CHAPTER III

RESEARCH METHOD

A. Research Design

The type of study is field research. It means that a study conducted by researcher to examine whether the using of Cooperative Learning is effective in improving students' skill in writing recount text at the tenth grade of SMAN 1 Beruntung Baru or not.

This research uses quantitative approach based on the kind of data was collected, calculated and formulated by researcher which it is formed by numbers. Also, it analyzes statistically using certain formula.

The design of this research uses experiment method. Experiment method is a research to examine whether the experiment variables are effective or not and it must use variable control to measure the effectiveness. It involved two groups, there are experimental group and control group. The experimental group uses cooperative learning and the control group uses Noncooperative learning (traditional teaching). Both groups were given pre-test and post-test. In the end, the result between experimental group and control group were compared.

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In the present study, experimental research model consisting of pre-test, post-test with a control group was applied. Experimental group was taught through Ask Together - Learn Together, whereas control group was taught through traditional teaching methods which involve lecturing and question-response.

The experimental research model is shown on Table 3.1:

 Table 3.1: Experimental Research Model

Groups	Pre-test	Experiments	Post-test
Experimental	Make	Cooperative	Make
Group	Recount Text	Learning	Recount Text
Control	based on	Traditional	based on
Group	Experience	Teaching	Experience

B. Research Setting

The location of this research is SMAN 1 Beruntung Baru, Jl. Pendidikan Desa Muara Halayung Kec. Beruntung Baru Kab. Banjar.

C. Population and Sample

1. Population

The population of this research is taken from the tenth grade students of SMAN 1 Beruntung Baru. It consist of 3

classes, namely Xa, Xb, and Xc the number of students of 3 classes is 58.

2. Sample

The research took the tenth grade, class A and B as the sample for both a control class and experimental class. Class A as a control class and class B as an experimental class.

Table 3.2: Subject of Research Distribution

Class	Number of	Crown	
Class	Students	Group	
A	19	CC	
В	19	EC	
Total	38	-	

D. Data and Source of Data

1. Data

a. Primary Data

The primary data in this research are:

- Data that connected with the first students' ability i.e English questions for tenth grade that is examined as a written test to the students.
- The students' achievement in writing recount text when using Cooperative Learning and not using Cooperative Learning.

b. Secondary Data

Secondary data is used to support the primary data, as follows:

- 1) Brief history of SMAN 1 Beruntung Baru
- The condition of teacher and staff administrative in SMAN 1 Beruntung Baru
- 3) The condition of students in SMAN 1 Beruntung Baru
- 4) The condition of facilities in SMAN 1 Beruntung Baru

2. Source of Data

There is some source of data that is used in this research, such as:

- Respondent, all class of tenth grade of SMAN 1 Beruntung
 Baru as a subject of research.
- b. Informant, headmaster, teachers, staff administrative in SMAN 1 Beruntung Baru.
- c. Document, all file consist of data and information which support the research.

E. Data Collecting Procedure

1. The Processing of Data and Technique of Collecting Data

The techniques of data processing in this research are as follows:

a) Editing

This technique is used to check back all of the collected data to make sure the writer that they already complete or not.

b) Coding

The writer classifies all the data that have been edited before in accordance with their kinds and by making certain codes on all collected data.

c) Tabulating

The writer tabulates all the collected data based on frequency to compute each certain by using the formula as follows:

$$p = \frac{f}{N} \ge 100$$

P: Percentage

F: The frequency of answer from respondents for each item question

N: Total Number of respondents

The technique of data collecting that is used in this research including:

a. Test (written test)

The students are tested to know their skill in writing recount text (Pre-test and Post Test).

1) Pre-Test

The writer gave pre-test to students before treatment in writing skill by using cooperative learning.

2) Treatment

The writer would give treatment in four times. The treatment is given to find out the effectiveness of using cooperative learning in teaching recount text.

3) Post-Test

The writer gave post-test to students. The post-test given after pre-test and treatment had been done in writing by using cooperative learning.

b. Interview

This technique is used to interview English teacher to know about how is the students' writing skill especially writing recount text.

c. Observation

This technique is used to observe students learning process in the classroom.

F. Research Instrument

1. Test (Pre-test/Post-test)

In this research, the writer gave some task to students called test instrument. Test instrument is needed to know how

effective the technique used in improving students' skill in writing recount text using Cooperative Learning at the tenth grade students in SMAN 1 Beruntung Baru.

In addition, the researcher asked one more meeting to apply the last test that was called post-test. This test was used to know the students' last ability in writing recount text on both of class after got some course about writing recount text. From this test, it could be known the students' achievement in writing both control class and experiment. Also from that it could be seen the effectiveness of Cooperative Learning with using t-test as a formula to compare the students' achievement in writing.

The final score of the students was interpreted using guideline from Dinas Pendidikan Provinsi Kalimantan Selatan (2004, p.27), as follows:

No	Score	Category
1.	95 - 100	Excellent
2.	80 - < 95	Very Good
3.	65 - < 80	Good
4.	55 - < 65	Enough
5.	40 - < 55	Low
6.	0 - < 40	Very Low

G. Data Analysis Procedure

Data of writing achievement is got from pre-test and post-test which was analyzed them descriptively and quantitatively. Then the writer makes the conclusion by using t-test formula of Anas Sudijono (1995, p.297-299). The application way to use students "t" or t-test or (t) code formula:

1. Looking for Mean Variable I as follows

Mx or M₁ =
$$\frac{\Sigma x}{N1}$$

M₁ : Mean of the Control Class of SMAN 1 Beruntung Baru

 ∑x : Accumulative of the total score of the Control Class of SMAN 1 Beruntung Baru
 N1 : Number of subject of the Control Class of SMAN

1 Beruntung Baru

2. Looking for Mean Variable II as follows the formula:

My or M₂ =
$$\frac{\Sigma y}{N2}$$

M₂ : Mean of the Experiment Class of SMAN 1 Beruntung Baru

3. Looking for Standard Deviation for Variable I as follows the formula:

SDx or SD₁ =
$$\sqrt{\frac{\sum x^2}{(N-1)}}$$

- SD₁ : Standard Deviation of the Control Class of SMAN 1 Beruntung Baru Σx^2 : Accumulative of the quadrant of deviation of the
 - 2x² : Accumulative of the quadrant of deviation of theControl Class of SMAN 1 Beruntung Baru
- 4. Looking for Standard Deviation for Variable II as follows the formula:

SDx or SD2 =
$$\sqrt{\frac{\Sigma y^2}{(N-1)}}$$

- SD₂ : Standard Deviation of the Experiment Class of SMAN Beruntung Baru
- $\sum y^2$: Accumulative of the quadrant of deviation of the Control Class of SMAN 1 Beruntung Baru

5. Looking for Standard Error of Mean variable I as follows the formula:

SE M1 =
$$\frac{SD_1}{\sqrt{N_1 - 1}}$$

: Value of constant

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- SE M1 : Standard Error of the Control Class of SMAN 1 Beruntung Baru
- 6. Looking for Standard Error of Mean variable II as follows the formula:

SE M2 =
$$\frac{SD_2}{\sqrt{N_2-1}}$$

- SE M2 : Standrad Error of Mean of the Experiment Class of SMAN 1 Beruntung Baru
- 1 : Value of constant
- Looking for Standard Error for Comparative Mean Variable I and Mean Variable II as follows the formula:

$$SE_{M1-M2} = \sqrt{SE_M1^2 + SE_M2^2}$$

SE M1 – M2 : Standard error for comparative mean of the Control Class and Experiment Class of SMAN 1 Beruntung Baru

- SE M1² : Quadrant Result of Standard Error of Mean of the Control Class of SMAN 1 Beruntung Baru
 SE M2² : Quadrant Result of Standard Error of Mean of the Experiment Class of SMAN 1 Beruntung Baru
- 8. Looking for t, as follows the formula:

$$t_{cont} = \frac{M1 - M2}{SE M1 - M2}$$

t test : Value of t observation

9. Giving interpretation for "t" with consulting t table ("t" table):

Looking for Degree of Freedom:

 $df/db = (N_1 + N_2 - 2)$

- df/db : Degree of Freedom
- N1 : Number of Subject of Control Class of SMAN 1 Beruntung Baru
- N2 : Number of Subject of Experiment Class of SMAN1 Beruntung Baru
- 2 : Value of degree of freedom for variables

Consulting Score of "df/db" with "t table":

T table : Value of Critic "t"

In significant degrees t table 5%

In significant degrees t table 1%