CHAPTER III

RESEARCH METHOD

The objective of this research to examine the effect of task-based language teaching compare to conventional strategy in reading ability and vocabulary mastery. This chapter presents six topics dealing with the research method. Those are: research design, population, sample and sampling, data collection method and research instrument, validity and reliability testing, normality and homogeneity testing and data analysis.

A. RESEARCH DESIGN

This research is aimed to examine the effectiveness of task-based language teaching and conventional strategy in students' reading ability and vocabulary mastery. Referring to the aim of the research, an experimental research is conducted. As Gay (1992: 298) state that the experimental research is only of the research that can truly test hypotheses concerning cause and effect relationship. In an experimental research, the researcher can be manipulated at least one independent variable, control over relevant variables and observes the effect on one or more dependent variable. In addition, Latief (2012: 96) also said that experimental research is a powerful research method to establish cause and effect relationship with involving two or more variables, the variable that becomes the cause (independent) and the variable that becomes the effect (dependent).

Quasi-experimental research design was chosen because only assign randomly different treatments in two different classes, and cannot artificially create groups for the experiment. Creswell (2012), state that quasi-experiments include assignment of participants to groups. The design was chosen for two reasons: First, this study conducted in the organized classroom setting in which the classes were not allowed to rearrange the students or subjects for research. Second, the school schedules which have been arranged by the school cannot disrupt.

This design employed non-randomized control group pretest and posttest. Creswell (2012) state that the researcher assigns intact groups of the experimental and control groups, administers a pretest to both groups, conduct experimental treatment activities with only the experimental group, and then administers a posttest to assess the differences between the two groups. The pre-test in this research was used to measure the students' vocabulary prior to the treatment and to check whether the two groups are equal or not before the treatment, while the posttest in this research was to find out the effectiveness of the strategy employed.

In this research, there were two variables measured. The independent variable was used of task-based language teaching and conventional strategy, which was symbolized by X. The dependent variables were the students' reading ability and vocabulary mastery, which was symbolized by Y. The research variables shown in the following table 3.1:

Table 3.1 Quasi-Experimental Design

Group	Pretest	Independent variable	Posttest
E	Y1	XI	Y2
C	Y1	-	Y2

Notes:

E : Experimental group, the group that is taught by using task-based language teaching.

C : Control group, the group that is taught by using conventional strategy

Y1 : Pre-test is given to both groups to measure students' vocabulary and students' reading prior to the treatment.

Y2 : Post-test is given to both groups to know whether or not applying task-based language teaching and conventional strategy has any effect to enhance students' vocabulary and reading.

X1 : Treatment, applying task-based language teaching to the students of experimental group

Based on the table above, the researcher gave different treatment both two groups. Students in the experimental group received task-based language teaching for eight meetings and those in the control group were received conventional strategy. Upon the completion of the treatment, posttest of reading ability and vocabulary mastery was done to obtain the data to test whether the independent variable had effect on students' reading ability and vocabulary mastery. The researcher wanted to measure the effectiveness of

using task-based language teaching strategy really to help increasing the students' reading ability and vocabulary mastery achievement.

Before conducted the strategy, the researcher prepared the lesson plan, the material and students' worksheet to support the treatment (see appendix 5). The lesson plan designed by the researcher for both groups. According to the lesson plan, the experimental and control group received same material which were selected based on the syllabus of Eight grade which used in SMPN 1 Sumbergempol, the students should be able to understand text in the form of recount text, descriptive text, and report text. Among aforementioned genre of the texts, the researcher selected personal recount text. While the material was adopted from English Module Book for VIII grade student. On the material, the researcher wanted to explain about definition and purpose of recount text, the generic structure of recount text, preparing a recount text, language feature of recount text and the example of recount text. Whereas, the students' worksheet was made by researcher herself. The students', worksheet consisted about three texts with different title and direction. The kinds of direction, like mentioned words in the form of verb, adverb, adjective and noun related with text, matched the synonyms of words, completed the missing text, identified the generic structure of the text, answered the questions, arranged the paragraph into a good recount text, listed the specific sentence and retold the content of the text with using their own words. The researcher took the texts from English module, website in internet and previous national examination.

In conducting the treatment process, the researcher was helped by the English teacher of SMPN 1 to handled control group, but before conducted the treatment the researcher give briefing to the English teacher so that the material and also the text taught are the same as in experimental group. while the experimental group handled by the researcher herself. Both two groups needed eight meetings to conduct treatment with different strategy.

The steps to do task-based language teaching in teaching reading ability and vocabulary mastery of this research was designed based on the adaptation of task-based language teaching procedure promoted by Wills (1996:38). There are three phases in eight meeting treatment, introduced this strategy from the first meeting and second up to seven meetings applied task-based language teaching. While for eight meeting, reflection about using the strategy. The meetings done in 8 meetings in order to make students had enough time to understand how to do task-based language teaching well. All three phases of task-based language teaching strategy were practiced in each meeting with specific time allotment. The students were scaffold in the practice of each task-based language teaching in first up to seven meetings of the applying this strategy and eight meeting the researcher only monitored, gave assistance and facilitated classroom instruction. The structured steps of task-based language teaching in 8 meetings, shown that the students in experimental group have sufficient time to learn recount text, learned to apply task-based language teaching and practiced task-based language teaching while reading English text.

1. **Treatment**

   The treatment for experimental group, the researcher applied the first phase of TBLT strategy that was called *Pre-Task*. On this phase, the researcher conducted brainstorming by asking the students question about what the topic that we wanted to discuss, the researcher introduced and explained the material about recount text. Next, the researcher showed a picture which were contained on students' worksheet. The researcher asked to the students to list any related words in the form of verb, adverb, adjective or noun based on the pictures and found the meaning of the words.

   Next phases, the researcher applied the second phase of TBLT strategy that was called *Task-Cycle*. In this part was many activities that should be done by the students. Before doing the activity, the researcher asked to the students to make the groups of four, each group consisted of 8 students. Then, the researcher distributed the students' task (set of students' worksheets). The researcher asked the students to match the words with their synonyms (the researcher monitored the students' activity and giving a help if necessary). The researcher asked to the students to fill out the incomplete text with correct text with correct answer. The researcher asked the students to compare their works with the complete texts. The researcher asked the students to identify the generic structures based on the text. The researcher asked the students to answer the

questions related with the text. The researcher asked to the students to arrange jumble paragraph into a good paragraph (new text) and identified whether the statements was true or false. The last, the researcher asked to the students to present the result of their work while the researcher assessed their presentation.

In this phase was the last phase of TBLT strategy that was called *Language Focus*. The researcher encouraged the students to find their language problem that they encounter during task-cycle, while the students consulted their language problem that they encounter during the previous part. Next, the researcher guided the students to make reflection by giving feedback based on the lesson (see appendix 1).

Whereas, treatment for control group by using conventional strategy. The procedure divided into three parts. The first part was Pre-Reading. Teacher gave brainstorming to the students by asking them to lead questions about the topic of the text learned. Next, teacher informed reading objective. The second part, that was While- Reading. Teacher explained personal recount text and its example. Students listened the teacher reading the personal recount text. Teacher asked to the students to identify the orientation, event and re-orientation of the text. Students read aloud the text then asked some particular sentences and word meaning in Indonesian. The last part, that was Post Reading. Teacher asked to the students to answer some questions on the text. Some students wrote their answer on the whiteboard. Teacher and students checked the written

answer. Students asked to do individual task for different personal recount text. Students submitted their individual work. The last, teacher concluded the lesson (see appendix 1).

The researcher implemented task-based language teaching in experimental group and conventional strategy in control group for 8 meetings. The detailed schedule displayed in Table 3. 2
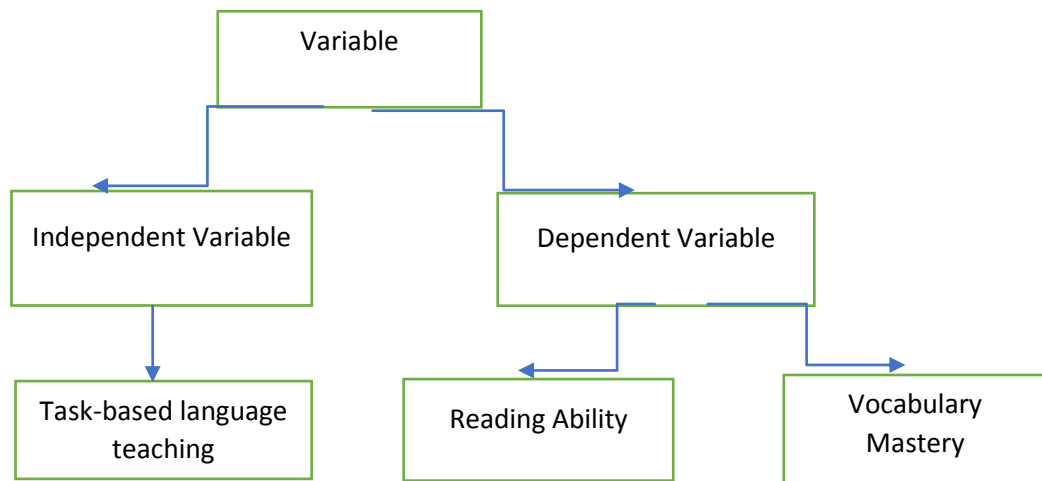
Table 3.2 Time Schedule of the Treatment

Meeting	Time for Experimental Group	Time for Control Group
1	Saturday, 13th April 2019	Wednesday, 10 April 2019
2	Saturday, 20 April 2019	Monday, 15 April 2019
3	Friday, 26 April 2019	Monday, 29 April 2019
4	Saturday, 27 April 2019	Wednesday, 1 May 2019
5	Friday, 3 May 2019	Monday, 6 May 2019
6	Saturday, 4 May 2019	Wednesday, 8 May 2019
7	Friday, 10 May 2019	Monday, 13 May 2019
8	Saturday, 11 May 2019	Wednesday, 15 May 2019

B. VARIABLES OF RESEARCH

The variables of this research consisted of two, the first variable was independent variable "cause" variable task-based language teaching (TBLT) strategy while the dependent variable "effect" variable was reading ability and vocabulary mastery. The independent variable was the strategy of TBLT to the dependent variable students' reading ability and vocabulary mastery to know the effectiveness of using this strategy can increase the students' reading achievement and vocabulary mastery. For the clear explanation each stage will explained in figure 3.1

Figure 3.1 Variable of Research

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                        ┌─────────────────┐
                        │    Variable     │
                        └─────────────────┘
              ┌──────────────────┴──────────────────┐
              ▼                                      ▼
   ┌─────────────────────┐              ┌─────────────────────┐
   │ Independent Variable │              │  Dependent Variable │
   └─────────────────────┘              └─────────────────────┘
              │                          ┌──────────┴──────────┐
              ▼                          ▼                     ▼
   ┌─────────────────────┐    ┌──────────────────┐   ┌──────────────────┐
   │ Task-based language │    │  Reading Ability │   │    Vocabulary    │
   │      teaching       │    │                  │   │     Mastery      │
   └─────────────────────┘    └──────────────────┘   └──────────────────┘
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C. POPULATION SAMPLE AND SAMPLING

1. Population

Gay (1992: 140), state that population is a large number of groups to which is given a treatment by a researcher who's the result would be generalized. In this research, the population was all the students at eight grades of SMPN 1 Sumbergempol Tulungagung in the academic year 2018/2019. The school had had ten classes for eight grade that consist of 353 students.

2. Sample

Gay (1992: 123), state that sample is the individual selected comprise. Selection of a sample is very important step in conducting a research study. Regardless of the specific technique used, the steps in

sample include identification of the population, determination of required sample size and selection sample.

In this research, the researcher took two classes become a sample. The classes are G and I class, then the total number both two groups are 63 students. After the researcher knew about the real condition of the students like average scores presented from students' daily examination scores. The researcher divides both two groups, two classes were assigned as the experimental group and control group. The G class become experimental group while I class become control group.

3. **Sampling**

Gay (1992: 123) state that sampling is the process of selecting a number of individuals for a research in such a way that the individuals represent the larger group from which they were selected.

The researcher selected the sample by using non-probability sampling with purposive sampling form, because the population have no chance of selection or the sampling don't have any chance to be selected, so the researcher takes all the sample both two groups.

D. **DATA COLLECTION METHOD AND RESEARCH INSTRUMENT**

1. **Data collection method**

Tanzeh (2011:83) state that data collection method is a systematical and standard procedure used to collect data that is needed. In this research, the researcher collected the data through administering test. It means that

the researcher administered the test in the form of written test. In this test consisted of two kinds of test, that are reading ability test in the form of multiple choice and vocabulary mastery test in the form of matching word. The test gives twice, that were pretest and posttest both to groups. The material that on this test talked about recount text for reading test while in the vocabulary test was words related with recount text. For the clear explanation, each stage will be explained in figure 3.2

Figure 3.2 Data Collection Method
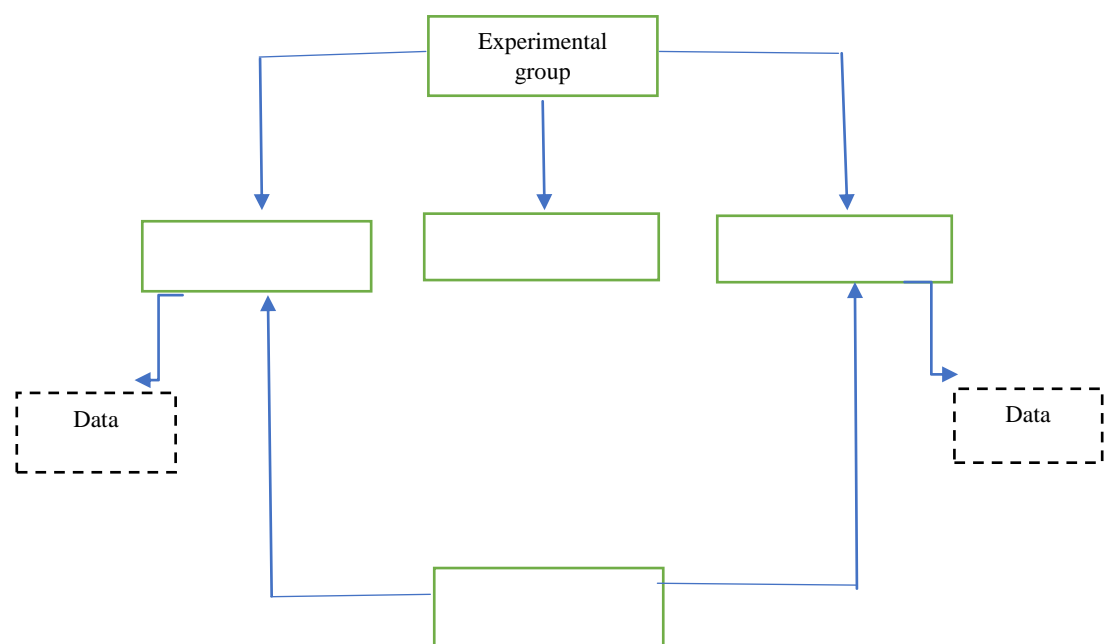
The technique of collecting data is clarified as follows:

a) Pre-test

The researcher administered pretest before giving treatment both experimental group and control group, and its score was used to know the normality and homogenity between control and experiemental

groups, to check that both experimental group and control group have the same or equal achievement or to know the prior knowledge both two groups. The pretest was administered on different time or period. The test was followed by 63 students and it allocated 80 minutes for administered pretest. The test was in the form of multiple choice and matching word, because it was suitable for testing reading and vocabulary. The test contained 50 questions, 25 questions in the form of words with the synonyms for vocabulary testing while 25 questions with seventh texts for reading testing.

b) Post-test

The researcher administered posttest after the students got treatment by using task-based language teaching and conventional strategy in reading ability and vocabulary mastery. The researcher conducted posttest both of two groups, to know whether or not apply task-based language teaching and conventional strategy has any significance effect to enhance students' vocabulary and reading ability. The result of posttests were compared to see whether the experimental group significantly outperformed the control group.

In this research, the researcher used the data in the form of students' reading scores and students' vocabulary scores. The researcher got the data after administered pretest and posttest both two groups. Administering the test result both two groups and scoring it with dichotomous scoring by giving 1 (one) score for correct answer and 0 (zero) for wrong answers, then

the total correct answer times two, so we can be got the students' reading and vocabulary scores.

2. **Research instrument**

   While the instrument, according to Gay (1992) is a tool of to measure a knowledge skill, feeling, intelligence of an individual of group. Here, the test is used to measure the students' reading ability and vocabulary mastery.

   The researcher used type of achievement test, meant that the test should be representative of structure and skill that will be tested then the test must be appropriate with the grade.

Table 3.3 Research Instruments

No	Instrument	Variable to measure	Function
1.	Reading ability (pretest)	Students reading ability before treatment	To see the homogeneity
2.	Vocabulary mastery (pretest)	Students vocabulary mastery before treatment	To see the homogeneity
3.	Reading ability (posttest)	Students reading ability after treatment	To test hypothesis
4.	Vocabulary mastery (posttest)	Students vocabulary mastery after treatment	To test hypothesis

   Here, the researcher used two kinds of test, there were reading ability test and vocabulary mastery test. the test used to measure the students' reading ability and vocabulary mastery, and the form of test were multiple choice and matching word both two form can be measured skill and component that will be tested. Addition, the test was suitable for eight grades because the content of the test referred to syllabus for eight grades of

Junior High School. The test was constructed by researcher herself. In other word, the test was called Researcher-made test, it meant that the test was arranged by the researcher.

a.   **Reading Ability Test**

Reading ability test used in pretest and posttest to students in both the experimental and control groups. Reading ability test related to the ability the students in identifying specific and detailed information, understanding references, predicted the effect, solved problem, made inferences, found main idea of paragraph, identified the purpose of the text and made judgement right or wrong based on the text.

The process of reading ability test consisted of several stages. These stages namely developing in the test specification, was establishing test blueprint (see appendix 3), was constructing reading ability test items (see appendix 2), was analyzing the selection of the reading texts, was conducting expert validation, doing first revision, was trying out the test, was analyzing the test based on the try out result and doing final revision based on the test analysis result to make final form of the test.

Reading ability test was multiple-choice type that has four options for each item in which there was only one correct response (see appendix 4). The researcher used multiple-choice test because has some advantages for teacher and student. The first advantage for teacher, the

scoring can be perfectly reliable. The scoring should also be rapid and economical. The second advantage for teacher and student, was possible to included more items than others forms of tests since the test-takers have only to make a mark on the paper (Hughes, 1989, 59).

The selection of the texts used in pretest and posttest based on the English syllabus used by the school and the students' familiarity of the text topic. The genre of the text was personal recount text. Fourteen texts were selected from English Module books as well as the internet and topics were those the students were familiar with. The student familiarity of the topic was also discussed with the English teacher of eight grade.

The readability of the texts examined using Flesch Kincaid Formula in online software from http://readibility-score.com. This formula measured the readability computed using the average number of syllabus per word per sentence. The criterion of the text readability proposed by Flesh (1949:149) in Table 3. 4 were used to interpret the result of the obtained reading ease score as the criteria has been commonly used by researcher in various contexts of educational setting.

Table 3.4 Flash-Kincaid Table

Flash-Kincaid Reading Ease	Grade Level	Interpretation
90-100	5th	Very easy
81-90	6th	Easy
71-80	7th	Fairy easy
61-70	8th -9th	Standard
51-60	High School	Fairy difficult
31-50	Collage students	Difficult
0-30	Collage graduate	Very difficult

(adopted from: Flesch, 1949:149)

The readability analysis in the online software indicated that in general the readability of the 14 texts referred to easy, standard and difficult level. Table 3.5 displays the detailed readability of selected 14 texts. Included in the final version of the test based on tryout analysis and test amendment. These texts will do on both pretest and posttest. The result of text readability used Flesh-Kincaid Formula presented on the following table.

Table 3.5 The Result of Text Readability using Flesh-Kincaid Formula

Reading Text	Flesh-Kincaid Reading ease score	Estimating Reading	Interpretation
Embarrassed Moment	81.4	8th -9th	Standard
Milton Friedman	48.6	High School	Fairy difficult
An Accident	89.7	7th	Fairy easy
Vocation to London	82.6	7th	Fairy easy
Burglars	70.1	8th -9th	Standard
Ubud Vacation	88.2	7th	Fairy easy
Late	91.8	7th	Fairy easy
Holiday in Manado	69.7	8th -9th	Standard
My 15th Birthday	63	8th -9th	Standard
Takbiran Night	82.7	7th	Fairy easy
Maron Beach Vacation	80.6	7th	Fairy easy
Chicago Marathon	72	7th	Fairy easy
Wrong Costume	75.40	8th -9th	Standard
Lionel Messi	57.2	High School	Fairy difficult

b. **Vocabulary Mastery Test**

Vocabulary mastery test used in pretest and posttest to the students in both experimental and control groups. Vocabulary mastery test related to the mastery of students in understanding vocabulary in context (antonym, synonym and meaning), while in this research the researcher

used the synonym of words that adopted from reading text on reading ability test.

The process of vocabulary mastery test consisted of several stages. These stages namely developing in the test specification, was establishing test blueprint (see appendix 3), was constructing vocabulary mastery test items (see appendix 2), was analyzing the selection of the reading texts, conducting expert validation, doing first revision, was trying out the test, was analyzing the test based on the try out result and doing final revision based on the test analysis result to make final form of the test.

Vocabulary mastery test used matching words type, this test has three words related to the main word contained in the question. Matching word required the students to match two parts of a text. The two parts are usually interrelated in terms of meaning or content. Usually the two parts are in the form of list. The first list usually consists of some statements or questions, while the second consists of responses. (Isnawati, 2012:34)

E. VALIDITY AND REABILITY TESTING

1. Validity

Gay (1992: 155) state that validity is the degree to which a test measures what it is supposed to measure. The researcher used multiple choice and matching test, it meant that form both of two group can measure the skill and component of students. To measure the test has a

good validity, the researcher analyzed the test from *face*, *content, construct and criterion-related validity*.

a) Face validity

Face validity if it looks as it measures what it is supposed measure. For example, a test which pretended to measure pronunciation ability but, which did not require the test-takers to speak might be through to lack face validity. This is true even if the test is constructing and criterion-related validity can be demonstrated. Face validity is hardly a scientific concept, yet it is very important. A test which does not have face validity may not be acceptable by test-takers, teachers, education authorities, and employers. The researcher used face validity by consulting with the advisor and teacher.

in order to get face validity, prototype of the reading ability test, vocabulary mastery test, test blueprint and expert validation form, was given to the expert to get judgment whether the test looks right to measure student's reading ability and student's vocabulary mastery.

b) Content Validity

Latief (2016: 239), state that content validity is concerned with the coverage of the materials will be measured or being tested. Besides, the content validity represents the test items in the test that cover and represent the material in the curriculum.

In this research, validating the content validity conducted by analyzing the content of the test and the materials required in the

English syllabus revision K13.The purpose of analyzing is whether the content of the test represented the reading materials in English syllabus.

The description of the test items used in reading ability test and vocabulary recognition test can be clearly seen in Table 3.6

Table 3.6 Content Validity Evidance of the Test Items

Objective	Types	Specific objectives	Items
To evaluate the students' reading ability of the text that they read	Literal comprehension	Finding the specific information or facts which clearly stated in the text	25
To evaluate the students' vocabulary mastery of the target words	Less frequent words	Finding synonyms of the target words	25

The reading ability test and vocabulary mastery were untilized in experimental and control groups. This procedure covered several steps, they were the purpose recognition, establishing of the test blueprint, devising the test items, expert review, and revision, tryout test, and analysis and revision.

The specification on the test included the objective, generalinstruction, test approach, kind of test, test type, the number of the text source, number of items, time allocation, equipment, and scoring (see appendix 2). The components of blueprint included the subject matter, the grade, construct, basic competence, dimension, indicator, questions and types of item (see appendix 3). In the devising

the items is multiple choice forms were constructed to the reading ability test in this study. There were 25 questions with multiple choice and 25 questions with matching word. The students were asked to cross the right answer and match the word. The next step was expert validation. The expert was one of lecturers in IAIN Tulungagung and other expert was one of English teacher of SMPN1 Sumbergempol who has specialized in reading ability, vocabulary mastery and test constraction. The expert checked whether both two tests possesses evidence that meets the criteria of a good test.

Before the real test was given, the tryout of the test was done. The pilot testing was conducted on the particular subject since it has many chracteristics in common with the main subject of the resaerch. Further, the score was dissected to know the item facility/difficulty, items discrimination, reliability and the efficiency of the distractor. After trying out the test, the test items were anlyzed based on the students' score. The test items analysis covered anlysis of item reliability, analysis of items difficulty, analysis of item discrimination, anlysis of item validity.

c) **Construct validity**

Latief (2016: 238), state that construct validity is the validity concerned with the theoretical construct will be measured. A test is

considered construct validity if the items of test measure each of thinking aspect from a variable will be measured through the test.

In this research, validating the construct validity conducted by analyzing the objective of the test and the type in which the students asked to do the task. Since the students' ability on reading ability and vocabulary mastery were measured, the test must give in the reading activity. After reading the students asked to answer the questions measuring for comprehension achievement. The construct validity evidence can be seen in Table 3.7.

Table 3.7 Construct Validity Evidence of The Test Items

Objective	Type of test	Task
Measuring the students' reading ability and vocabulary mastery	Reading ability test and vocabulary recognition test.	Students ask to answer the reading ability questions and match the right synonyms of the target words.

d) Criterion- related validity

Criterion related validity applied to know how far results on the test agree with those provided by some independent and highly dependable assessment of the candidate's ability. This independent assessment is thus the criterion measure against hich the test is validated. There are essentially two kinds of criterion-related validity: concurrent validity and predictive validity (Hughes, 2002: 22).

The researchers use *predictive validity*. The predictive validity this concerned the degree to which a test can predict candidates' future performance. An example would be how well a proficiency test could predict a student's ability to cope with a graduation at SMPN 1 Sumbergempol. The criterion measure here might be an assessment of the student's English as perceived by his or her teacher or researchers at SMPN 1 Sumbergempol.

To apply this validity, the developer or the researcher might administer a certain test before the students begun the material about recount text explained by the researcher. After several time, the same group of students might take the same test and the scores, resulted from the first score and the second score were calculated to find the correlation coefficient. The closer the correlation, to know the stronger the relationship between the two set of scores and the stronger the test to predict the students' future. In this research, used *Pearson Product Correlation Coefficient (PPMC)* though SPSS 25.0 version to find the correlation coefficient between the first and second scores. The correlation both two scores of reading ability evidence can be seen from the table:

Correlations

	Reading Try out 1	Reading Try out 2

Reading Try out 1	Pearson Correlation	1	,963[**]
	Sig. (2-tailed)		,000
	N	32	32
Reading Try out 2	Pearson Correlation	,963[**]	1
	Sig. (2-tailed)	,000	
	N	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

Table: 3.8 Result of Criterion-related validity (Predictive Validity)

The SPSS output suggests that the correlation coefficient is was 0,963. It means that there is a positive correlation between variables. It also suggest that the ρ-value is 0.000. Considering that 0.000 is smaller than 0.05, so the null hypothesis is rejected.

While, the correlation both two scores of vocabulary mastery evidence can be seen from the table:

Table: 3.9 Result of Criterion-related validity (Predictive Validity)

Correlations

		Vocabulary Try out 1	Vocabulary Try out 2
Vocabulary Try out 1	Pearson Correlation	1	,937[**]
	Sig. (2-tailed)		,000
	N	32	32
Vocabulary Try out 2	Pearson Correlation	,937[**]	1
	Sig. (2-tailed)	,000	

	N	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

The SPSS output suggests that the correlation coefficient is was 0, 937. It means that there is a positive correlation between variables. It also suggests that the ρ-value is 0.000. considering that 0.000 is smaller than 0.05, so the null hypothesis is rejected.

2. **Reliability**

Gay (1992: 161), state that reliability is the degree to which a test consistently measures whatever it measures. Or reliability is expressed numerically, usually as coefficient, a high coefficient indicates high reliability. Then is significant difference between the score of tryout 1 and the score of tryout 2, so the result of research was reliable.

To measure the reliability of the test, the researcher used *Cronbachs' Alpha*, if the result of *Cronbachs' alpha* was higher than 0.05 (reliable index > 0.05), it meant that the test was reliable.

Actually, the ideal test should be both reliable and valid. In this research, the researcher also used SPSS 25.0 for window to know the reliability of test instruments. The criteria of reliability instrument can be divided into 5 classes as follows (Ridwan, 2004), those are:

a. If the *alpha cronbach* score 0.00 − 0.20: less reliable

b. If the *alpha cronbach* score 0.21 – 0.40: rather reliable

c. If the *alpha cronbach* score 0.41 – 0.60: enough reliable

d. If the *alpha cronbach* score 0.61 - 0.80: reliable

e. If the *alpha cronbach* score 0.81 – 1.00: very reliable

The result of reliability testing of reading comprehension by using SPSS 25.0 can be seen from the table:

Table: 3. 10   **Result of Reliability Test in Reading Ability**

Reliability Statistics

Cronbach's Alpha	N of Items
,791	25

To know the items was reliable or not it can be seen from Cronbach's Alpha column. The Cronbach's Alpha score = 0,791 meant that it was reliable.

While, the result of reliability testing of vocabulary mastery by using SPSS 25.0 can be seen from the table:

Table: 3.11   **Result of Reliability Test in Vocabulary Mastery**

Reliability Statistics

Cronbach's Alpha	N of Items
,808	25

To know the items was reliable or not it can be seen from Cronbach's Alpha column. The Cronbach's Alpha score = 0, 809 meant that it was very reliable.

F. NORMALITY AND HOMOGENEITY TESTING

1. Normality

In this research works with statistic nonparametric to analyze the hypothesis. In statistic nonparametric the data that will be analyzed should in normal distribution. The technique that can be used to test normality by using *Shapiro-Wilk* by the value of significance (α) = 0.05 rules as follow:

a. H_0 : If the value of significance > 0.05, means data is normal distribution

b. H_a : If the value of significance < 0.05, means the distribution data is not normal distribution.

Table: 3.12 Result of Normality Test of try out of Reading Ability with Shapiro-Wilk

Tests of Normality

	Test	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Reading comprehension score	test 1	,126	32	,200[*]	,968	32	,435
	test 2	,186	32	,070	,932	32	,440

a. Lilliefors Significance Correction

Based on the result of pretest and posttest in normality testing above, it was known that the significance of tryout 1 was 0,435 and the significance value of tryout 2 was 0,440. So, it can be concluded that test has normal distribution, because the significance value of tryout 1 0,435 and the significance value of tryout 2 is 0,440 were higher than 0,05. To fulfill the provision of normal distribution was if the significance value or probability > 0,05.

Table: 3.13 Result of Normality Test of try out of Vocabulary Mastery with Shapiro-Wilk

Tests of Normality

	Test	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Vocabulary mastery score	test 1	,149	32	,068	,960	32	,280
	test 2	,192	32	,400	,883	32	,120

Based on the result of pretest and posttest in normality testing above, it was known that the significance of tryout 1 was 0,280 and the significance value of tryout 2 was 0,120. So, it can be concluded that test has normal distribution, because the significance value of tryout 1 was 0,280 and the significance value of tryout 2 was 0,120 were higher than 0,05. To fulfill the provision of normal distribution was if the significance value or probability > 0,05.

2. **Homogeneity**

Homogeneity test intended to know whether the variance of data was homogeneous or not. In this research the researcher wants to know the variance score in class (group) sample with employed *Levene's statistic* by the value of significance (α) = 0.05. Before doing homogeneity testing, the researcher decided hypothesis in this homogeneity as follow:

a.　　H_0 : If the value of significance > 0.05, means data is homogeny

b.　　H_a : If the value of significance < 0.05, means data is not homogeny

Table 3.14 Result of Homogeneity Test try out of Reading Ability

Test of Homogeneity of Variances

PreTest

Levene Statistic	df1	df2	Sig.
1.426	6	24	.246

Based on the table above was known that the sig/p value was 0.246 higher than 0.05 means H_0 was accepted and H_a was rejected. So, it can be interpreted that the data was homogeneity.

Table 3.15 Result of Homogeneity Test try out of Vocabulary Mastery

Test of Homogeneity of Variances

PreTest

Levene Statistic	df1	df2	Sig.
2.519	4	25	.066

Based on the table above was known that the sig/p value was 0.066 higher than 0.05 means H_0 was accepted and H_a was rejected. So, it can be interpreted that the data was homogeneity.

G. DATA ANALYSIS

In this research, the researcher used MANOVA for practicality SPSS program 25.0 version to analyze data that include more than one dependent variable at a time. It was to test the hypotheses regarding the effect of one or more independent variables on two or more dependent variables. It was to test the hypotheses regarding the effectiveness of task-based language teaching on students' reading ability and students' vocabulary mastery.

Homogeneity test of variances used to examine whether or not the variance between the independent variable groups were equal. This test was one of the prerequisite tests of MANOVA. Levene's test of Equality of Error Variances was used based on the decision, if the significance value was > 0.05, it means that the variance between the independent variable groups were equal. On the contrary, if the significance value was < 0.05, it means that the variance between the independent variable groups were not equal.

Homogeneity test of variance that determined the variance between the independent variable groups, homogeneity test of covariance matrices

should be conducted. The covariance matrices between the independent variable groups had to be equal too. The homogeneity test of covariance matrices could be done through Box's M test based on the decision, if the significance value was > 0.05, it means that the covariance matrices between the independent variable groups were equal. Yet, if the significance value was < 0.05, it means that the covariance matrices between the independent variable groups were not equal.

There was research hypothesis that should be tested. The hypothesis was the students' reading ability and vocabulary had better improved achievement significantly by using task-based language teaching than those improved with using conventional strategy. To test the hypothesis, the hypothesis was transformed into null hypothesis (symbolized $H_{0)}$. The Ho was the students' reading ability and students' vocabulary mastery improved by using task-based language teaching has no difference from that improved by conventional strategy.

To reject the null hypothesis the researcher stated the alternative hypothesis (symbolized Ha). There was alternative hypothesis. The Ha was the students' reading ability and vocabulary improved by using task-based language teaching was better than that improved by conventional strategy.