

CHAPTER III

RESEARCH METHOD

This chapter discuss about the method used by the present research. The discussion includes research design, population sample and sampling, the instruments of collecting data, validity and reliability testing, normality and homogeneity testing, and data analysis.

A. Research Design

This research used Quantitative approach. It was designed to be a Quasi-Experimental research. Quasi experimental design is when the researcher took two classes, the experimental class and control class. The researcher taught the students in experimental class by using Time Token Arends technique and in control class without using Time Token Arends technique. It is to know the effectiveness of using Time Token Arends technique on students' speaking skill. In this research consisted two variables they were Independent variable (variable x) that is effect of Time Token Arends technique and Dependent variable (variable y) that is speaking skill.

Table 3.1 The Illustration of Research Design

Group	Pre-test	Independent variable	Post-test
B	Y1	X	Y2
E	Y1	-	Y2

Where:

B: Experimental Group

E: Control Group

Y1: Pre-test

Y2: Post-test

X: Treatment by Using Time Token Arends technique

According to illustration above at table 3.1 there are two group, which received a treatment (X) that is experimental class while the second group is the control group that is do not received treatment (-). Both experimental and control group have pre-test and post-test to know the data about students speaking' skill score. In this research after conduct pre-test and post-test the researcher distinguish speaking' score which each the more effective score among before giving treatment that is using Time Token Arends technique and after giving treatment that is Time Token Arends technique.

B. Population, Sample, Sampling

1. Population

As stated in Sugiono (2010:117) population is generalization area that is consisting object or subject that have characteristics and quality decided by researcher to be researched and take a conclusion. The population used to conduct in this research was second grade Junior High School of MTs Assyafi'iyah Gondang Tulungagung. It is located at Jl. Raya Brontoseno,

Gondang, Tulungagung. The total population was 137 students consisting of 74 male students and 63 female students which spread in 5 classes.

2. Sample

In this study the researcher selected sample to support this research. According to Sugiyono (2010:118) sample is part of total population which researched. A good sample that is representative of the population from which it was selected. As a sample the researcher select VIII B class and VIII E classes. Then VIII B as an experimental class and VIII E as control class. In this research the sample of this research consist of 52 students, 26 students for experimental class and 26 students for control class. Both of the class is difference proficiency that they still any problem in speaking skill. They must practice in speaking ability in the class.

3. Sampling

As stated in this research above, the researcher taking sample by using purposive random sampling technique. Purposive random sampling technique means here said by Sugiono (2010:24) purposive sampling is a technique to determination a sample with certain consideration. Purposive sampling is used when the researcher is unable to take probability sampling but the researcher still able to select subjects to be typical or representative are chosen on the basis of the researcher's purpose. Thus, it is used to select sample because to obtain representative sample from population. The researcher get the representative sample which provides sufficient information needed by the researcher. To get

representative result the researcher choose two class who can give sufficient information and the effectiveness of using Time Token Arends Technique can be identified when the technique it is implemented in speaking class.

C. Research Instrument

In collecting the data, the researcher needed instrument. Instrument has important functions in this research. Therefore, the researcher must choose an instrument in process to collecting the data. Research instrument is the tool of collecting data that is should be valid and reliable.

According to Brown (2004:3) test is a method to measure a person's ability, knowledge, or performance in given domain. In this study the researcher used test instruments to collect the data. The researcher needed to support this research, the researcher used oral production test to know the information about speaking skill from the students. The researcher conduct the research with Time Token Arends Technique. The students given the same topic in recount text, after the teacher give instructions, the students must discussion with their partner with the same topic in their group that they have. The students discuss with their partner, they must speak individually with limitation time 2 minutes. The coupon submitted to the teacher if they have finished to speak.

There are two kinds of test, they are pre-test and post-test. In this research the researcher using pre-test and post-test as instruments. Pre-test is given before applying Time Token Arends Technique. While post-test given after researcher applied Time Token Arends Technique. The students practice to speak one by

one in their group by using Time Token Arends technique with limitation time. Before conducting research the researcher followed some procedures below selecting some topics, consulting the result to English teacher, revised based on suggestion, and the last the researcher conduct the research based on the topic chosen.

D. Validity and Reliability Testing

1. Validity Testing

Validity is an important part of the research. Validity of the test refers to the extent inferences made from assessment result are appropriate, useful, in the terms of the purpose of the assessment in this research. According to Ary et al (2010:225) validity is the most important consideration in developing and evaluating, measuring instrument. It means that, validity is needed in the research to support this study and to make this result of this study is valid. In addition, to being valid the researcher used content validity, construct validity and face validity to make a good research instrument.

a. Content Validity

Content validity is one kind of validity that is important if the researcher make the instrument. In this research the researcher was conduct content validity it refers to the learning syllabus that contains of standard competence and basic competence in syllabus curriculum of 2013 that implemented in MTs Assyafi'iyah Gondang Tulungagung. According to Ary et al (2010:235) content validity is to have teachers or subject matter experts examine the test and judge

whether it is adequate sample of the content and objectives to be measured. It means that content validity is very important in this research when the researcher make the instrument. The researcher adjusted the test with learning syllabus in the school that contains of standard competence and basic competence. The instrument of this study has content validity because very important for teaching speaking of second grade Junior High School. The content validity of the test will be designed based on main competence and basic competence in syllabus curriculum of 2013 that implemented in this school.

Table 3.2

Main Competence and Basic Competence in Curriculum 2013

Basic competence	Indicator
3.11 Comparing social functions, text structures and linguistics elements of some oral and written personal recount texts by giving and asking for information related to personal experiences in the past short and simple in accordance with the context of their use.	Students are able to identify the content of Recount Text appropriately
4.11 Recount text 4.11.1 Capturing contextually meaning related to social functions, text structure and language elements very short and simple oral and written recount texts related to personal experience in the past (personal recount) 4.12.1 Compiling very short and simple oral recount and written texts related to personal recount by paying attention to social functions, text structures and linguistic elements correctly and in context.	Students are able to do short monologue in the form of Recount Text

b. Construct Validity

Construct validity is one kind of validity that is measure the ability which is supposed to measure. According to Isnawati (2014:29) the word “construct” refers to any underlying ability which is hypothesized in the theory of language ability. Based on the theory above in this research the researcher used scoring rubric to analyze the test of speaking.

In addition the researcher used rating scale which some categories and the researcher analyze by follows scoring criteria for each categories. In this categories there are 5 kind vocabulary, grammar, fluency, pronunciation, and comprehension.

Table 3.3 Scoring Rubric of Speaking

No	Elements of Speaking	Score	Criteria
1.	Grammar	1	Errors in grammar are frequent, but speaker can be understood by a native speaker used to dealing with foreigners attempting to speak his language.
		2	Can usually handle elementary construction quite accurately but does not have thorough or confident control of the grammar.
		3	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversations on practical, social, and professional needs. Errors in grammar are quite rare.
		4	Able to use the language accurately on all levels normally pertinent to

			professional needs. Errors in grammar are quite rare.
		5	Equivalent to that of an educated native speaker.
2.	Vocabulary	1	Speaking vocabulary inadequate to express anything but the most elementary needs.
		2	Has speaking vocabulary sufficient to express himself simply with some circumlocutions.
		3	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversation on practical, social, and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.
		4	Can understand and participate in any conversation within the range of his experience with a high degree of precision of vocabulary.
		5	Speech on all levels is fully accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.
3.	Comprehension	1	Within the scope of his very limited language experience, can understand simple questions and statements
		2	Can get the gist of most conversations of non- technical subjects.
		3	Comprehension is quite complete at a normal rate of speech.
		4	Can understand any conversation within the range of his experience.
		5	Equivalent to that of an educated native speaker.
4.	Fluency	1	No specific fluency description. Refer to other four language areas for implied level of fluency.
		2	Can handle with confidence but not with facility most social situation, including introductions and casual conversations about current events, as

			well as work, family, and autobiographical information.
		3	Can discuss particular interests of competence with reasonable ease. Rarely has to grope for words.
		4	Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of this experience with a high degree of fluency.
		5	Has complete fluently in the language such that his speech is fully accepted by educated native speaker.
5.	Pronunciation	1	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to speak his language.
		2	Accent is intelligible though often quite faulty.
		3	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign.
		4	Errors in pronunciation are quite rare.
		5	Equivalent to and fully accepted native speakers.

Brown, H. Douglas. (2001)

Maximal score 100

$$\text{Students' Score} = \frac{\text{Obtained Score}}{25} \times 100$$

25

From the table above the researcher got the students' score based on obtained score and it will multiple 100 score and divided 25. The researcher make a rating scale to classify the result of score that each students got. The rating scale was consisted of score, and criteria. It can be seen below:

Table 3.4 Rating Scale

No	Range of score	Criteria
1.	81-100	Excellent
2.	61-80	Good
3.	41-60	Enough/Fair
4.	0-40	Poor

c. Face Validity

Face validity is important part in this research. Face validity refers to the extent the examiners believe about instrument is measuring what it is supposed measure. According to Isnawati (2014:29) face validity is a test which does not have face validity may not be accepted by test takers teacher's education authorities or employer. In this research the researcher used face validity by consulting with advisor and English teacher of the second grade Junior High School MTs Assyafi'iyah Gondang Tulungagung.

2. Reliability Testing

According to Ary et al (2010:236) reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. It means that reliability testing is used by researcher to whether the test is consistent and reliable. For getting the reliable value, the researcher choose VIII C as try out class and took 10 students as sample. The researcher showed two topic pre-test and post-test. After that the teacher give instructions to tell the topic of recount text that they have. Besides that, the test was evaluated by the teacher after it was develop. To know the reliability test the researcher used Alpha Cronbach's reliability SPSS 20 for Windows.

Table 3.5 Cronbach Scale

Cronbach Values	Interpretation
0,00 – 0,20	Less Reliable
0,21 – 0,40	Rather Reliable
0,41 – 0,60	Quite Reliable
0,61 – 0,80	Reliable
0,81 – 1,00	Very Reliable

Table 3.6 The scores obtained from the Try Out

No	Students	Score 1	Score 2
1	AB	56	60
2	CT	52	60
3	YT	48	56
4	HK	44	60
5	TV	60	72
6	HN	64	68
7	WJ	52	76
8	KH	64	68
9	YN	64	68
10	LS	52	72

After the score of try out pre-test and post-test were calculated SPSS 20, the researcher got result as follows:

Table 3.7 Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.602	2

The result of calculations using SPSS 20 on the reliability test was 0.602. Thus, it could be concluded that the instrument was reliable.

E. Data Collecting Method

In this research the researcher used test to collect the data. The test will be in the form of speaking test to see the different result of students speaking skill who being taught by using Time Token Arends and without Time Token Arends technique. In this case the researcher used two kinds of test they were pretest and posttest.

1. Pre-test

Pre-test was administered at the beginning of the study in experimental class and control class. The pre-test was held on April 2nd 2019. The test was given to the experimental class (8B) and control class (8E) both of class were given the same test the topic is tell about Parangtritis Beach. When the students show their performance the teacher recorded them, then made the score used scoring rubric to compute the score of pre-test.

2. Post test

Post-test was administered after all treatment were done. The post-test was held on April 6th 2019. It was conducted to know the students speaking skill of experimental and control class were given the same topic, the topic is Borobudur Temple. When the students show their performance the teacher recorded them. It was done to know the final score and to know the students difference competence before and after.