CHAPTER III

RESEARCH METHODOLOGY

Research methodology is strategy used for collecting and analyzing the data of the research. This chapter includes the following major components: research design, population and sample, variable,research instrument, validity and reliability testing, data collecting method, data and data sourceand data analysis.

A. Research Design

Knowing the meaning of research is important to understand the study well. It is explained that research is considered to be the more formal, systematic and intensive process of carrying on them scientific method analysis. In other word, research is also defined as systematic and objective analysis and recording of controlled observation that may have the development of generalization, principles of theories, resulting in prediction and possible ultimate control of event.

In achieving the goal of research, it is better to take for the certain design of the research. The design of the research was comparative study because this research is to know the students score taught by using picture series and watching cartoon movie. Comparative study is the research to find out thought the analysis of cause effect relation between some factors with the phenomenon". Meanwhile, according to Arikunto (2006: 267) "comparative study is the research to compare about thing, people, work, procedure, and ideas".

B. Population, Sample and Sampling

1. Population

Population is whole of research subject. In Encyclopedia of educational evaluation noted that a population is a set (or collection) of all elements processing one or more attributes of interest (Arikunto, 2010:173). Population based on Ary et al (2003:53) population is all numbers of well defined class of people, events or object. In this research, the populations all second grade are 31 students consist of two classes; they were class A 14 students and class B 17 students.

2. Sample

According to Arikunto (2010:174) sample is a part of population which is researched. Azwar (2010:79) state sample is a part of population. In this research, researcher took all of the students of eighth year students of MTs Sultan AgungJabalsariTulungagung, is divided to two classes consist of 31 students. The purpose of taking class A and B for the sample was because the research found that in MTs Sultan AgungJabalsariTulungagung the students both of them less in writing achievement.From the description above the sample of this study is the fourth year student of MTs Sultan AgungJabalsariTulungagung in the year of 2014.

3. Sampling

Sampling is a technique of taking sample which gives opportunity for every element or population member to be chosen as sample. In this research the researcher used purposive sampling. Purposive sampling was technique to determine sample with a particular consideration.

The researcher chose the class VIII A and B at the sample because the students had homogeneity than other classes. The meaning of homogeneity in this research is the students have similar score when they get examination especially in writing test. The researcher proved it when she conducted a teaching practice there.

C. Variable

A variable is a concept a noun that stands for variation within a class of objects. Variables can be classified in into two classifications. The most important classification is on the basis of their use within the research under consideration, when they are classified as independent variables or dependent variables (Ary, 1985:30).

a. The dependent variable

Dependent variable is observed to determine what effect, if any the types of variable may have on it. In other words, dependent variable will act if there is any relationship. In this research, the dependent variable was teaching writing narrative text by using cartoon movie and picture series as media on teaching.

b. The independent variable

Independent variable is an antecedent of the depend variable (Ary, 1979:29). Independent variable is variable selected by the research to the effect on or relationship with dependent variable. In this research the independent variable was the students' writing achievement in narrative text based on the use of cartoon movie and picture series as media on teaching writing narrative text.

D. Research Instrument

The research instrument used in this study was test. Aryet al (1985: 189) states that a test is a set of stimuli presented to an individual in order to elicit responses on the basic of which a numerical score can be assigned. In this research, the researcher used the achievement test to measure the students writing achievement. According to Ary, achievement test measure the mastery and proficiency of individual in different areas of knowledge.

Hence, the data of this research were collected by administering test. Arikunto (2010:193) explains "Tool is a space of question or exercise and other tools that are used to measure the knowledge, skills, abilities or talent of the intelligentsia that is owned by an individual or group". Test is used to get the data about the students' achievement in writing learning. Administering test here means as rewrite narrative test taught by using picture series and cartoon movie as media to look an ability of students of Mts Sultan AgungJabalsariTulungagung.

In collecting the data test, there were some procedures that the researcher did, namely:

a. The researcher collected the data from two classes that one of them uses.

b. The researcher got the teacher who teaches in each class to help the researcher to arrange the post-test.

This research uses picture series and cartoon movie to administer the test for getting the data. The test is informed of rewriting the narrative text taught by using picture series and cartoon movie as media. It is supplying the correct form test which asks the students to supply the correct form or words in the bracket. The main point of this test is that the students can write very well. The test consists of post-test. The result of those tests will be the data of this research.

The indicator of scoring system for students taught by using picture series and cartoon movie for writing narrative text as follow:

Table 3.1 Scoring Form of Writing Narrative Text

Name   :

NO.	Scoring Aspects	Maximum score	Result
	A. Text Organization	**50**	
1.	Orientation/ The Topic Sentence	10	
2.	Complication/ The Body Support	20	
3.	Resolution/ The Concluding Sentence	10	
4.	Consist of 25 sentences, minimally	10	
	B. Correction Symbols	**50**	
1.	Composing	10	
2.	Style	10	
3.	Sentence Formation	10	
4.	Usage	10	
5.	Mechanics	10	
	Total	**100**	

That classification was meant to ease the researcher in taking a score of the student's ability in writing narrative text based on the text organization and correction symbols which the students most frequently made mistakes on them. The test item used for post-test was analyzed to know the level of validity and reliability.

E. Validity and Reliability Testing

A research is always dependent upon measurement. There are two important characteristics that every measuring instrument should go through a process of validity and reliability check.

1. Validity

Validity is the degree to which a test measure what it is supposed to measure. A common misconception is that a test is, or, is not valid. Validity is the most complex criterion of an effective test and the most important principle of language testing. It is the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the purpose of the assessment. A test should test what the writer wants to test. To measure writing ability, one might ask students to write in 15 minutes, and then simply count the words for the final score. Although it would be easy to administer (practical) and the scoring is quite dependable (reliable), it would not be considered a valid test of writing ability because there are no considered of comprehensibility, organization of ideas and other factors of writing ability Brown in Isnawati(2012:27).

There are four types of validity; 1). Content validity, 2) criterion-related validity, 3) construct validity, 4) face validity.

Content validity is a kind of validity which depends on careful analysis of the language being tested and a particular test. A test is said to have content validity if its contents constitutes a representative sample of the language skills, structures, etc. with which it is meant to be concerned (Hughes, 2003:26).

In this research the researcher used content validity. Both in the post-test, the researcher gave picture series, cartoon movie and administering test. According to Arikunto (2010: 67), a test has content validity when the test measures a certain purpose that reflects the material which was given.

The most proper role to achieve the content validity for the writing test was asking the students to test the students' writing narrative text which Cinderella and snow white as title. The researcher also looked at the syllabus when constructing the test and the test was suitable to the syllabus of English for Junior High School in the competence of writing.

2. Reliability

Brown in Isnawati (2012:18) states "a reliable test is consistent and dependable. If the students are given the same test on two different occasions, the test should yield similar results". The word "similar" is used here because it is almost impossible for the test takers to get exactly the same scores when the test is repeated the following day.

In this research, the researcher used Inter-rater reliability. This way was done by asking another teacher to score students' writing by using the same scoring rubric. Hence, the students' writing was scored once by two different scorers.

In this research, to score the students' performance in writing test, the researcher used analytical oral language scoring rubric. By using this scoring rubric, the students' writing achievement completely and specifically could be judged.

Scoring for each component is based on the degree of control the students' paper exhibits for that component. Separate score only scale of 1 (little or no control of the component) to 4 (consists control) are assigned to each of the five components. In Virginia, composing is weighted 3, style is weighted 2, and the other components are weighted 1 in deriving the total score.

Notice that the differentiated scoring for sentence formation, usage, and mechanics (each is weighted 1) gives a balanced emphasis to these dimensions relative to the weight given to composing (which is weight 3). According to Michael (1996:145) the researcher will decide to weight the components of the analytic scoring rubric consist with local language arts programs and objectives.

Table 3.2 Analytic Scoring Rubric for Writing

Domain Score	Composing	Style	Sentence Formation	Usage	Mechanics
4	Focuses on central ideas with an organized and elaborated text.	Purposefully chosen vocabulary, sentence variety, information, and voice to affect reader.	Standard word order, no enjambment (run-on sentences), completeness (no sentence fragments) standard modifiers and coordinators, and effective transitions.	Standard inflection (e.g., plurals, possessives, -ed, -ing with verb, and –ly with adverbs), subject-verb agreement (we were vs. we was), standard word meaning.	Effective use of capitalization, punctuation, spelling, and formatting (paragraphs noted by indenting).
3	Central idea, but not as evenly elaborated and some digressions.	Vocabulary less precise and information chosen less purposeful.	Mostly standards word order, some enjambment or sentence fragments.	Mostly standard inflections agreement and word meaning.	Mostly effective use of mechanics errors do not detract from meaning.
2	Not a focused idea or more than one idea, sketchy elaboration, and many digressions.	Vocabulary basic and not purposefully selected; tone flat or inconsistent.	Some non standard word order, enjambment, and word omissions (e.g., verbs).	Some errors with inflections, agreement, and word meaning.	Some errors with spelling and punctuation that detract from meaning.
1	No clear idea, little or no elaboration, many	Not controlled, tone flat, sentences halted or	Frequent not-standard word order, enjambment, and word	Shifts from one tense to other; errors in convention	Misspells even simple words; little formatting evident.

	digressions.	choppy.	omissions.	s (them/ those, good/ well, double negatives, etc.).	

The scores will become a more meaningful numerical data if they are converted to numerical data, which will be processed to the scale of 0 to 100. Then the processed scores will be used sequentially from the highest to the lowest. It will be easier to know the position of a student in his/ her group.

The researcher classified the reliability coefficient which taken from Sudjiono (1996: 388) as the table follow:

Table 3.3The Classification of Reliability Test

Reliability Test Coefficient	Classification
0.99-1.00	More Highly
0.77-0.89	High
0.50-0.69	Fair
0.30-0.49	Low
<0.30	Very Low

F. Data Collecting Method

Data colleting method is a way how the needed data are collected. Data collecting is a systematic and standardized procedure to obtain the necessary data (Tanzeh, 2011:83).A researcher must develop a new test to measure the specific knowledge, skills, behavior, or cognitive activity that is being studied. In this research, the researcher tries to know the students' ability in writing narrative text by giving picture series and cartoon movie, and administering test. There will be

two tests. The first test is to measure the students' writing achievement by using picture series and the second test is to measure the students' writing achievement by watching cartoon movie.

In datacollecting method, the researcher conducted post-testfor picture series and cartoon movie by using administering test. The aims of using these techniques are to know the difficulties that the students have in understanding narrative, to know to what extent the teaching of narrative using pictures and films can improve students' writing achievement, to gather information and to find a simple way for the students to produce a text.The post-test is conducted for checking whether the students can produce the narrative text well or not. The assessment tests are used for knowing whether there is achievement of the students in producing a narrative text.

The researcher wants to compare which one is the better way in studying writing text especially narrative text.

G. Data and Data Source

1. Data

Data is important factor in a research. It is needed by researcher to solve problem in his or her investigation. Data is some information about the research object that is gotten in research field Bungin (2008:119). It means that data is all information needed by researcher to find the answers of the research problems. There is only one kind of data needed that is interval or score data come from the writing achievement in narrative text related from test narrative score.

In short to support the needed data, in this research the researcher needed to get data deals with the writing achievement in narrative text at the second grade students' MTs Sultan AgungJabalsariTulungagung.

2. Data Source

Data sources are the subject of research from where the data can be obtained. Arikunto, (2010:172) said that the data source can be classified into three sources which are person, place, and paper. Bungin (2008:122) stated that the primary data is data which are collected directly from the first data source in the field or research object.

In this research, the data was taken fromthe second grade students' MTs Sultan AgungJabalsariTulungagung.The researcher administered the post test to the students of second grade of Mts Sultan AgungJabalsariTulungagung.It means that the data sources in this research were all students in class A and class B of second grade atMts Sultan AgungJabalsariTulungagung.

H. Data Analysis

In this research, the researcher used statistical data analysis technique to know the different score between the students' achievement in writing narrative text being taught by using picture series and cartoon movie as media in teaching writing. The data collected in research must be analyzed. Quantitative data are usually in the form of numbers that researchers analyze using various statistical

procedures. The analysis provides evidence that supports or fails to support the hypothesis of the study Ary (1985: 29).

The researcher determines it with using statistical computation to analyze the collected data and the researcher uses SPSS 20.

The purpose is the writer wants know the result of the students' writing ability after being taught by using picture series and cartoon movie at the second grade students of MTs Sultan AgungJabalsariTulungagung.

The researcher involved two classes that consist of 31 students in teaching and learning process.

The researcher wants her students to write the narrative text by using picture series and cartoon movie as media into order beside that the researcher wants her students pay attention to compose, style, sentence formation, usage, and mechanics.

The researcher scored in the combination of five aspects as bellow:

1. Compose (C)   : (0 - 20)

2. Style (S)   : (0 - 20)

3. Sentence formation (SF)   : (0 - 20)

4. Usage (U)   : (0 - 20)

5. Mechanics (M)   : (0 - 20)

The total score is 100