CHAPTER III METHODS OF INVESTIGATION

A. Research Design

To answer the question, which has been stated in the research question, the researcher uses a descriptive research design. The purpose of this study is to know the real situation and characteristic the subject so the researcher do not add and reduce anything in teaching process. The researcher observes the teaching learning activities in the class than she will describe the database on fact. To get the empirical data for the study, the researcher administered a dictation test and questionnaire. The test is given to the eleven grade students of MA Bilingual Krian. They are supposed to do the test to show the achievement in vocabulary.

In analyzing the data, the researcher uses a quantitative measurement to find the result. From the result, the researcher can describe the students' achievement to mastery in vocabulary.

B. Subject of the Study

1. Population and Sample

In this research researcher chooses 3 classes in 11 grades at MA bilingual Krian year 2016-2017, Class 11-2, 11-3 and 11-4 which consist of 80 students. While sample are 80. The researcher use all of population become sample so this

research is kind of population research. The purpose of use five classes as subject research is because just three classes which use dictation method in teaching learning process.

2. Variable

The variable of this research are:

a. Individual Learner Differences

Factor individual learner differences is a factor from students itself or has been known as factor internal which consist of:

1) Motivations

Motivation is reasons which come from students' itself to do something. The instrument to analyze motivation is using questionnaire. The questionnaires consist of ten questions.

Table 3.1 Questionnaire to assess students' motivation

Mad	the state of		_		_	
Mot	ivation					
No	Questions	1	2	3	4	5
1	English is easy for me					
2	I always want to know new					
	vocabulary					
3	Getting to know new vocabulary					
	is the most important in learning					
	English.					
4	I study English to meet my					
	educational needs.					
5	I learned English in order to easily					
	find a job.					
6	My English Vocabulary is bad and					

	I will study hard.						
7	Learn new vocabulary using						
	dictation methods is fun for me						
8	I think there is an increasing						
	vocabulary when I learn English						
	using dictation method						
9	Difficulties in learning language						
	does not make me give up but						
	make me feel challenged						
10	Learning English make me happy						
	Total = pointsobtained X 2						

2) Working memory capacity

In this research, the researcher use students IQ to measure grade of working memory capacity.

b. School Learning Environment

School learning environment is anything that can create students enthusiasm to study which come from school environment.

1) Subject standard

To measure standard of subjects, researcher hold interviewed to teacher about students' achievement of predefined standard lessons. Standard lesson have 20 points if students could mastery the material which be teacher goals.

2) Class size

The instrument to analyses class size standard, researcher uses minister of national education wisdom No. 32 of August 9, 2011. Class size has 20 points the way to assess class size are below:

Table 3.2 Table to assess class size standard

N 0.	National F	Infor	mation						
1.	Class Standard					Complete Uncomple			
	 Size of classroom The width of terra The ceramic floor method by SNI 03 	gh-ceiling rooms at least 3.50 meters of floor te of classroom is 7.00 X 8.00 meters te width of terrace 2.00 meters te ceramic floor tiles, good quality and test thod by SNI 03-3976-1995 the walls can muffle the sounds							
2.	Standard Classrooms'	furnitur	·e			Complete	Uncompleted		
	Furniture	Jum	P	L	Т				
	6. The single students' desk	32	60	55	65- 71				
	7. The double students desk	16	120	55	65- 71				
4	8. Teachers' desk	1	75	60	73				
	9. Students' seat	32	38	38	40				
	10. Teachers' seat	1	45	40	43	1			
	11. Whiteboard		240	120					
	12. Schedules board	1	60	40					
	13. The board of attendance	1	60	40					
	14. Picket board	1	80	60					
	15. The classroom cupboard	1	70- 80	40-60	180				
	16. The materials for students and teachers' table using wood with thickness 18 mm or multiplex17. Materials for frame chair use wood with the backrest holder from wooden board in				ltiplex				

thickness 18mm	
18. Materials for whiteboard use tripleks12mm	
thickness with wooden frames 4X6 used on the	
back of the whiteboard	
19. Whiteboard materials using 12 mm thickness	
multiplex with a frame of aluminum	
20. The materials for the frame using wood	
cabinets with wall coverings of 4mm thick teak	
trim the edges used for teak veneer.	

Note: Each point is fulfilled will get 10 scored, and unfulfilled will get 5 score

Total = Total score : 10

3) Physical facilities

The facilities include; administration office, staffrooms, classroom, chairs, toilets, laboratories, libraries and school ground. The instrument is by research observation physical facilities have 20 points if have standard administration office, staffrooms, classroom, chairs, toilets, laboratories, libraries and school ground.

4) Instructional materials

Instructional materials include textbooks, exercise books, wall maps, charts, and atlas and science kits. The instrument is by research observation. Instructional materials have 20 points if have three textbooks, exercise books, wall maps, charts, and atlas and science kitsin every class.

5) School location

The layout of the school building must fulfill requirements. In this case, researcher uses sumadi suryabrata. 2004 standard in *Metodologi penelitian* and have 20 points.

c. Teacher

Teacher is a person which has obligation to teach in personal or group manner. The indicators of teacher are teachers' personality qualities, training experience and teachers' work environment include teacher relationship with students. The questionnaire to assess teacher are below.

Table 3.3 Questionnaire to assess teachers' relationship with student

No	Questions	1	2	3	4	5	
16	I felt uncomfortable with my English				Ç.,		
	teacher						
17	I think my English teacher less experienced						
18	When I look my English teacher, I was bored						
19	My English teacher just take attention to some students only				,		
20	Teacher often angry for reasons that are not clear						
21	My English teacher often come late						
22	Teachers give duty too much	//	e e				
23	Teacher never explain when I did not understand the subject						
24	Teacher too hard while giving material						
25	My English teacher is so seriously so that the class never felt relaxed						
	Total = point obtained X 2						

C. Data Collection

To carry out researchers' study, the researcher collects data containing some information needed for researchers' study. In this research, researcher gets the data from observing the teaching learning process: field notes, questionnaire and the result of the students' test: the pre-test and post-test.

1. Observation

Observations are used to observe the situation of the class during each cycle of this study. There are three components that the writer observed. They are:

- a. The situation of the class. Numbers of students who enthusiastically raising their hands when teacher asks them, researcher may concludes that they give much attention to teachers' explanation during the study.
- b. The participation of the students. Numbers of students who do what teacher orders, researcher will conclude that they are motivated to be active.
- c. The pronunciation of the students. Numbers of students who can pronounce the vocabulary give in the last each cycle better than in the beginning of each cycle, researcher will concludes that they are in progress. However, she does not take the score of it.
- d. School learning environment. The school learning environment that will be examined is class size, physical facilities, school location, tools and building.

2. Pre-test and Post-test

According to the regulation of standard dictation tests, a dictation achievement test should consist of 120 words (Malekian & Akhundi, 2010). In this test there are 10 questions to be tested consist of questions to assessing Word Identification, Word meaning, Reading the word and Writing the word. To assess Word identification, which consists of student proficient in saying and reading the word, researcher should records to assess it.

Table 3.4 Table to assess pretest and posttest

Criterion	Level #3 Advanced (3 Points)	Level #2 Developing (2 Points)	Level #1 Striving (1 Point)	Measure
Word identification	The student is proficient in saying, reading, or writing the word.	The student has some difficulty saying, reading, or writing the word.	The student has a lot of difficulty saying, reading, or writing the word.	Reading aloud
Word meaning	The student knows the comprehensive meaning of the word and can discuss multiple meanings of the word.	The student knows a partial meaning of the word but has difficulty discussing a full meaning of the word.	The student does not know the meaning of the word and cannot discuss it.	Questions in Pre and posttest point 3
Reading the word	The student offers a rich explanation of the contextual meaning of the word.	The student offers a partial explanation of the contextual meaning of the word.	The student is not able to explain the contextual meaning of the word.	Questions in Pre and post test finding meaning
Writing the word	The student uses the word with a high degree of accuracy within the context of writing.	The student uses the word with some degree of accuracy within the context of writing.	The student does not attempt to use the word within the context of writing.	Questions in Pre and posttest point 5
Overall level of vocabulary development	Advanced level 10–8 points	Developing level 7–5 points	Striving level 4–0 points	

	Total = number of points X 2						
Word- learning strategies	The student uses a range of word-learning strategies, along with varied resources, to learn new words.	The student uses few word-learning strategies and resources to learn new words.	The student does not use word-learning strategies and resources to learn new words.	Questionnair e			
Word consciousne ss	The student demonstrates an awareness and interest in learning and using new words.	The student demonstrates a minimal awareness and interest in learning and using new words.	The student does not demonstrate an awareness and interest in learning and using new words.	Observation			
Overall level of vocabulary development	Advanced level 5–4 points	Developing level 3–2 points	Striving level 1–0 points				
Total = number of points X 2							

Table 3.5 Example of question in pretest and posttest.

	1.	Break	(1) I've never seen this word before.					
8.			(2) I've seen this word, but I do not know what it means					
			(3) I think it means					
			(4) I know this word. It means					
			1					
			2					
			3					
			(5) I can use this word in a sentence. My sentence is					
			u -					
			" (you must also fill in column 4)					
		"Then the	re's a break of several years."					
		In those s	sentence "break" have meaning					

3. Questionnaire

The last technique in collecting data is the use of questionnaire. The purpose is to assess Word learning- Strategies, Word Consciousness criterion, motivation, and the relationship between teacher and students.

D. Research Instrument

This study consists of four steps consist of step 1, step 2, step 3 and step 4. In the step 1 the students do pre-test. In step 2 is teaching learning process, and in step 3 the students get post-test. The process of collecting the data does in five meetings. First meeting is the pre-test. In the second until four meeting, researcher analyses the teaching learning process and the five meeting the students do a posttest. The aims of using pre and post-test were to know the students' responses during the activities and to see their abilities in mastering the vocabulary and their progress. Then, the researcher compares the students result in the pre-test and post-test. The last step is give questionnaire. The purpose of give questionnaire is to gain data for analyze factors in increasing students' vocabulary. The researcher will agglomerate students according high increasing achievement and low increasing achievement. Then, she will analyze the result of questionnaire both groups and analyze them.

E. Data Analysis

To get the result of the study, researcher needs to do some steps analysis. First, to find out the significant of increasing vocabulary, researcher will use T Test Paired One Sample. In this test, the researchers do not need normal distribution data. This analyze will answer research question number 1.

- 1. The first step, researcher put scores of pre-test and post-test into SPSS.
- 2. Second, the researcher calculate the mean from overall each of pre-test and post-test.
- 3. Third, the researcher will analyze the data to find out whether the difference of the scores between pre-test and post-test.

The second analyze was analyze the questionnaire which have scale 1,2,3,4 and 5. The scales aimed to know the grades of students' motivation. Start from number 1 until number 5, if students choose number 1 it means that students have low motivation and this applies to contrary.

The third analyze was analyze effect individual learner differences, home learning environment and school learning environment in increasing students' vocabulary using dictation method. In the third analyze researcher use multiple regression linearity test in SPSS. The second and third analyze will answer research question number 2 and 3.