CHAPTER I

INTRODUCTION

A. Background

Ministry of Education and Culture (2016) tries to increase Indonesian students' reading interest. UNESCO also conducted a study of Indonesian students' reading interest, the result showed that only 0.001 percent students' interest in reading. "The literacy value of our reading is still very low. It is admitted by the research from the Program for International Student Assessment (PISA) that averaged score 493 and Indonesian literacy is only 396" (Asianto, Kasubdit in Ministry of Education and Culture as cited in Indopos, 2016). He added the literacy value of Indonesian students' reading interest consists of base literacy *e.g. reading, writing, etc*., competence and quality of character. So, it means that Indonesian students' reading interest is very low.

The low reading interest also happened in one of the Islamic junior high schools in Bandung, which found during *Teaching Practicum Program* observation. The researcher found two problems about the learning process. Regarding the media and the method that they were used in the teaching process. There are teachers who teach using conventional method *e.g. lecture method* and using the limited media *e.g. whiteboard, board marker, book* in teaching the material especially in teaching English. The weakness of using the conventional method and limited media is the students were getting bored and hard to understand the materials.

Students' achievement depends on how their learning process and how the teachers teach them to understand the material. Learning is an activity that a person undertakes in order to achieve the learning goals and the desired competence. Through the learning process, a person gains the better knowledge, skills, and attitude (Pribadi, 2009, p. 21). The learning process is basically done to improve the ability or personal competence. So, the teachers were demanded to choose an appropriate method and appropriate media, those were used to make the process of learning become easy.

The learning activity is emphasizing on the process of learning. So, using the instructional media *e.g. power point, CD interactive* become an important thing (Helna, 2015). Adegun (1997) said that instructional media can be used to help the teachers to teach more effectively and enable to learn more readily. One of instructional media is using ICT. It is appropriate to this era, digital era. ICT is believed to bring a lot of benefits for both the students and the teachers. However, using ICT in teaching and learning process should be well planned and accompanied by a proper instructional strategy to achieve the best result (Clerck & Mayer, 2008 as cited in Triska and Ketut, 2015, p. 554). Before using ICT, teachers need to know how to use ICT in the teaching process. Since there are many ICT products that can be used during the instruction process, this research focuses on one product of ICT that is an electronic module named Lectora Inspire.

The Lectora Inspire is an authoring tool in form computer program that can be used as an instructional media. It is developed by Trivantis Corporation

in 1999, founded by Timothy D. Loudermilk in Cincinnati, Ohio. In 2000, Lectora became the first software as certified authoring system of Aviation Industry Computer-Based Training Committee (AICC). Lectora got credibility in e-learning.

Sukamto and Kusuma (2016) conducted a research using E-Module in teaching mathematics. They used the ADDIE research design development. The research utilized Lectora Inspire's design materials, media and students' response toward Lectora Inspire. The result showed Lectora Inspire is an effective media in teaching mathematics with t_{count} 9.056. Another research conducted by Toto (2015), he used the E-Module based Lectora Inspire in Arabic to improve students' reading skill. In his research, he found that teachers and students need a teaching media that include of SK *'Standard Competence*, KD *'Kompetensi Dasar'*, route of learning, glossaries, text, structure, and evaluation. His research proved that E-Module is an effective media for improving students' reading skill in Arabic. He examined it to the experts about the software, communicative, visual, audio, content, language and contextual. The result of t_{table} and t_{count} of this research is 18.15 and 35.05.

The previous studies inspire the researcher to study the effectiveness of using E-Module based Lectora Inspire for teaching reading. So, the researcher undertakes a research by the title **"The Effectiveness of Using E-Module Based Lectora Inspire as Media to Improve Students' Reading Skill."**

B. Research Questions

Based on the background above, this study has research questions:

1. How is the students' skill in reading before the use of E-Module based Lectora Inspire?
2. How the students' skill in reading after the use of E-Module based Lectora Inspire?
3. What is the effectiveness of E-Module based Lectora Inspire as media on improving the students' reading skill?

C. Research Purposes

Based on the specific problems formulated above, the purposes of the study are as follows:

1. To find out the students' skill in reading before the use of E-Module based Lectora Inspire.
2. To find out the students' skill in reading after the use of E-Module based Lectora Inspire.
3. To find out the effectiveness of E-Module based Lectora Inspire as Media.

D. Research Limitation

The researcher limits this research about "The Effectiveness of Using E-Module based Lectora Inspire as Media to Improve Students' Reading Skill". For using E-Module based Lectora Inspire, the school that chosen was MAN 1 Garut because it has enough facilities to the research. Then, in reading, there

were a lot of materials to be discussed. But, in this research, the researcher used Factual Report text as the material to be discussed.

E. Significances of the Study

The findings of this research are expected to give both theoretical and practical significance, as follows:

1. Theoretical significance

   This research develops knowledge about reading activity in the classroom and ICT based media to improve reading skill in teaching and learning process. The result of this study is expected to find the effectiveness of using E-Module based Lectora Inspire as media to improve students' reading skill. Besides, Lectora Inspire consists of visual and audiovisual. For a beginner in reading, they cannot only read the text but also listen how to pronounce the word of the text.

2. Practical significances

   a. Teacher

      This research offers the teacher's knowledge about attractive media that they can use in teaching reading. Besides, they know about media, they also can make an attractive media, especially in E- Module to teach English, especially in teaching reading.

   b. Student

      The researcher gives the students a media that make the learning process more interested. This media can also minimize the students'

boredom in teaching reading. So, it improves the students to be more active in the reading classroom.

F. Rationale

According to Alderson (2000, p. 1), reading is an activity that was done to process text meaning through some process of interaction with print (as cited in Aspari & Yana, 2015, p. 219). In reading, students should understand the meaning contained in a text neither that is implicit nor explicit.

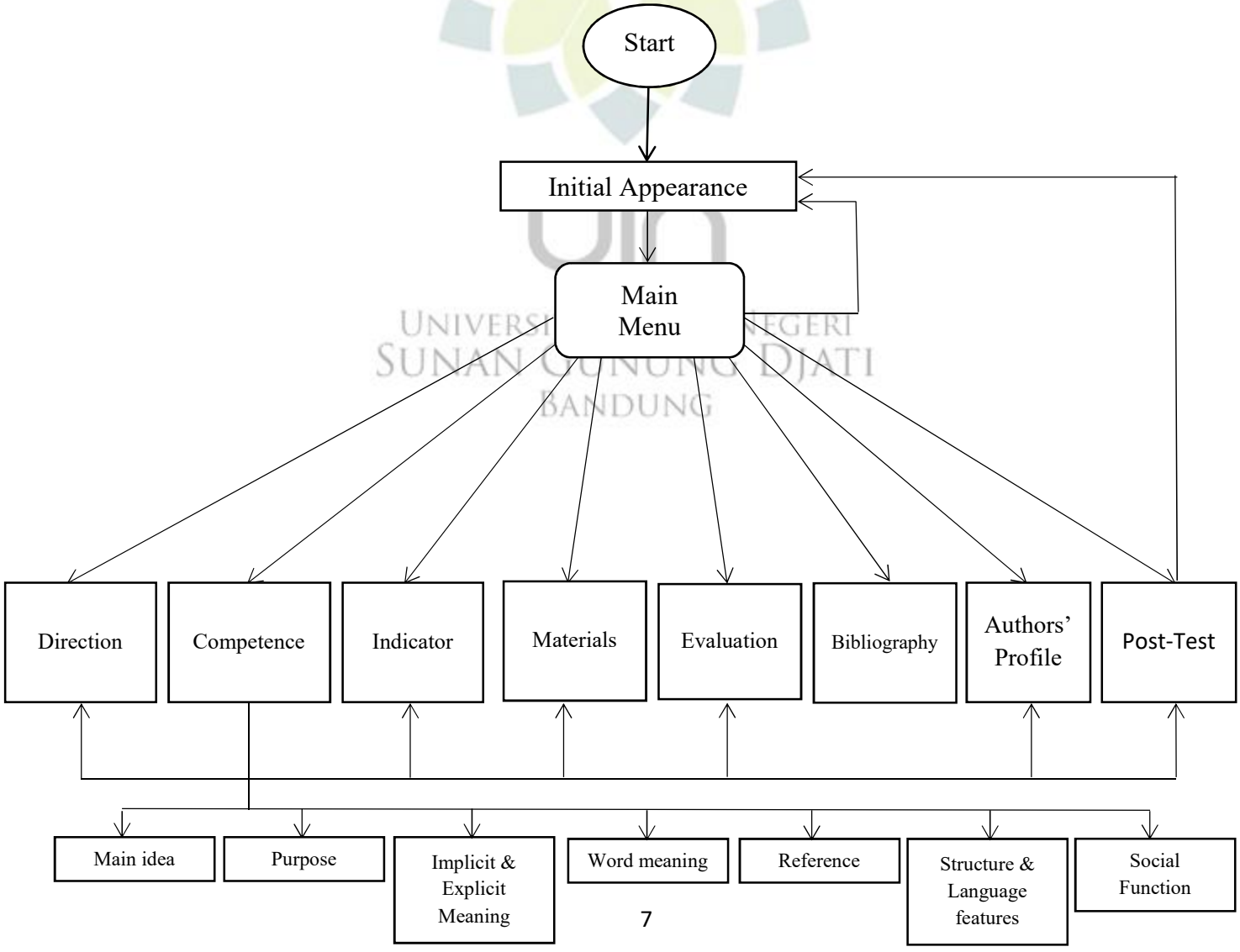
In teaching and learning process of English, especially in reading, the students are bored to read the text because the teacher does not use appropriate method and media that make them more interest in reading materials. Due to the problems, the use of teaching media could be considered to improve reading skill. The teacher must consider teaching media that can facilitate the teaching reading process.

The reading skill can be improved by optimizing the use of ICT in the classroom. ICT is an abbreviation from Information, Communication, and Technology. It is a system or technology that can reduce space and time constraints to retrieve, move, analyze, present, store and transmit data to information. The researcher proposes an ICT media that can be used in teaching and learning process, E-Module based Lectora Inspire. This teaching media is used with the student-centered approach. This approach focuses on the students' activity in the classroom. It makes the students more creative and active. So, the students could elaborate the materials in the E - Module by themselves. It is relevant to the learning approach of the Curriculum 2013. In

the regulation document, the student-centered approach as the characteristic of the Curriculum 2013 which is needed to be followed by the improvement of mindset (Permendikbud No. 70, 2013). The method that was used in the classroom with using E-Module is *discovery learning*. It is used to arrange the learning process. With this method, the students got knowledge by themselves and the teacher only has a role as facilitator. E-Module has contents that facilitate learning and teaching process. In general, the content of E-Module based Lectora Inspire in a factual report text at least drawn in Figure 1.1.

Figure 1.1

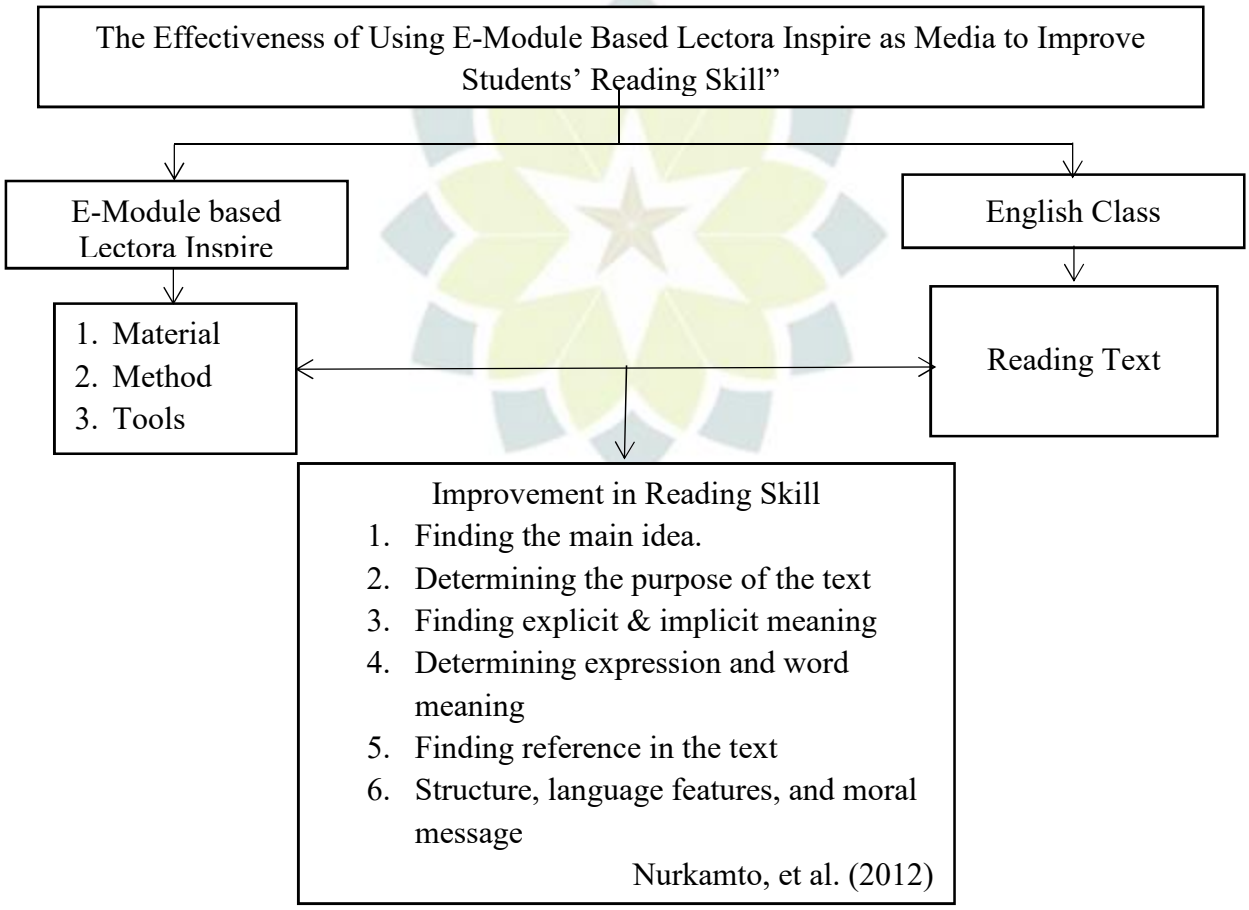
Flow Chart of E-Module illustrates the content of E-Module



Besides figure above, the specific contents of E-Module can be seen in storyboard *(see Appendix 1)*. The researcher also figures out the indicators of research about the effectiveness of using E-Module based Lectora Inspire in Students' Reading Skill such as the figure below:

Figure 1.2

The figure illustrates the indicators of this research



In this research, the researcher uses two kinds of variables. The first variable is E-Module based Lectora Inspire as Media and the second is improving students' reading skill. The first variable is "X variable" because it influences another variable and the second becomes "Y variable" because this is influenced by the other.

F. Hypothesis

The hypothesis is the third step in research after the researcher explained the background and rationale (Sugiyono, 2013, p. 96). Based on the rationale the hypothesis is a temporary answer to the problems which is observed until the observation proven through the data which is collected. This research has two hypothesis: E-Module based Lectora Inspire as media as variable X and students' reading skill as variable Y. The hypothesis of this research is proposed as follows:

"Students' reading skill is improved through using E-Module based Lectora Inspire as media. It is compared by looking at the result of their pre-test and post-test."

Ha: there is the effectiveness of using E-Module based Lectora Inspire as media. This hypothesis is accepted if:

$t_{count} > t_{table}$

Ho: there is no effect of using E-Module based Lectora Inspire as media. This hypothesis is accepted if:

$t_{count} < t_{table}$

G. Methodology of Research

In this research, the researcher used quantitative data as research method because the data analysis in this research uses statistic data. Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured typically on instruments. So that, numbered data can be analyzed using

statistical procedures (Creswell 2014, p. 32). It means that quantitative research method is a measurement of statistical number, count of thing and the data can be sorted, classified and measured. Thus, the researcher uses a quantitative method and the kind of experiment is pre-experimental.

1. Research Design

This research uses Pre-Experimental Design especially one-group Pre-test Post-test design. The researcher compares same subjects before and after giving treatment. According to Sugiyono (2010, p. 74) in this research design, there is Pre - Test which is given to the students before they have treatments. Then, the students were given post-test after the treatments. The results of this research can be known more accurately. It is caused the result was seen from the comparisons between pre-test and post-test score.

Table 1.1

One- Group Pre-test Post-test Design

Group	**O_1**	**X**	**O_2**
Pre-Experiment	**Pretest** Test the students' reading skill	**Treatment** 4x treatments using E-Module based Lectora Inspire	**Post-test** Test the students' reading skill

Notes:
O_1 = *the first test before treatment*
X = *treatments using E-Module based Lectora Inspire*
O_2 = *the last after treatment*

2. Determining Source of Data

a. Research Site

The research was conducted at the eleventh grade of MAN 1 GARUT. This school is regarded suitable with the problem of the research because they are still many students not attracted to improve their reading skill. Then, the school also has facilities to use E-Module as a new media. This media is given in this school as a new way to make they are more attracted in reading and also the researcher has an easy access to get this school as the object of this research. Although the researcher knows that teacher in this school has used English book and power point as media but the researcher wants to use it to get the data of the research.

b. Participants

This research has population and sample as the subjects of conducting the research.

1) Population

Sugiyono (2012, p. 117) states that "Population is a region of generalization that consists of object/subject that has quality and certain characteristics that have been decided by the researcher to be observed and then takes a conclusion from it". Thus, the population here is the students' eleventh grades of MAN 1 Garut. There are 356 students which divided into 9 classes.

2) Sample

In this research, the researcher decides the sample for the research. “Sample is part of the number and characteristics possessed by this population. When the population is large and the researcher may not learn all the population, the researcher can use the sample drawn from the population.” (Sugiyono, 2012, p. 80).

The sampling technique in this research is purposive sampling where the sample is taken based on the consideration of the researcher (Sugiyono, 2010, p. 85). Based on the explanation above, the researcher takes 30 participants in XI MIPA 1. According to (Bailey in Mahmud, 2011, p. 159), the minimum sample that should be used in the research using statistical data analysis is 30.

3. Techniques of Data Collection

“Collecting data can be done by various ways. It uses setting, resource or technique. If you use a resource, you can use primary data or secondary data. The techniques that can you choose is interview, questionnaire, observation, test or all of them” (Sugiyono, 2012, p. 193). In this case, the researcher uses the test as a technique of collecting data to know the result of improving students’ reading skill by using of E-Module based Lectora Inspire. The tests were validated before those were given to the students *(The Calculation can be seen in Appendix 2)*. The test is pre-test and post-test. The pre-test is a test that was given to the students before having

treatments. Meanwhile, the post-test is a test that was given to the students after having the treatments. Both tests are 10 questions in the multiple-choice form. The score of pre-test and post-test were obtained by multiplying the correct answer by 10. So, if the students answered the whole questions well, they get the score 100 as a maximum score. The following explanations are the detail of those two kinds of the test; pretest and posttest:

a. Pre-Test

A pre-test is used to measure the student's ability in reading before giving the treatments. In the pre-test, the researcher measures the condition students' reading skill by giving questions that relate to reading. The researcher gave ten multiple choice questions. According to Surakhmad (1995, p. 46), "Pre-test is used to measure the students' comprehension before they taught."

b. Post Test

Post-test is used to measure the students' ability in reading after the students have already been given a treatment. Surakhmad (1995, p. 46) said that "post-test is used to measure the mean learning achievement after the subject bears experimental variable (treatment)".

4. Research Procedure

The research involves three steps:

a. Preparations

1) The study curriculum conducted to determine the basic competence to be achieved at the research site. It is also used in order to apply the learning approach which is obtained the final result that appropriate with the basic competencies described in the curriculum
2) Determining the material
3) Determining the population and sample
4) Creating a lesson plan in accordance with the learning models tested for each learning
5) Make a research instrument
6) Do the judgment instrument
7) Training observer for filling the observation sheet
8) Make a schedule of the research activities
9) Test the instruments
10) Conducting an analysis of test instruments such as validity, reliability, distinguishing features, and level of difficulty.

b. The Implementations

Some of the activities carried out at this stage include:

1) Do the pre-test
2) Analyzing the results of the pre-test
3) Implementing learning using E-Module based Lectora Inspire
4) Observing the activity of teachers and learners during the process teaching and learning.
5) Do the post-test

6) Post-test data processing

c. The Last Steps

Some of the activities carried out at this stage include:

1) Process the research data

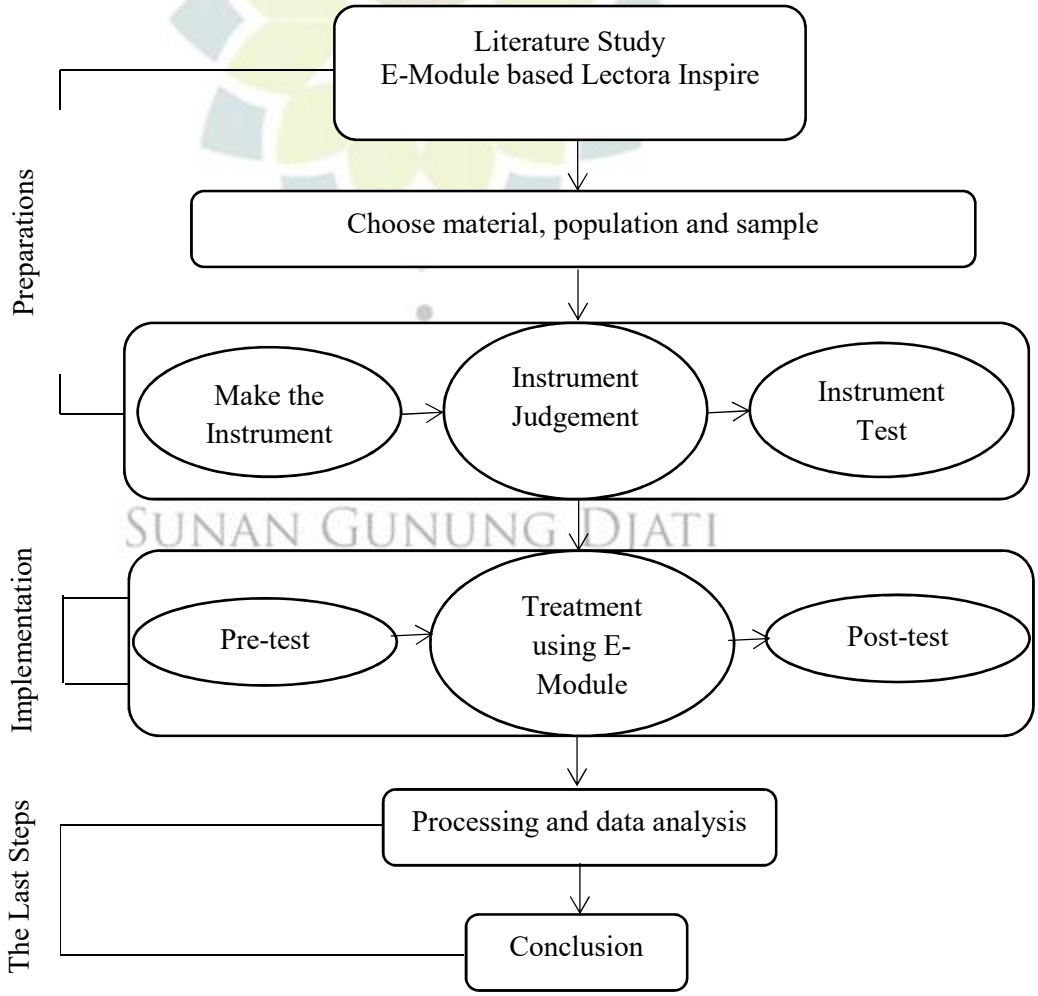
2) Discuss and analyze the research data

3) Make conclusions

The procedure of the research is drawn as the following figure:

Figure 1.3

Research Procedure



The steps of the treatment are described below:

Table 1.2

Activities and Materials of the Research

No	Activities	Topic	Material
1.	Pre-Test	-	-
2.	Treatment	Factual Report Text	Definition and Structure
3.	Treatment	Factual Report Text	Several texts
4.	Treatment	Factual Report Text	Language feature and analyzing text
5.	Treatment	Factual Report Text	Evaluation all about factual report
6.	Post-Test	-	-

Table 1.3
Activities of the Research

No.	Activities	Description
1.	Pre-Test	Teacher gives the pre-test before treatment
2.	Treatment	Teacher introduces E-Module and teaches how to use it. Then, the teacher gives the material about Factual Report Text in E-Module, definition, and structure.
3.	Treatment	Students were given some types of text in order the students more recognize the factual report text
4.	Treatment	Students were given automatic analyzing of factual report text
5.	Treatment	Teacher and students talked all about factual report
6.	Post-Test	Teacher gives post-test after treatment

5. Data Analysis

The collected data were analyzed using a statistical approach. The statistical approach is used to process the data in a quantitative method. With the statistical approach, the researcher used several steps:

a. Testing the Normality

1) Determining the range of data **(R)**

Formula:

$$R = H - L + 1$$

(Sugiyono, 2012, p. 55)

Notes:

R : The range of data
H : The highest score
L : The lowest score

2) Determining the class interval **(K)**

Formula:

$$K = 1 + 3.3 \log N$$

(Sugiyono, 2012, p. 35)

Notes:

K : The class interval

N : The number of students

3) Determining the length of class interval **(P)**

Formula:

$$P = \frac{R}{K}$$

(Subana et al., 2010, p. 40)

Notes:

P : Length of class interval

R : Range of data

K : Class interval

4) Arranging the distribution frequency, observation, and expectation by using the table, as follows**:**

Table 1.4
Distribution of Frequency

Score	f	x	$f.x$	X^2	$f.X^2$
1	2	3	4	5	6

Table 1.5
Distribution Observation and Expectation

Class Limit	Z_{count}	Z_{table}	Li	Ei	Oi	χ^2
1	2	3	4	5	6	7

$$Z_{count} = \frac{Class\ Limit - \bar{X}}{SD}$$

$$Li = Z_{table}\ (+/-)\ Z_{table}$$

$$Ei = Li \times n$$

Notes:

- *If both of Z_{count} positive, the calculation must use minus*
- *If one of Z_{count} positive and the other negative, the calculation must use be added*

5) Determining mean of the data.

$$\overline{x} = \frac{\Sigma f_i . x_i}{\Sigma f_i}$$

(Subana, 2010, p. 65)

6) Determining standard deviation

$$SD = \sqrt{\frac{N \sum f_i . x_i^2 - (\sum fi . xi)^2}{N(N-1)}}$$

(Sugiyono, 2012, p. 58)

7) Determining the degree of freedom with the formula:

$$df = K - 3$$

8) Determining X^2t with the value of the significance of 5% by using the formula:

$$\chi^2_{tabel} = \chi^2_{(1-\alpha)(dk)}$$

9) Determining the criteria of normality test

Normality test with determination:

- The data is normal if $\chi^2_{count} < \chi^2_{table}$
- The data is abnormal if $\chi^2_{count} > \chi^2_{table}$

b. Hypothesis Test

A hypothesis test is used to know the improving students' reading skill using E-Module based Lectora Inspire as Media. The hypothesis test is done by testing the statistic data. If the data is distributed normally, the parametric statistic test is conducted with the **T-test**.

1) Determining the gain between pre-test and post-test

$$d = post\ test - pre\ test$$

2) Determining the average from the difference of pre-test and post-test

$$Md = \frac{\sum d}{N}$$

(Suharsimi, 2013, p. 349)

3) Determining the significance with hypothesis test with level significance 5%.

$$t_{count} = \frac{Md}{\sqrt{\frac{\sum_d 2 - \frac{(\sum d)^2}{N}}{N(N-1)}}}$$

(Subana, et al., 2010, p. 132)

Notes:

t_{count} : *significances of the data*

Md : *the average from gain between the pretest and the posttest*

d : *Score gain of the posttest toward the pretest of each object*

N : *the number of students*

c. N- Gain

After acquiring the data from the pre-test and post-test, the data was analyzed to determine the significance level of using E-Module based Lectora Inspire in improving reading skill, whether in high, medium, or low level of change. To know the level of improvement of the students' reading skill, normal gain (d) is used with the formula:

$$d = \frac{post\ test - pre\ test}{Maximum\ score - pre\ test}$$

Normal gain score acquired is interpreted into the table below:

Table 1.6
Normal Gain Interpretation

Score	Interpretation
g > 0.7	High
0.3 ≤ g ≥0.7	Average
g < 0.3	Low

(Hake, 1999)

In summary, the data are acquired with the determination of the research population, sample, and instrument. It is done to investigate the result of learning process before and after treatments. So, the investigation could prove the effectiveness of using E-Module in the reading subject.