity and reliability of the tests. It was determined by finding the difficulty level of each item. The item of difficulty was determined as the proportion of correct responses. The formula for item of difficulty can be seen as follows (Arikunto, 2009, p. 209):

$$P = \frac{B}{JS}$$

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Where:

- P : Index of difficulty or facility value
- B : The number of correct answers
- JS : The number of examinees or students taking the test

The formula above was used in order to know the easy or difficult tests that were given to the respondents. As mentioned by Arikunto (2013), the standard value of the proportion of correct answer can be seen in the table below:

Table III.6
Index Difficulty Level of Instruments

Proportion correct (p)	Item category
$P > 0.70$	Easy
$0.30 \leq P \leq 0.70$	Mean
$P < 0.30$	Difficult

Referring to the table III.6 above, the standard level of the difficulty used was >0.30 and <0.70 , thus, the items were accepted if the level of difficulty was between 0.30 – 0.70 and it was rejected if the level of difficulty was below 0.30 (difficult) and over 0.70 (easy). Then, the proportion correct was represented by “p”, whereas the incorrect was represented by “q”.

Table III.7
The students are able to identify the main idea of the narrative text

Variable	Identify the Main idea of the Narrative texts					N
	1	6	11	16	21	
Correct item	14	15	16	15	17	27
P	0.52	0.56	0.59	0.56	0.63	
Q	0.48	0.44	0.41	0.44	0.37	

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Referring to the table III.7 above, the item numbers of question for identifying the main idea of the narrative text were 1, 6, 11, 16 and 21 showing the the portion of correct answers. In term of the item number 1, it obtained 0.52, the item number 6 obtained 0.56, the item number 11 obtained 0.59, the item number 16 obtained 0.56 and the item number 21 obtained 0.63. Thus, based on the standard level of the difficulty “p” < 0.30 and > 0.70 , it was clear that item difficulties in average of each item number for identifying about main idea were accepted.

Table III.8
The students are able to identify the detail information of the narrative text

Variable	Identify the Detail Information of the Narrative text					N
Item No	2	7	12	17	22	27
Correct item	13	14	16	14	13	
P	0.48	0.52	0.59	0.52	0.48	
Q	0.52	0.48	0.41	0.48	0.52	

Referring to the table III.8 presented above, the item numbers of question for identifying the detail information of the narrative text were 2, 7, 12, 17 and 22 showing the the portion of correct answers. The item number 2 obtained 0.48, the item number 7 obtained 0.52, the item number 12 obtained 0.59, the item number 17 obtained 0.52 and the item number 22 obtained 0.48. Hence, based on the standard level of the difficulty “p” < 0.30 and > 0.70 , it was clear that item difficulties in average of each item number for identifying about detail information of the text were accepted.

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Table III.9
The students are able to identify the generic structure of the narrative text

Variable	Identify the generic structure of the narrative text					N
Item No	3	8	13	18	23	27
Correct item	18	17	17	16	15	
P	0.67	0.63	0.63	0.59	0.56	
Q	0.33	0.37	0.37	0.41	0.44	

From the table III.9 illustrated above, the item numbers of question for identifying the generic structure of the narrative text were 3, 8, 13, 18 and 23 showing the the portion of correct answers. In term of item number 3, it obtained 0.67, item number 8 obtained 0.63, item number 13 obtained 0.63, item number 18 obtained 0.59 and item number 23 obtained 0.56. Therefore, based on the standard level of the difficulty “p” <0.30 and > 0.70, it was clear that item difficulties in average of each item number for identifying about generic structure of the text were accepted.

Table III.10
The students are able to identify the communicative purpose of the narrative text

Variable	Identify the Communicative Purpose of the Narrative text					N
Item No	4	9	14	19	24	27
Correct item	17	18	16	17	17	
P	0.63	0.67	0.59	0.63	0.63	
Q	0.37	0.33	0.41	0.37	0.37	

Referring to the table III.10 above, the item numbers of question for identifying the communicative purposes of the narrative text were 4, 9, 14, 19 and 24 showing the the portion of correct answers. For the item number 4, it obtained 0.63, the item number 9 obtained 0.67, the item

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

number 16 obtained 0.59, the item number 19 obtained 0.63 and the item number 24 obtained 0.63. Thus, based on the standard level of the difficulty “p” <0.30 and > 0.70 , it was clearly stated that the items for identifying the communicative purpose of the narrative text were accepted.

Table III.11
The students are able to identify the reference of the narrative text

Variable	Identify the Reference of the Narrative text					N
	5	10	15	20	25	
Item No	5	10	15	20	25	27
Correct item	13	12	12	11	13	
P	0.48	0.45	0.45	0.41	0.48	
Q	0.52	0.55	0.55	0.59	0.52	

Referring to the table III.11 presented above, the item numbers of question for identifying the reference from the narrative text were 5, 10, 15, 20 and 25 showing the the portion of correct answers. For the item number 5, it obtained 0.48, the item number 10 obtained 0.45, the item number 15 obtained 0.45, the item number 20 obtained 0.41 and the item number 25 obtained 0.48. Therefore, based on the standard level of the difficulty “p” <0.30 and > 0.70 , it was clearly pointed out that the items for identifying the reference from the narrative text were accepted.

2. The Reliability

As Henning (1987) pointed out that reliability is consistency. In line with Henning’s statement, Brown (2000) also stated that reliability is the consistent and dependable test. Consistent means consistent in scoring. And dependable means that condition of the students, temperature, and condition. Furthermore, we must be concerned about errors of

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

measurement, or unreliability, because we know that test performance is affected by factors other than the abilities we want to measure (Bachman, 1990)

As mentioned by Arikunto (2013) that the reliability for good classroom achievement tests are expected to exceed 0.0 and closed 1.00.

He stated that reliability of test is considered as follows:

0.0-0.20	: reliability is poor
0.21-0.40	: reliability is satisfactory
0.41-0.70	: reliability is good
0.71-1.0	: reliability is excellent

In this research, the reliability of the tests was processed by SPSS 23 version, it can be seen in the following table:

Table III.12
The Reliability of the Test

Case Processing Summary			
		N	%
Cases	Valid	27	100.0
	Excluded ^a	0	.0
	Total	27	100.0

Reliability Statistics	
Cronbach's Alpha	N of Items
1.000	2

Based on at the table III.12 illustrated above, it can be seen that the total number of the students consisted of 27 students. The score of Cronbach's Alpha was 1.000. In short, the reliability of the tests as calculated above was categorized into excellent level.

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

G. The Technique of Data Analysis

1. The Homogeneity of the Test

The researcher analyzed and tested the hypotheses pre-requisite test as the first analysis containing homogeneity tests and making sure if the experimental and control classes are homogenous. There are two SPSS results of the homogeneity of the data. They are; if the probability (sig) > 0.05, the data are homogenous and if the probability (sig) < 0.05, the data are not homogenous.

2. The Normality of the Test

In term of the normality test of the data, it was analyzed by using Kolmogorov-Smirnove technique with SPSS 23 version. It can be interpreted as follows:

If the probability (sig) > 0.05 H_0 is accepted (the data are normally distributed)

If the probability (sig) < 0.05 H_0 is rejected (the data are abnormally distributed)

After knowing that the data were normally distributed and having the homogenous variance, the researcher needed to use Independent Sample T-test analysis in order to know whether or not there is significant difference between by using and without using the STAD (Student Team Achievement Division) method on students' reading comprehension of narrative texts. Furthermore, the SPSS result of Independent Sample T-test can be interpreted as follows:

Hak Cipta Diindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

If the value in Sig. (2-tailed) ≤ 0.05 , then H_a is accepted

If the value in Sig. (2-tailed) ≥ 0.05 , then H_o is accepted

Furthermore, in order to find out how large the magnitude effect of using the STAD (Student Team Achievement Division) method on the students' reading comprehension of narrative texts is, the researcher needed to calculate the effect size by using eta squared below (Cohen et al., 2007).

$$\text{Eta squared} = \frac{t^2}{t^2 + (N_1 + N_2 - 2)}$$

Where :

t : the t-value (calculated by SPSS)

N_1 : the number in the sample of group one

N_2 : the number in the sample of group two

To interpret the strength of eta squared values, the following guidelines can be used (Pallant, 2005, p.201).

1. .01= small effect
2. .06= moderate effect
3. .14= large effect