# CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The design of this research was true experimental research used "one group pretest-posttest design". This research was conducted by comparing the experimental group and control group. The control group is the class which is not taught reading comprehension to descriptive text by using two stay two stray technique. The class which is taught by using two stay two stray was indicated as experimental group.

This research consist of two variables: independent variable and dependent variable. Nunan (1993:25) states that independent variable is variable that experimenter expects to influence to other, whereas he states that dependent variable is a variable upon which the independent variable is acting. It means that the independent variable (X) affects the dependent variable (Y).In this research, the independent variable (X) refers to reading text by using Two Stay Two Stray (TSTS) technique that affects the dependent variable (Y) refers to students reading comprehension. They could be seen as follow:

Figure 3.1 Research Design

1
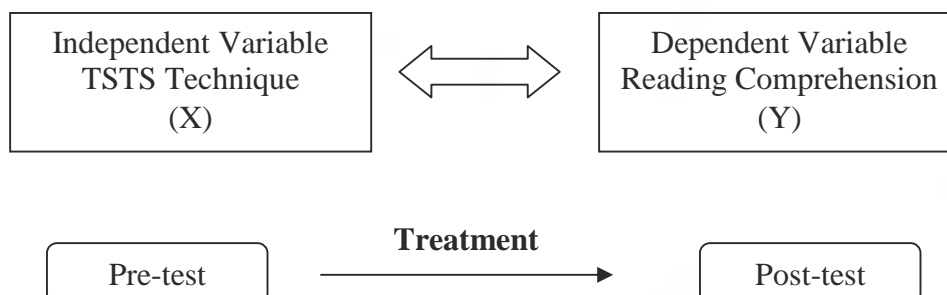
According to (Gay, L.R. and Peter Airasian, 2000:367), the design of this research can be illustrated as follows:

Table 3.2 The Research Design

Group	Pre-Test	Treatment	Post-Test
A (Experimental class)	Test 1		Test 2
B (Control class)	Test 1	X	Test 2

Where:

A   = Experimental group
B   = Control group
T1   = Pre-Test for Experimental group
            = Receiving particular treatment
X   = Without particular treatment
T2   = Post-test for control group

3.2   Location and the Time of the Research

The research was conducted at SMPN 4 Siak Hulu which is located in Lembah Damai street, Siak Hulu district, Kampar. The time of the research was conducted on October until November2017.

Table 3.3 The Time of the Research

No	Meeting	Date	Topic	Group
1	I	5-6 November 2017	Bali Lions My brother's favorite slingshot Lovely grandpa's flower garden.	Control Class and Experiment Class
2	II	11 November 2017	Zaskia Adya Mecca	Experiment Class
3	III	13 November 2017	Barack Obama	Experiment Class
4	IV	18 November 2017	Barack Obama, Justin Bieber, Taylor Swift, Mark Zuckerberg, Singapore Zoo	Experiment Class
5	V	27 November 2017	Suramadu Bridge My robot My family Peter	Control Class and Experiment Class

3.3 Population and Sample of the Research

3.3.1. Population

The target population of this research is second year students at SMPN 4 Siak Hulu in academic year 2017/2018 consist of 9 classes, all classes are consist of 173 students.

Table 3.4 Population of the Research

Class	Total of students
VIII 1	24
VIII 2	23
VIII 3	24
VIII4	*24*
VIII5	30
VIII6	24
VIII 7	24
Total Population	173

3.3.2. Sample

In determining the sample of this research, the researcher used random sampling. According to Sugiyono (2008:121) random samplingtechnique use to take sample if the object that was very wide to decide which one the population that take as sample, the sample was taken based on the population that specified.

The research choosed class VIII6 as an experimental group and VIII7 as control group. The experimental group consist of 24 students, while the control

group consist of 24 students. So, 48 students were representative enough to be sample of this research.

Table 3.5 Sample of the Research of the second year students at SMPN

4 Siak Hulu 2017/2018

Class	The number of students
VIII-6	24
VIII-7	24
Total	48

3.4   Instrumentof the Research

The instrument of this research is descriptive test of multiple choices test. Most of the test items adapted from internet such as people, thing, and place. The researcher will apply two tests; pre-test and post-test to measure the students' reading comprehension before and after conducting the treatment by using TSTS Technique. Each test consisted of 20 questions (multiple choices).

The researcher focus in the goals to find out the students' reading comprehension by asking themto find the details of information about the main idea, identifying detailed information, understanding vocabulary, and making reference related to a descriptive text.

After applying the TSTS model for several meetings, the post-test will be given. It will be used to test the reading comprehension of the students after the treatment. This test also consisted of 20 multiple choice questions concerning a

similar kind of text. Each question had four alternative answers (a, b, c, and d) one

correct answer and three distracters.

Table 3.6 Blue Print of Research Instrument

(Pre-Test)

No.	Topics	Indicators	Number of items
1	Bali	1. Main idea	1
		2. Factual information	2
		3. Reference	3
		4. Identification	4
		5. Description	5
2	Lions	1. Main idea	6
		2. Description	7
		3. Reference	8
		4. Factual information	9
		5. Identification	10
3	My Brother's Favorite Slingshot	1. Main idea	11
		2. Reference	12
		3. Description	13
		4. Identification	14
		5. Factual information	15
4	Lovely Grandpa's Flower Garden	1. Main idea	16
		2. Identification	17
		3. Description	18
		4. Reference	19
		5. Factual information	20
	Total		20

Table 3.7 Blue Print of Research Instrument

(Post-Test)

No.	Topics	Indicators	Number of items
1	Suramadu Bridge	1. Main idea	1
		2. Factual information	2
		3. Description	3
		4. Identification	4
		5. Reference	5
2	My Robot	1. Main idea	6
		2. Factual information	7
		3. Description	8
		4. Identification	9
		5. Reference	10
3	Grandma	1. Main idea	11
		2. Description	12
		3. Identification	13
		4. Reference	14
		5. Factual information	15
4	Peter	1. Main idea	16
		2. Identification	17
		3. Reference	18
		4. Description	19
		5. Factual information	20
	Total		20

Table 3.8 The Blue Print of Schedule in Classroom

No.	Date	Materials	Activity
1.	**Meeting 1**	Bali, Lions, My brother's favorite slingshot, Lovely grandpa's flower garden.	Giving pre-test
2.	**Meeting 2** **Treatment 1**	Zaskia Adya Mecca	Explain about TSTS technique and descriptive text. Give an example of Zaskia. After that, The researcher give the students text; determine the main idea, generic structure, language features, and they work to do the text. Then, the researcher gives conclusion from that text.
3.	**Meeting 3** **Treatment 2**	Barack Obama, Justin Bieber, Mark Zukerberg, Singapore Zoo, Taylor Swift.	Ask students to read the text and divided the students in a group that consist of four students to discuss a topic. Two of the students will be a guest (strayers) and the others just stay at their group (stayers).
4.	**Meeting 4** **Treatment 3**	Barack Obama, Justin Bieber, Mark Zukerberg, Singapore Zoo, Taylor Swift.	Ask students to read the text and divided the students in a group that consist of four students to discuss a topic. Two of the students will be a guest (strayers) and the others just stay at their group (stayers).
5.	**Meeting 5**	Suramadu Bridge, My robot, Grandma, Peter.	Giving post-test

3.4.1 Research Procedure

In this research, the procedure of collecting the data divided into two phases; first is the procedure of experimental group and control group. The reasearcher used two classes assumed to be equall and homogenous statiscally in order to conduct the research. Then, the researcher explained into classroom and gave the same material, for lenght the of time.

Table 3.9 the Activities of Taking the Data

Class	Pre-test	Treatment	Post-test
Experimental	Firstly, the researcher give pre-test for experimental class before gives the treatment. In order to know the students' reading comprehension on descriptive text.	After pre-test, the researcher give treatment in experimental class by using TSTS technique when teaching and learning process.	After the students got the treatment, the researcher give the students post-test. In order to know students' reading comprehension after learning descriptive text by using TSTS technique.
Control	Firstly, the researcher give pre-test for control class. In order to know the students' reading comprehension on descriptive text.	For control class there is no treatment.	The researcher give the students post-test. In order to know students' reading comprehension without using treatment.

3.4.1.1 Research procedure for experimental group

In this research, the procedure of collecting data for experimental group by applying Two Stay Two Stray technique are as follows:

1. Pre-test

Before conducting the treatment, the researcher gave pre-test to experimental and control group in the first meeting. There are 20 questions for 40 minutes. It was used to know the students' reading comprehension in descriptive text of the second year students of SMPN 4 Siak Hulu. After evaluating the students' answer and computing the students' scores, the researcher calculated their percentage in order to know their comprehension in reading.

2. Treatment by Applying TSTS Technique in Teaching Reading

The researcher carried out treatment by applying Two Stay Two Stray technique in teaching reading comprehension in descriptive text after giving pre-test. The treatment was applied on the experimental group. The lenght of time toapply this technique is about 3 meetings which focus on the topic of reading text.

In the first meeting, the researcher and the students disscused together about descriptive text. It aims to build up the prior knowledge of students about descriptive text that already heard or they read from another sources. The second to the fourth meeting the researcher was applied treatment by applying Two Stay Two Stray technique in teaching reading comprehension in experimental group. The treatment activities that did by the researcher in experimental group are:

a. The researcher tells and explain the descriptive text.

b. The researcher divided the students into several groups that consist of 4 students.

c. The researcher introduced and explained Two Stay Two Stray technique and appoints two students as stayers and the rest of studets as strayers for each group.

d. Teacher asks the groups to discuss how to comprehend the text which covers supporting idea, implicit information, word meaning, and pronoun reference from the story given in certain duration of time.

e. Monitoring the class and giving more explanation about the task.

f. After all groups have finished discussing and answering the task, teacher asks two group members (strayers) to leave their group and each of the two students go to two different groups in order to get the information each group.

g. The teacher asks the guests (strayers) to excuse themselves and back to their group and report the answers from other groups.

h. The teacher asks the groups to revise and complete their work.

i. The researcher distributed the descriptive text to the students and the question for each group.

j. The researcher asked the students to read the text and found the

The purpose of this researche is to know the students' reading comprehension teach by using Two Stay Two Stray technique and to know the difference of reading comprehension between students' who taught by using Two

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Stay Two Stray technique and the students' who did taught by Two Stay Two Stray technique.

3. Post-test

Post test was given after giving treatment (teaching and learning process. The aim of giving a test after treatment is to find out weather or not thereis any significant effect after teaching by applying Two Stay Two Stray (TSTS) technique. After evaluating the students' answer and computig the students' scores the researcher calculated their percentage in order to know their ability level in reading.

3.4.1.2 The procedure of collecting the data for control group

1. Pre-test

The goal and the procedure of giving a test for control group are the same previously done on the experimental group. However this group were not given the treatments

2. Post-test

The procedure of giving posttest for control group are the same previously done on the experimental group.

Table 3.10 Teacher and Students Activities in Classroom

No.	Learning Activities
1	**Pre-Activities** ✓ The teacher greets the students and asked the students to prayer in English. ✓ The teacher check students' attendance list and check preparation of the students. ✓ The teacher asks some questions to the students related to the topic being discussed ✓ The teacher explains the students' roles in doing the activity and the

	objective of the lesson.
2	**Whilst-Activities** ✓ The teacher remains the students about descriptive text. ✓ Giving the students an example of descriptive text about Zaskia Adya Mecca. ✓ The teacher asks the students to make an group consist of 4 students. ✓ The teacher Introduces and explains how to apply Two Stay Two Stray technique to the students. ✓ The teacher appoints two students as the stayers and the rest students as the strayers. ✓ Teacher gives descriptive text and the questions for each group. ✓ Teacher asks the groups to discuss how to comprehend the text which covers supporting idea, implicit information, word meaning, and pronoun reference from the story given in certain duration of time. ✓ Monitoring the class and giving more explanation about the task. ✓ After all groups have finished discussing and answering the task, teacher asks two group members (strayers) to leave their group and each of the two students go to two different groups in order to get the information each group. ✓ The teacher asks the guests (strayers) to excuse themselves and back to their group and report the answers from other groups. ✓ The teacher asks the groups to revise and complete their work.
3	**Post-Activities** ✓ Giving positive feedback about the students' participation in the learning process ✓ Asking the students whether they still have questions about the lesson or not ✓ Concluding the material ✓ The teacher close the lesson.
No.	**Students Activities**
1	**Pre-Activities** ✓ Students repond the teacher greeting ✓ Students respond the teacher quetions ✓ Students pay attention roles in doing the activity and the objective of the lesson
2	**Whilst-Activities** ✓ Students pay attention when the teacher explain about descriptive text. ✓ Students sit based on their group that divided by the teacher. ✓ Students pay attention to the teacher explanation about Two Stay Two Stray technique. ✓ Students work in group to complete the task given by the teacher about descriptive text by applying TSTS technique.

3	✓ Students present the result of their discussion. ✓ Students revise and complete their work.
3	**Post-Activities** ✓ Students pay attention to the teacher about concluding the material ✓ Students finish the study

3.4.2 Variable X

There are two variables of this research, which is consisting of independent variable and dependent variable. Independent variable (X) is Two Stay Two Stray technique.

3.4.3 Variable Y

In this research, dependent variable (Y) is students' reading comprehension.

3.4.4 Validity of the Instrument

The validity in this research used construct validity. This test particularly measure the purpose of the test based on the purpose of the particular instruction. It means that every item in the test to measured the particular instructions in thinking aspect. To test the validity of the tests, the researcher used SPSS 24.0 program.

3.4.5 Reliability of the Instrument

Reliability is the other important thing in measuring the instrument. Reliability will be used to determine the consistency of the test. It focused on how many items will be given to the respondents. Reliability was related to validity. Even validity is more important, but realibility support the validity. There are several formulas that can be used to measure the realiability of the test. In this research, the researcher used SPSS 24.0 program.

3.5   Data Analysis Technique

After teaching reading by using TSTS technique, the data will be analyzed by using SPSS version 24 (Paired Sample Test). The researcher assessed the students' comprehension in the fifth components; finding main idea, finding factual information, reference, rhetorical description.

Table 3.11 The Components of Reading Comprehension

Variable	Indicators
Reading Comprehension	- Finding the main idea - Finding the factual information - Finding the meaning of vocabulary in context - Identifying reference - Inference of reading text

(Javarina:2005)

Table 3.12 The Components of Descriptive Text

Variable	Indicators	The classification of terms
Descriptive text	Identification	Finding information of the object and main idea
	Description	Finding information about feature or character of the object, supporting detail and factual information

Table 3.12 The Classification of Students' Score

No.	Score Range	Categories
1	86 – 100	Excellent
2	76– 85	Very Good
3	60 – 75	Good
4	55– 59	Fairy
5	<54	Poor

(Arikunto:1999)