

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the research method. It is used by the researcher in conducting the research. Those descriptions include a model of test development.

3.1 Model of Test Development

This research is developed based on the Research and Development (R&D). In developing the reading test, the researcher uses Harris (1969) models as an approach for doing the development of test. Actually, in Harris (1969) design, there are several cycles that should be done. The cycles consist of:

1. Planning test
2. Preparing the test items and directions
3. Submitting the test material to review and revising on the basis of review
4. Pre-testing the test and analyzing the result
5. Assembling the final form of the test.

Based on the cycle of test development applied by Harris, the researcher designs seven stages that will be applied for this research. The fourth stage is divided into two parts. The first is pre-testing the test and the second is analyzing the result. Besides, the researcher divides into two parts on the fifth stage. They are integrating in CALL and final product.

This research is developed by using the design of Harris (1969). The stage consists of:

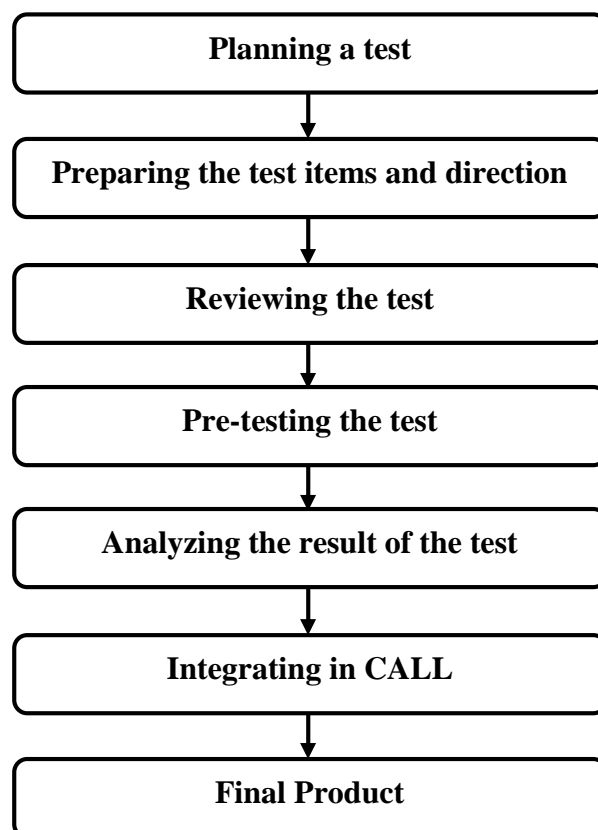


Figure 3.1. Research and Development cycle adapted from Harris (1969)

Figure 3.1 shows the series of actions that will be done by the researcher for developing the reading test. Each points will be describes in the following section.

Before discussing about model of test development, the researcher analyzes the school syllabus at the eight grade of the second semester of MTs. Al-Karimi 1 Tebuwung Dukun Gresik (Appendix 1). There are some differentiates of instruments and indicators between school syllabus and syllabus that is developed researcher. For instruments of the school syllabus are *read aloud*, *multiple choice* and *short answer (essay)*, but the researcher focuses on the *multiple choice* because in the end of school examination is just multiple choice items. In other

hands, the researcher gives the questions of multiple choice items with a good form; it uses Longtion Autorun Application as CALL media. The indicators of school syllabus are *read aloud short essay in the form of recount and narrative, identify a variety of recount and narrative text, identify communicative purpose of recount and narrative text, identify the characteristic of recount and narrative text, identify a variety of information in functional text, identify communicative purpose of functional text, and identify the characteristic of functional text*. Here, the researcher deletes and adds some indicators.

That is why, the researcher has some differentiate of indicators and instruments in developing reading test of narrative text using Longtion Autorun Application at the eight grade of the second semester of MTs. Al-Karimi 1 Tebuwung Dukun Gresik, and it will be discussed in the model of test development below.

3.1.1 Planning Test

In this step, the researcher has to do many steps. As stated by Harris (1969: 95), in the planning of a test, the test developer has to:

a. Determine the General Course Objectives

In developing the test, the researcher decided to develop English reading test. Thus, she had to know the general objective of teaching and learning of reading for the seventh grade students of Junior High School, specifically teaching and learning of reading in the first semester. As stated in Standar Isi (2006), the general objectives of teaching and learning of reading for the eight grade students

of Junior High School in the second semester are reflected from the standart competence and basic competence (Appendix I). They are:

Standard Competence:

11. Comprehending the meaning of simple short essay in the form of recount and narrative for interacting with the surrounding.

Basic Competence:

- 11.1 Reading aloud a functional text and simple short essay in the form of recount and narrative by oral stress, and intonation which acceptable and related to the surrounding.
- 11.2 Comprehending the meaning of short functional text accurately, fluently, and acceptably which related to the surrounding.
- 11.3 Responding the meaning and the rhetorical sequences of simple short essay accurately, fluently, and acceptably which related to the surroundings in the form of recount and narrative text.

To develop a reading test has to reflect in standard and basic competence. The basic competence 11.1 can not be developed because a teacher should test the students by oral test, it is the only way to test the students' ability in reading a text, so this basic competence is not included into the focus of this research. The basic competence 11.2 can not also be developed in this research because it focuses on short functional text like invitation, letter, and others. The basic competence 11.3 focuses on recount and narrative text, so it is suitable to develop a reading text, but the researcher just focuses on narrative text.

b. Divide the General Course Objective into their Component

Based on syllabus, the objectives test of teaching and learning of reading can be seen from indicators. They are:

1. The students should be able to know the narrative text.
2. The students should be able to understand the narrative text.
3. The students should be able to analyze the narrative text.

Based on those indicators, there are many objective reading tests. They are:

Indicators	
Know	The students are able to identify the text
	The students are able to give the definition of the text
Understand	The students are able to summarize the text
	The students are able to develop the text
Analyze	The students are able to connect the text.
	The students are able to make scheme of the text.

Figure 3.1.1 (b) General Course Objective

c. Establish the general design of the test

Harris (1969: 97) stated that there were two extremely important factors must be considered in establishing the general design of the test. Those were: the time to be provided for testing and the degree of speediness to build for the test.

The tests are going to be designed with Longtion Autorun Application as the media. The objective tests are multiple-choice. They consist of the questions which provide four answers. The students have to choose one of the answer provide. In this test, one question consists of one right answer and other answer is distracters. The researcher just gives 3 minutes for 1 item, so the time allocation is 120 minutes

3.1.2 Preparing the test items and directions

Preparing the test items, the researcher makes some questions to get the validity test. The test is 40 questions of multiple choice (Appendix IV). Those items are going to be included in Longtion Autorun Application as the media.

Furthermore, the researcher has to prepare the test directions because the students will know what they should do to the test. Test directions should be brief, simple to understand, and free from possible ambiguities (Harris, 1969:102). The test directions are:

	Indicators	Direction	Numbers
Know	The students are able to identify the text.	Give the narrative text, the students are able to answer questions related to the text content.	15
		Give the narrative text, the students are able to mention a setting and characters.	6
		Give the narrative text, the students are able to classify or know the dissimilarity of the types of narrative text (fable, legend, and myth).	3
		Give the narrative text, the students are able to differentiate the generic structure of the text.	6
Understand	The students are able to conclude the text.	Give the narrative text, the students are able to give a moral value of the text.	3
	The students are able to develop the text.	Give a picture, the students are able to develop narrative text with a correct generic structure.	2
Analyze	The students are able to connect the sentence into good paragraph.	Give sentences, the students are able to arrange sentences into narrative text.	2
	The students are able to make scheme of the text.	Give the narrative text, the students are able to make the generic structure of the text.	3
Total			40 items

Figure 3.1.2 Preparing the Test Items and Direction

3.1.3 Reviewing the test

After preparing the test items and the directions, the researcher gives the tests to the teacher of the eight grade of MTs. Al-Karimi 1 Tebuwung Dukun Gresik in order to get content validity and criterion validity. The teacher has to fill the validation sheet (Appendix III) in order to know the items of reading test have to suitable with syllabus and handbook and others.

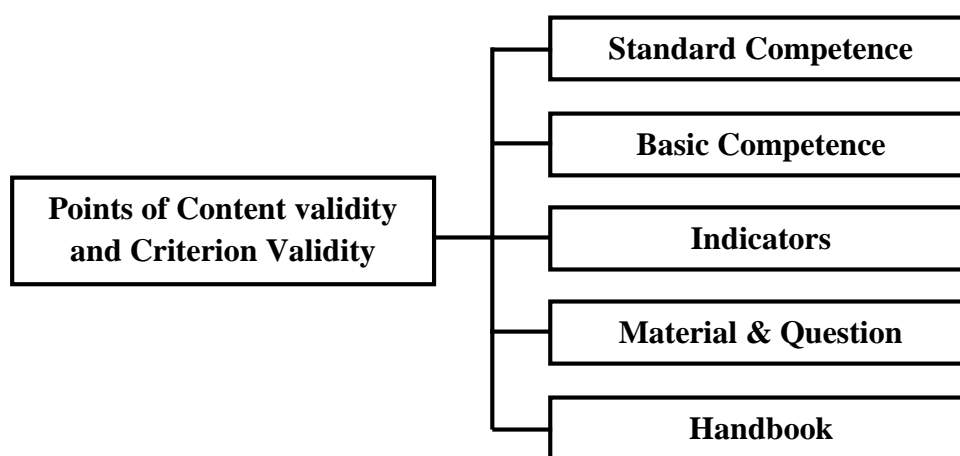


Figure 3.1.3 Points of Content Validity and Criterion Validity

3.1.4 Pre-testing the test

After reviewing the test, the researcher has to give test to the students to know the result of the test in each item. For pre testing the test still uses paper because it is used to get a reliability, validity, and item analysis. The test is applied to students of the eighth grade of MTs. Al-Karimi 1 Tebuwung Dukun Gresik. Actually, there are 3 classes in the eighth grade: A, B, and C. After interview with the teacher, the researcher takes A class because A class has facilitated LCD and projector, but it is not maximal in developing reading test. Therefore, it supports the researcher in developing reading test using longtion

autorun application because the researcher wants to make the different way with the test before; it still uses a paper. The quantity is 28 students which consist of 8 male and 20 female (Appendix II). The researcher gives 40 questions in pre-testing of the test, and they have to do it in 120 minutes.

3.1.5 Analyzing the Result

After pre-testing the test, the researcher will analyze the data with three points of test in order to get Construct Validity. The first is analyzing the reliability of the test. The second is analyzing the validity of the test . The last is analyzing the item facility of the test.

a. Analyzing the reliability of the test.

To know the reliability of the reading test, the researcher uses the SPSS software for analyzing it. It aims to decide whether the test are reliable or not. The researcher calculate the reliability of test by follow the following steps of using SPSS:

1. Input the data score of student in SPSS sheet
2. Click tab Analyze- Scale- Reliability Analysis
3. Move each data to the items column
4. Click Statistics button, and give the checklist to item, scale, scale if item deleted then click continue and OK
5. Then reliability coefficient will be displayed
6. See Reliability Statistics

According to George and Mallery (2003) stated that the Cronbach's Alpha value of Reliability Statistic is more than 0.7 that is acceptable.

b. Analyzing the validity of the test

To know the validity of the each items test, the researcher uses the SPSS software for analyzing it. An item is said to be valid if the number of corrected item-total correlation is higher than the value of r Pearson correlation. In r Product Moment's table, the number of 28 students represents the number of 0,361. Thus, it can be concluded that the items of test is considered valid if the number of corrected item-total correlation is higher than 0,361 figure.

c. Analyzing the item facility of the test

Item facility is one of the things that need to be considered in analyzing each item of test. Item facility is a term of how easy or difficult an items of test. The item which can be answered by most of students belongs to easy item. In the other hand, the item which can be answered only by few students is belongs to difficult item. According to Djiwandono (1996) in his study stated that the ideal index of item facility is between 0.20-0.80.

The table used for investigating the item facility is as follows:

Items	N Total	Correct Answer	Wrong Answer	Item Facility	Conclusion
1	28				
2	28				
3	28				
...					

Figure 3.1.5 (c) Analyzing the item facility of the test

The formula used for investigating item facility of multiple choice items is as follows:

$$IF = N \text{ correct} : N \text{ total}$$

IF : Item Facility

N correct : Number of students who answer correctly

N total : Number of students who take the test

3.1.6 Integrating in CALL

After the researcher gets a validity test, she includes the test into Longtion Autorun Application. At the beginning of the application, there are some menu of reading test about narrative text, they are: multiple choice and jumbled stories. Those menus will link to the questions. The last of the application is about the researcher.

The researcher provides validity checklist to get the expert validation, it gives to the lecturer of Computer Assisted Language Learning in Muhammadiyah University of Gresik (Appendix IX). There are four components which used for the evaluation; attractiveness, concept, mechanics, content, and originality. The revisions or suggestions from the reviewer are expected to help the researcher in developing a good quality of test.

3.1.7 Final Product

After the researcher gets the expert validation, the researcher is going to revise the product and try out the product to the students. Then, the researcher is going to give questionnaire to the students in order to know the students' perception toward the product (Appendix XII). The questionnaire is given to 28 students of A class.

The Formula:
$$P = \frac{F}{N} \times 100\%$$

P = Percentage
F = Frequency
N = Total of participants