II. LITERATURE REVIEW

This chapter explains about some theories related to the research. The theories will be the references for the writer in conducting the research. The theories that will be explained are about vocabulary, teaching vocabulary, clustering technique, derivational exercises, clustering technique in teaching vocabulary, derivational exercises in teaching vocabulary, theoretical assumption and hypothesis.

2.1. Vocabulary

Every language in this world has a list of words. This word is used to express human feelings or ideas in oral and written form. Every word in a language always has specific meaning, both literal and semantic meaning. And people will use suitable vocabularies to express their feelings or ideas in order to be understood by other people. By using vocabulary people can communicate each other in order to ask or deliver an information. This is why vocabulary has an important role in language use.

In English, vocabulary means every part of speech which is used to construct the sentences when people communicated each other. It includes content words (Noun, Verb, Adjective and Adverb) and function words (Pronoun, Preposition, and Conjunction). Fries (1973) as cited in Arbainaya (2012) classified English vocabulary or word into four groups, they are:
1. Content word

Content word represent the name of the subject or things, that is concrete noun (mosquito, disease, insect), action done by with these things, that is verb (reproduce, bite, fly), and the qualities of these things, that is adjectives (big, strong, sharp).

2. Function word

Function word are those words which are used as a means of expressing relation grammar structure. According to Collier-Macmillan (1971) the words which are included in function word are articles (the, a, and an), auxiliary verbs (are, be, have, do, etc), conjunctions (and, but, or, because, after, etc.), preposition (in, at, on, during, until, etc.), pronoun (I, you, him, her, them, etc.), noun determiner (which, this, that, each, much, some, many, etc.), substitute nouns (all, little, some, such, etc.), intensifier (almost, enough, quite, rather, etc.), and special expression such as the indefinite pronoun (anybody, anyone,

3. Substitute word

Substitute word are those, which represent the individual things or specific action as substitutes for whole form classes of words. In other words, substituted words are indefinite pronouns such as anybody, anyone, anything, everybody, nobody, nothing, etc.

4. Distributed word

Distributed words are those are distributed in use according to grammatical matter as presence of a negative such as, either, too, or yet.
Evelyn Hatch and Cheryl Brown (1995) define vocabulary as a list or set of words for a particular language or a list or set of word that individual speaker of language might use. It means that vocabulary is not always consist of one word. In English, vocabulary can be more than one word. The word can be formed as a phrase such as noun phrase, adjective phrase, or prepositional phrase.

While according to Roget (1980:1036), Vocabulary is:

- An alphabetical list of words often defined or translated, the vocabulary includes idioms and two words verb.
- All the word of Language.
- Specialized expression indigenous to a particular fields, subject, trade or subculture.

Referring to Roget, it can be stated that every word produce by people which often defined and translated in an appropriate fields, subject, trade, or subculture. Then, English vocabulary is a list of word that included in part of speech which have meaning when it is used to construct a sentence to express human ideas in order to be understood by other people.

2.2. Teaching Vocabulary

In learning a language, vocabulary becomes the most important things to be improved when the learners want to be success to improve their skill. When the students have a lot of vocabulary they will have many ways to express their ideas. Vocabulary should be learned and skills should be practiced.
Kriedler (1963) as cited in Sari (2004) says that in modern method of language teaching, vocabulary learning no longer consist of memorizing of list of words in isolation, but words are usually introduced in a meaningful context and practiced in appropriate sentence pattern. It is important that when the teacher teaches vocabulary he/she should make the students understand not only the meaning of vocabulary itself, but also how to use it in appropriate sentences.

Therefore, vocabulary should be taught in context. Teacher also should find learning burden to know what should be involved in learning vocabulary. Nation (2005) states that discovering learning burden in teaching vocabulary can help the teacher to know what should be involved in learning vocabulary. Furthermore, he defines the aspects that should be involved in learning vocabulary. The first aspect involved in learning vocabulary is meaning which is related to form and its meaning, concept and referents, and word association. The second is form which is related to spoken form (pronunciation and spelling) written form and word part. And the last is the use which is related to grammatical functions, collocation and constraint of use.

If all the aspects can be covered, the students will understand the meaning and know when to use it in appropriate sentence. Because the same vocabulary will have different meaning when it is used in different context. It should be a focus for the teacher to be successful in teaching vocabulary.
Kustardjo (1988) as cited in Sari (2004) says that there are five ways of teaching vocabulary as explained below.

1. Teaching vocabulary through creativity. The teacher should allow the students to decide what they want to learn. Teacher can make such technique which enables the students to be creative in producing the vocabulary. Kochappilly (2011) as stated in ELTWeekly Newsletter proposed some techniques to teach vocabulary creatively in the classroom. These are brainstorming, visual aids, playing with words, etc. Brainstorming makes the students can produce new vocabularies by theirselves. The teacher just need to write the key word and ask the students to find new related words. Visual aids can be picture, diagram or painting. This aids can help the students to memorize vocabulary by their colors or forms. Then, playing with words can be done by using some games such as scrabble, boggle, and crossword puzzle.

2. Teaching vocabulary through derivation, this way of teaching vocabulary is included in the term study word in families (Collier-Macmillan, 1971). It says that we can learn many related words if we understand the use of suffixes and prefixes. For example, the use of word “learn” in the sentence “The students learn English twice every week”. Then, the word “learn” can be added suffix –er to be a noun such as in sentence “Every English learner should have a dictionary to be guide for studying.”

3. Teaching vocabulary through translation. This method is considered as ancient one. Here the teacher teaches vocabulary by translating the words into their mother tongue. The teacher talked the word into English, then translate
the word into the students’ mother tongue. For example when the teacher said “Good morning my students!”, he/she will continue to say “Selamat pagi anak-anak”. This method used to make the students understand the meaning of the word precisely.

4. Teaching vocabulary through guessing. This technique is very useful especially when we are reading. Collier-Macmillan (1971) states educated guessing will be used especially in reading when we will find words whose exact meaning is not absolutely necessary for us to know in order to understand the sentence.

5. Teaching vocabulary through context clues. According to Collier-Macmillan (1971) this technique is included in studying word in families. Here learners learn the words that are related in meaning. The teacher can use a context clue by giving list of items that naturally occur together. For example the words travelling, foul, jump, dribbling, shoot, etc. These word have related meaning and occur together in a context clues “basket ball”.

Teaching vocabulary will be less effective if the teacher can not match the technique. A good technique will make the students interested in learning vocabulary and easier to remind the meaning. Regarding to the five ways of teaching vocabulary above, the writer interested in two ways that is teaching vocabulary through derivation and through clustering technique that can be assumed as an interactive technique to teach vocabulary and are relevant with those ways proposed by Kustardjo. Furthermore, teaching vocabulary is a process to make the students understand the meaning of word in different language and use it in appropriate context by using some kind of techniques.
2.3. Clustering Technique

Clustering technique is a technique which is often used in many task. This technique is adapted from mathematical concept. When we are using any form of clustering technique, The fundamental requirement is some ways to measure similarity or, conversely, distance between any two points. Brody (2005) states that the clustering uses proximity relations rather than sentence structure, and the patterns they seek are of a specific nature – common phrases. Using a hierarchal clustering method could provide us with more precise generalization, and is suggested as a possible improvement.

In language learning, clustering technique used to make the learners easier to memorize the word they learned. Because every word in clustering technique always has a relationship with another word. According to Nation (1990) as cited in Arbainaya (2012) cluster is word grouped around a central point when new word are met, they can be fitted into the most suitable place in the cluster, and this always provides good opportunity for revising related words. It means that the students can add a new word based on their own creativity as long as the word still has a relation with the central word. The students will be more remember the word they add because they are actively included in thinking.
Moreover Nation (1990) gives example of clustering word as below.

From the diagram above, it can be seen that the core-word “school” has many related word both physic and activity which exist in the school. Some words that have been mentioned above can be defined into three word classes that is noun (building, teacher, schedule, students, and knowledge), verb (teach and study) and adjective (discipline). In addition, the word “building” which has relation with the core-word “school” also can be a core word for related words which describe more specific term from building that is classroom, library and office which also still have relation with the main core-word “school”. These words can be used by the students to make a sentence. For example “The teacher teaches Physics to the
students in the classroom.” So, the students can combine some words into a good sentence and it makes the students easier to understand the context of the word.

By using the words in diagram above, the students can make some sentences. For example “The school makes some rules to make the students to be discipline.”, “There are some kinds of building in my school such as classroom, teachers office, library, etc.”, and “The teacher teaches the students based on the schedule.” This sentences will be easily made by the students because they understand the context of the sentences. It also will be effective by the students to be memorized.

Macdonald and Macdonald (1996) as stated in Faransari (2011) said that clustering is a type of free associated listing. It begins with a core-word, a word that acts as a mental stimulus to make the writer come up with related terms that branc out from the center term. One term leads to another to create a complex network of diverse idea, all related back in the same way to the core stimulus word. As we can see from the figure 1, there are a core-word ‘school’ which lead another word around it. The words have close relation with the word ‘school’ and it can lead the students to memorize or even use the words to arrange a sentence. For example, the students can make a sentence like this, “The teacher teaches the students to study in the school”.

From the example above, we can conclude that the students will memorize a high number of vocabulary with only one word as a core to trigger the learners to find out another word related to the core-word. It will help the students to be
easier to memorize the vocabularies because they found it based on their own experience.

2.4. Derivational Exercises

In English linguistics, there is a matter about word formation which can be divided into inflection and derivation. Inflection is the formation of word where the word’s changing will not change its class. While derivation is the formation of word where it will change the word classes. Both inflection and derivation need affixes (prefixes and suffixes) to change into another form and make a new meaning. Plage (2002) states that the basis of this criterion (i.e. lexeme formation), a distinction has traditionally been made between inflection (i.e. conjugation and declension in traditional grammar) as a part of grammar. On the other hand, derivation and compounding as part of word-formation (or rather lexeme formation).

Furthermore, Plage (2002) divides suffixes into four categories as follows.

1. Nominal suffixes are often employed to derive abstract nouns from verbs, adjectives and nouns. The suffixes which is included into nominal suffixes are –age, -al, -ant, -cy/ce, -dom, -ee, -eer, -er, -(e)ry, -ess, -ful, -hood, -an (and its variants –ian, -ean), -ing, -ion, -ism, -ist, -ity, -ment, -ness, and -ship.

For example:
Motivate + ion → motivation
The teacher always gives motivation to the students after learning English.

Argue + ment → argument
The teacher provided some arguments about the important of reading habit.
2. Verbal suffixes are four suffixes which derive verbs from other categories (mostly adjectives and nouns), -ate, -en, -ify, and –ize.

For example:

real + ize \[\rightarrow\] realize

The students haven’t realized that reading habit is very important yet.

organ + ize \[\rightarrow\] organize

Nadia can easily organize her schedule every day.

3. Adjectival suffixes (in English) can be divided into two major groups these are relational adjectives, whose role is simply to relate the noun the adjective qualifies to the base word of the derived adjective. And the second is qualitative adjectives that express more specific concept. The example of this suffixes are –able, -al, -ary, -ed, -esque, -ful, -ic, -ing, -ish, -ive, -less, -ly, and –ous.

For example:

Value + able \[\rightarrow\] valuable

There are many valuable books in the library which have not being read by the students.

Effect + ive \[\rightarrow\] effective

Teachers should have an effective way to make the students understand English well.

4. Adverbial suffixes consists of –ly which is the most part syntactically triggered and obligatory, and it can therefore be considered as inflectional. And the second is –wise that derives adverb from noun, with two distinguishable sub-group: manner/ dimension adverbs, and so called view-
point adverbs. For example in the sentence “They make no special demands for food-wise”.

For example:

Easy + ly  →  easily

The students can understand English easily when they practice it.

Happy + ly  →  happily

Finally, Snow White and The Prince can live happily ever after.

In addition, derivation also can be formed by adding some prefixes as cited in Coller and Macmillan (1971). The prefix which can change word form is “en-“. This prefix can change adjective and noun into verb. For example:

1. Adjective into verb

Large  →  enlarge

“My father decided to enlarge our house by adding a new room.”

2. Adjective into noun

Title  →  entitle

“The author published the new book entitled The Beauty of the World.”

Bauer (2004) stated that word-formation has two functions, firstly a function of lexical enrichment, whereby new words are coined to denote new, or newly salient, concepts, and secondly a transpositional function, whereby lexemes (which we assume to have a fixed word-class) are permitted to appear in a new word class so that the same meaning can be transferred to a new function in a sentence.
Thornbury (2002) says that rather than talk about the number of individual words a person knows, it makes more sense to talk about the number of word families. Scott (2005) a number of features of word can influence the attention that readers pay to it as well as the ease with which they remember it. One of the feature is morphology. Furthermore, morphemic analysis involves the derivation of a word’s meaning by examining and using its morphological structure, such as word roots, prefixes, suffixes, and inflected endings (Edwards, et al., 2004). The statements above support that derivation can be one of the good way in order to make sense the vocabulary learning, so it can make students pay attention to the words being taught.

From the explanation above, derivation has an advantage when it is used to teach vocabulary. The learners can find more than one meaning and form in a one word. When the learners pay attention to the words, they will find it easier to remember the words. It will be easier for students to understand the word and use it based on the context. It makes derivational exercises used in many occasions when a teacher teaches vocabulary.

2.5. Clustering Technique in Teaching Vocabulary

Thematic clustering has been established to be a facilitating strategy in presenting words in a second language (L2) to be memorized (Tinkham, 1997). This technique is used to make language learners easier to memorize vocabulary, especially in learning English.
Many teachers use clustering technique to teach vocabulary. Everyone has different criteria to cluster their subject. Sometimes, the teacher clustered the word by categorize it in different part of speech such as verb, noun, adjective, and adverb. And the other categorize the word based on the topic which is being discussed. From the general one to be more specific such as sport that has relation with football, basketball, health, sweat, etc.

Clustering technique in language teaching was actually a technique which was used for writing. It is usually used in pre-writing activity to give a stimulus for the students to develope their ideas when they are writing. If we used Clustering Technique, it made our idea seems to be more conceptual. So that, the idea will be more understandable by a reader.

The researcher did the process of teaching vocabulary through clustering technique as follow.

1. The teacher gave the texts to the students about Hortatory Exposition and Narrative
2. The teacher asked the students to read the text to get general information about the text and find the generic structure of the text.
3. After that, the teacher wrote a word which can describe the main topic from the text to trigger the students found some related words based on the text and their experience.
4. The teacher asked the students to writes the other words related to the core-word based on the text or their knowledge.
5. After getting a number of words, teacher asked the students to arrange a new sentences from the words which had been written by the student. This step was given to know whether the students understand the meaning of the word or not and to know whether the students could use the words in context or not.

In vocabulary learning, clustering technique also can give similar effect. The students will be more understand the vocabulary because they understand the context of vocabulary. They understand not only the meaning of the vocabulary but also when it was used and in what topic. Because the same vocabulary sometimes has different meaning when it was used in different topic.

2.6. Derivational Exercises in Teaching Vocabulary

Derivational exercises is one of the technique which is ususally used for teaching vocabulary. This technique is basically need the implementation of using vocabulary in complete sentence. So, the form of the exercises will be such kind of completing a sentence. Lamb (1963) as stated in Wafa (2012) said that most words in English are derivative, that is, they are derived from other words. The derivation word can be constructed by adding affixes that are prefixes and suffixes. This addition will give a new meaning of a word and change its class word grammatically.

The kind of derivational exercises in teaching vocabulary can be a word called root and the other words from the root word which has been added by affixes that should be matched in an incomplete sentence. In teaching vocabulary through
derivational exercises, teacher gave some exercises. These words should be matched in or filled in the incomplete sentence stated in the exercises.

This are the examples of the derivational excercise.

1. (protection, to protect, protected, protective, protectively)
   a. The princess lived a _______ life.
   b. If you are too _______ of your children, they will never learn to deal with life’s difficulties.
   c. My health insurance _______ me if I get sick.
   d. Trees are a good _______ against soil loss.
   e. The mother bear stood _______ in front of her baby cubs.

2. (distinction, to distinguish, distinct, distinctive, distinctly, distinctively)
   a. Mrs. Karnowsky has the _______ of being the oldest person to graduate from this college.
   b. I _______ remember the events that led up to the accident.
   c. John’s girlfriend always wears _______ jewelry.
   d. She also dresses very _______.
   e. The words on that page aren’t very _______. I can hardly read them.
   f. Can you _________ different wines from each other by their taste?

(Linda Markstein and Louis Hirasawa : 1982)
Here, the researcher arranged the way to teach vocabulary through Derivational Exercises.

1. The teacher gave the texts to the students about Hortatory Exposition and Narrative
2. The teacher asked the students to read the text to get general information about the text and find the generic structure of the text.
3. Teacher chose some important words from the text as a key words. Then, teacher made some items of Derivational Excercises using the words.
4. After that, the teacher gave an exercise such as the example above to the students based on the key words of the text.
5. The teacher and the students analyzed the answer of the exercises together to reinforce students understanding about Derivational Exercises.

Therefore, Derivational Exercises was one of the technique for teaching vocabulary in order to make the students easy to use the word in a sentence. This exercises made the students understand the meaning and get more number of vocabulary. Because of the students just need to memorize one word and they will understand more than one word in contextual use.

2.7. Theoretical Assumption

Referring to the theories above, the writer assumes that vocabulary learning should be integrated with other language skills. In order to make it easier, the teacher should have a good technique for teaching vocabulary. Since a good technique will make the students understand more about vocabulary more than its literal meaning but also its meaning in context. Understanding the meaning of
vocabularies in context will make the students easier to use it to practice language skills.

Based on the assumption above, the writer thinks that one of the techniques between clustering technique and derivational exercises will give a good impact for students understanding in learning vocabulary. And it will make the students understand vocabulary more than its literal meaning. Beside that, the techniques have different way to be used in teaching vocabulary in the classroom. Therefore, the writer assumed that one of the techniques will be easier to teach vocabulary while other will be more complicated.

2.8. Hypothesis

The hypothesis which are proposed to be formulated in this research are bellow:

1. \(H_0\) : there is no significant difference of the students’ vocabulary achievement taught through Clustering Technique and Derivational Exercises.

\(H_1\) : there is significant difference between the students’ vocabulary achievement taught through Clustering Technique and Derivational Exercises.

These are the explanation about some theories related to the research. The theories will be used as a references to conduct the research.