

## **CHAPTER II**

### **THEORETICAL REVIEW**

#### **A. The Nature of Vocabulary**

##### **1. Definition of vocabulary**

In learning English, vocabulary is one of the language components that most important to be mastered by the students. There are some definitions of vocabulary that mention in some literature. Vocabulary refers to list or set of words which individual speaker of language might use (Hatch et all, 1995: 368). It means that without vocabulary people is unable to use language to communicate. Anderson (2010: 1) also states that vocabulary can be defined generally as knowledge of words or word meaning. Vocabulary become basic element in learning language and without vocabulary knowledge people cannot learn any language. Furthermore, Min and Hsu (2010: 3) state that vocabulary learning is closely related to foreign language. The reader should understand most of vocabulary and the contextual meaning used in the passage.

Based on the definitions mentioned previously, it can be defined that vocabulary is a set or total number meaningful words that used by people as basic element of learning English.

## 2. Types of Vocabulary

Vocabulary is an important part in learning language. It is hard for the students to read, write and speak a foreign language without having enough vocabulary knowledge. There are two types of vocabulary or words according to Kamil and Hiebert (2005:11) those are oral and print vocabulary. Oral vocabulary is words that are spoken or listening and print vocabulary is words that people know when they are reading or writing.

Nation (2003:136) divides vocabulary based on basic of frequency

### a. High Frequency Vocabulary

It consists of words that are used very often in normal language, used in all four skills and across the full range of situation of use. High frequency vocabulary consists of 2000 word families which are about 87% of the running words in formal written text and more than 95% of the words in informal spoken texts.

### b. Low Frequency Vocabulary

Low Frequency Vocabulary covers only small proportion of the running words of a continuous text. It means that low frequency vocabulary is rarely used in common English activity. This group includes well over 100.000 word family.

A native speaker has a vocabulary about 20,000 words whereas a good learner who has studied English for several years knows only around 5,000 words. Thornbury (2002) mentions that a student of English would need about

18 years of studying to be able to receive the same amount of vocabulary which a native speaker absorbs only in one year.

Thornbury (2002) claims that the number of words which every student needs to make themselves understood is 2,000 words, this is called *core vocabulary*. This amount is used by native speakers in conversation as well as in so called *defining vocabulary* which occurs in monolingual dictionary.

Furthermore, Aebersold and Field (1997:139) classify the vocabulary based on the uses of vocabulary in communication into active and passive. Active vocabulary refers to put item which the learner can use appropriately in speaking or writing and it is also called as productive vocabulary. Passive vocabulary refers to language items that can be recognized and understood in the context of reading and listening and it is also called as receptive vocabulary.

From the explanation above, it can be understood that every expert is different in classifying the types of vocabulary but, the point is same that their classification are based on different side and aspect.

### **3. Aspects of Vocabulary**

Someone who brilliantly masters his/her English grammar is useless without the knowledge of vocabulary. It is because of the words are the basic in learning English. However, to know a word is a broader term, it is

needed to know several aspects of it. Ur (1991) describes the individual aspects in this order: form, grammar, collocation, meaning, word formation.

To know the *form* of a word means to know the *pronunciation* and *spelling* of a word (Ur, 1991). The other aspect is *grammar* if it is necessary, for example, when teaching irregular verbs teacher should present the other two forms, as well. Similarly, when teaching a noun with irregular plural form such as *woman*, teacher should teach the plural form immediately. Another important thing is teaching *collocations*, so that students know in what context they can use the word, for instance, verbs *do* and *make* can be used with different situations, we can say *do the shopping* but not *makes the shopping* (Ur, 1991).

The next aspect is *meaning* which can be divided into several categories. The most used are synonyms (*pretty - beautiful*), antonyms (*young - old*) and hyponyms (*lion, cat, zebra - animals*).

More advanced learners will probably deal with *word formation* in which creating new words by modification of the old ones, there are several ways how to form a new word such as compounding (*second-hand*), adding a prefix (*in/decisive*) or a suffix (*comfort/able*) etc.

The last basic thing is to know the *word class*; Ur (1991) distinguishes eight word classes:

1. nouns (sun, computer)
2. adjectives (long, happy)

3. pronouns (I, him)
4. numerals (first, two)
5. verbs (take, decide)
6. adverbs (always, never)
7. prepositions (on, by)
8. conjunctions (or, and)

#### **4. Vocabulary Knowledge**

Vocabulary knowledge is fundamental to reading comprehension; one can't understand text without knowing what most of the words mean. A wealth of research has documented the strength of the relationship between vocabulary and comprehension. The proportion of difficult words in a text is the single most powerful predictor of text difficulty, and a reader's general vocabulary knowledge is the single best predictor of how well that reader can understand text (Anderson & Freebody, 1981).

Nation (1990) offered eight aspects of word knowledge:

- (1) the spoken form of a word,
- (2) the written form of the word,
- (3) the grammatical behavior of the word,
- (5) the frequency of the word,
- (6) the stylistic register constraints of the word,
- (7) the conceptual meaning of the word, and

(8) the association the word has with other related word.

Qian's (2002) proposes that vocabulary knowledge comprises four intrinsically connected dimensions:

1) vocabulary size, which refers to the number of words of which a learner has at least some superficial knowledge of meaning;

2) depth of vocabulary knowledge, which includes all lexical characteristics, such as phonemic, graphemic, morphemic, syntactic, semantic, collocational, and phraseological properties, as well as frequency and register;

3) lexical organization, which refers to the storage, connection, and representation of words in the mental lexicon of a learner; and

4) automaticity of receptive-productive knowledge, which refers to all the fundamental processes through which access to word knowledge is achieved for both receptive and productive purposes, including phonological and orthographic encoding and decoding, access to structural and semantic features from the mental lexicon, lexical-semantic integration and representation, and morphological parsing and composing.

There are still researchers who have a similar view about vocabulary knowledge. Read (1989) and Qian (1999) contend that vocabulary knowledge should at least comprise two dimensions, which are vocabulary breadth, or size, and depth, or quality, of vocabulary knowledge. Vocabulary breadth refers to the number of words the meaning of which a learner has at least

some superficial knowledge. Depth of vocabulary knowledge refers to how well a learner knows a word.

## **5. Vocabulary Knowledge Breadth**

The breadth of vocabulary knowledge usually is represented as vocabulary size, which refers to the numbers of the words that the students know, rather than emphasizing on how well they know given words. Breadth of vocabulary refers to the size of the mental lexicon and is the number of words that have some level of meaning to the individual. However, breadth does not specifically address how well each of these words is known. It is a dimension defined by how many words have meaning for the individual (Anderson & Freebody, 1981).

Hirsh and Nation (1992) indicate that learners might need around 5,000 words to read a novel that had been written for English speakers. Put differently, for second language learners to achieve fluency in English, they need to gain at least 5,000 words, preferably 10,000 words (Nation, 2001). Nation (2001) explained that in order to understand 95% of reading content, readers have to know at least 4000 word families, including 2000 high-frequency words, 570 general academic words, at least 1000 technical words, and proper low-frequency word families. Nation believes students' reading comprehension will improve when their known words increase.

## 6. Learning vocabulary

Learning vocabulary is different with learning grammar. Thornburry (2007: 144) states that vocabulary cannot be taught. Instead, it can be presented, explained, included in all kind of activities an experienced in all manner of association. However vocabulary is ultimately learned by individual, not commonly taught by the teacher.

The teachers are not supposed to spoon-feed the learners by giving abundant material dealing with vocabulary. The teacher can play major role in motivating the learners to take vocabulary seriously and in giving them ideas how to learn it (Thornburry, 2007: 144)

According to Thornburry(2007) there are several things that the English learners must do successfully to learn vocabulary. Those are described as follows:

### a. Paying attention to form

It means that the learners need to pay attention to the constituent of words, their spelling, pronunciation and the way the words are stressed. For example the learners will be able to distinguish the word 'look' (noun) which means a vision and 'look' (verb) has meaning to see.

### b. Paying attention to meaning

That means the learners should pay attention the way word are similar or different in meaning, to the connotation of words, to their style and their association.

c. Being a good guesser

It is widely known as guessing meaning from context. The learners have to work out the meanings of unfamiliar words from their form and contextual clues. The students are not supposed to directly look the unfamiliar words up in the dictionary, but trying to guess the meaning is better.

d. Taking a risk and not afraid of making mistakes

This means the learners make the most limited resources and adopt strategies to cope when the right words simply do not come forth.

e. Organizing the learners' own learning

It can be done by, for example, keeping a systematic record of new words, using dictionary and other study aids resourcefully, using memorizing technique, and putting time aside for the spare work in language learning, such as receptive practice.

Based on the explanation, the students need to do at least those five things to success in learning vocabulary.

## **7. Evaluation in Vocabulary knowledge**

Testing vocabulary is needed to know about how students' vocabulary level. Testing vocabulary occurs in placement test or diagnostic tests to find out students' level of knowledge or in achievement test at the end of the school year (Thornbury, 2002: 130). Heaton (1990: 79) states that vocabulary tests are often connected with reading skill; here the researcher can test

everything together such as passive and active vocabulary, collocation and etc.

There are two kinds of vocabulary evaluation that can be used, namely recognition and production (Hughes, 1989: 147). Those are described as follows:

a. Recognition

This is type of vocabulary testing which the test takers are provided with several alternatives. It only needs to be recognized and chosen which one is appropriate with the question. This kind of multiple choice is recommended without to many doubtfulness and may involve a number of different operation as follows:

1) Synonyms

The test takers are supposed to choose the alternatives with has closest meaning to the words being asked. It is suggested that all options are the words that the candidates are expected to know.

2) Definitions

It is a recognition test type in which the test takers need to know the description of the word that being asked. Test writer needs to notice that all the option should have the same length.

3) Gap Filling

It is the test in which the test takers are required to fill the gap in a sentence that having certain context with available option. The test

writer needs to notice that the context should not contain itself words that the test takers are unlikely to know.

b. Production

It is a type of vocabulary testing productively that is so difficult and it is practically never attempted in proficiency test.

Several types of productive vocabulary testing are described as follows:

1) Pictures

This test are expected the test takers to write down the name of given pictures. This method of testing is restricted to concrete nouns which can be unambiguously drawn.

2) Definitions

This test method requires the test-takers to give a definition or a term of the clue that being given.

3) Gap Filling

This is a bit similar to the gap filling method in recognition vocabulary test, but there are no alternatives here. The test takers need to find the missing word by themselves. To avoid unexpected answer from the test takers, it is suggested to give the firs letter of the missing word or an indication of the number or letters.

To assess breath of vocabulary knowledge of the students in this research The Vocabulary Level Test whichis the revised version of nation's vocabulary Level Test (VLT) (Schmitt, Schmitt, &Clapham, 2001) will be

used. It is kind of recognition test that was developed by Paul Nation. The vocabulary size test (VST), called the Vocabulary Levels Test (VLT), was originally designed by Nation (1983, 1990) and used to measure learner's size of vocabulary knowledge. Nation (2001) referred to the revised version as a major improvement on the original test made by Schmitt et al. (2001).

According to Schmitt et al. (2001) Reflecting the distribution of word classes in English, the words from the stratified sample tended to fall into a 3 (noun): 2 (verb): 1 (adjective) ratio. This ratio was maintained in the test, with each section containing three noun clusters, two verb clusters and one adjective cluster.

Each cluster was written with the following considerations in mind:

- 1) The options in the format are words instead of definitions.
- 2) The definitions are kept short, so that there is a minimum of reading, allowing for more items to be taken within a given period of time.
- 3) Words are learned incrementally, and tests should aim to tap into partial lexical knowledge (Nagy *et al.*, 1985). The Levels Test was designed to do this. The option words in each cluster are chosen so that they have very different meanings. Thus, even if learners have only a minimal impression of a target word's meaning, they should be able to make the correct match.
- 4) The clusters are designed to minimize aids to guessing. The target words are in alphabetical order, and the definitions are in order of

length. In addition, the target words to be defined were selected randomly.

- 5) The words used in the definitions are always more frequent than the target words. The 2000 level words are defined with 1000 level words and, wherever possible, the target words at other levels are defined with words from the GSL (essentially the 2000 level) (for more details, see Nation, 1990: 264). This is obviously important as it is necessary to ensure that the ability to demonstrate knowledge of the target words is not compromised by a lack of knowledge of the defining words.
- 6) The word counts from which the target words were sampled typically give base forms. However, derived forms are sometimes the most frequent members of a word family. Therefore, the frequency of the members of each target word family was checked, and the most frequent one attached to the test. In the case of derivatives, affixes up to and including Level 5 of Bauer and Nation's (1993) hierarchy were allowed.
- 7) As much as possible, target words in each cluster begin with different letters and do not have similar orthographic forms. Likewise, similarities between the target words and words in their respective definitions were avoided whenever possible.

## **B. The Nature of Reading Comprehension**

### **1. Definition**

Reading is an important skill in learning activities. Students need to read in every lesson subject to know and to think about the subject related. But, reading is not just about read. In reading, students have to understand about what they read and also the content of passage, it called reading comprehension. Pang (2007: 5) defines reading comprehension as about understanding the written text. It is complex activity that involves both perception and thought. Reading consist of two related processes, word recognition and comprehension. Word recognition refers to the process of perceiving how written symbols correspond to one's spoken language. Comprehension is the process of making sense words, sentences and connected text. Readers typically make use of background knowledge, vocabulary, grammatical knowledge, experience with text and other strategies to help in understanding the text.

Reading comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. The words extracting and constructing are to emphasize both the importance and the insufficiency of the text as a determinant of reading comprehension. Comprehension entails three elements:

- a. The reader who is doing the comprehending which is all the capacities, abilities, knowledge, and experiences that a person bring to the act of reading.
- b. The text that is to be comprehended, which is broadly construed to include any printed text or electronic text.
- c. The activity in which comprehension is a part, which includes the purposes, processes, and consequences, associated the act of reading. (Snow, 2002:9).

In other hand, Sawyer (2006: 3) states that comprehension refers to an ability to understand the meaning or importance of something. Other researcher, Iqbal (2009: 1) says that reading comprehension is defined as the level of understanding the text. This understanding comes from the interaction between the words that are written and how the readers trigger knowledge outside the text.

Knowledge is the basic element for comprehension, because comprehension is ability to find, interpret, and use the ideas. Kustaryo (1988 cited in Ananto 2004: 12) says that reading with comprehension means understanding what has been read. It is an active thinking process that depends not only on comprehension skill but also on the experiences and prior knowledge. Comprehension involves understanding the vocabulary seeing the

relationship among words and concepts, organizing ideas, recognizing ideas, recognizing the author's purpose making judgment and evaluating.

From the theories above, the meaning of reading comprehension can be concluded as the degree to which the reader understand what has been read.

## **2. Purpose of Reading**

The main purposes of reading is searching for and getting information from books or text. In reading, students have to understand the idea, the context, and the meaning of the text on passage. According to Anderson (1989: 35) there are some purposes of reading:

a. Reading for details or facts.

The students read the text to get or know the inversion that have been done by the writer or solve the problems of the writer.

b. Reading for the main idea.

The students read the text (book) to know "Why the topic is good or interesting, then the problems on the story, and make summaries of the story".

c. Reading for the sequence or organization.

The students read the text to know “What is happening in each part of the story in every episode and solve the problems of the story”.

d. Reading to classify.

The students read the text to classify some information or actions of the writer in the text of paragraph.

e. Reading for inference.

The students read in order to find out the conclusion from the actions or the idea in the text.

f. Reading to compare or contrast.

The students read to compare the plot of the story or content whether having similarity with him self or even contrast.

### 3. Major Components of Reading Comprehension

There are some major components of reading comprehension. Donald, et al (1987: 31-38 in Ananto 2004: 15) state that one must first become familiar with the major component of reading, knowing that it will support the successful in comprehending the material. The reading comprehension process involves:

a. Decoding knowledge.

It refers to the knowledge readers use to determine the oral equivalent of a written word.

b. Vocabulary knowledge.

It is the knowledge one has about word meaning used to determine the appropriate meaning for a word in a particular text.

c. Syntactic knowledge.

Knowledge of sentence syntax or word order is also crucial for the comprehension process syntactic knowledge include knowledge of word order rules that determine grammatical function and sometimes the meaning and pronunciations of words.

d. Discourse Knowledge.

It refers to knowledge of language organization at units beyond the single sentence level, including knowledge of the structural organization of different type or writing.

e. Readiness Aspect.

Traditionally, reading readiness is the ability of students to benefit from initial reading instruction. Recently reading readiness also includes being ready to read and understand a particular selection.

f. Affective Aspect.

Affective Aspect in reading comprehension includes both interest and attitude. These increase motivation and facilitate reading comprehension.

#### 4. Evaluation in Reading Comprehension

Evaluation is needed to know the level of students in reading. According to Brown (2004: 188), there are some macro and micro skill representing spectrum of possibilities for objective in assessment of reading comprehension, as follow:

##### a. Macro Skill

- 1) Recognize the rhetorical forms of written discourse and their significant interpretation.
- 2) Recognize the communicative function in written text, according to form and purpose.
- 3) Infer the context that is not explicit by using background knowledge.
- 4) Infer link and connection between events, deduce, cause, and effect, detect such relation as main idea, supporting idea, new information, given information, given information generalization, and exemplification.
- 5) Distinguish between literal and implied meanings.
- 6) Detect cultural specific references and interpret them in content of appropriate culture schemata.

##### b. Micro Skills

- 1) Discriminate among the distinctive graphemes and orthography in English.
- 2) Process writing at an efficient rate of speed to suit the purpose.

- 3) Recognize a core of words and interpret word order patterns and significant.
- 4) Recognize grammatical word classes (verb, noun, adjective, etc.), system (tenses, agreement), pattern, rules, and elliptical forms.
- 5) Recognize the plural meaning may be expressed in different grammatical forms.
- 6) Recognize cohesive device in written discourse and their role in signaling the relationship among clauses.

The basic purpose of reading is that the readers can comprehend the text. This research focus in both macro and micro skill in which recognizing the communicative function of written texts, according to form and purpose; inferring the context that is not explicit by using background knowledge; inferring link and connection between events, deduce, cause, and effect, detect such relation as main idea, supporting idea, new information, given information, given information – generalization, and exemplification, recognizing a core of words and interpret word order patterns and significant. as the guidance of this research.

### **C. The Influence of Vocabulary Knowledge Breadth on Reading Comprehension.**

With regard to the influence of vocabulary knowledge breadth on reading comprehension, Hsin and Ming (2010: 77) state that a prevailing consensus had

been showed that vocabulary knowledge was a vital factor determine or influence one's ability. If a person's literacy was low, he or she would probably experience difficulty in acquiring the message or information from the text. The relationship between vocabulary knowledge and reading comprehension is complex and dynamic. Researchers have suggested several models to describe it.

Anderson and Freebody (1981) have three hypotheses which interpret the relationship between the vocabulary knowledge and reading comprehension, these three hypotheses are: instrumental, general aptitude, and general knowledge hypothesis. The instrumental hypothesis suggests that vocabulary is the critical factor for text comprehension and that there exists a cause-effect relationship between them. The more word meanings the reader knows, the more easily he/she understands the text. General aptitude hypothesis states that vocabulary knowledge is the orientation of the general language ability, and the general language ability is the decisive factor on reading comprehension. General knowledge hypothesis confirms that vocabulary knowledge is one of the sources of the general knowledge which is fundamental for comprehension.

Furthermore, Grabe (1991) asserts that one of the most important areas of research for reading comprehension is research in vocabulary development. Grabe and Stroller (2001) emphasize the role of large vocabulary knowledge in reading comprehension. It is stressed that students need to recognize a large number of words to become fluent readers. They advised teachers to help students better

understand the texts by explicitly teaching the key words of the text to be read in class.

Surely, researchers tend to agree that vocabulary knowledge is a major prerequisite and causal factor in comprehension and that there is a relationship between vocabulary size and reading comprehension. Some studies have used vocabulary size as a predictor variable for reading comprehension (Hu & Nation, 2000; Laufer 1992, 1997; Liu & Nation, 1985).

To estimate how many words the learners know in their vocabulary, breadth/size tests have been developed and researchers have found that breadth test of vocabulary knowledge can very well predict success in reading, writing, general proficiency, and academic achievement (Laufer & Goldstein, 2004; Nation & Meara, 2002). A number of studies (e.g., Al-Nujaid, 2003, as cited in Alsamadani, 2011; Koda, 1989; Laufer, 1992, 1996; Qian, 1999) have used scores on vocabulary size to predict levels of academic reading comprehension. Al-Nujaid (2003 as cited in Alsamadani, 2011), for example, found that there is a strong and significant relationship between vocabulary size and comprehension level. In study done by Laufer (1996), he investigated the relationship between the vocabulary knowledge and reading comprehension of 80 first-year university students of similar L1 backgrounds in Israel. He reported the correlation of .71 ( $p < .0001$ ) between students' scores on reading comprehension and on the Vocabulary Levels Test.

Qian (1999) found stronger correlations in his study of 44 Korean speakers and 33 Chinese speakers using version A of the VLT and the Reading Comprehension section from the TOEFL. The correlation between the two tests was .78. Beglar (1999) conducted an almost identical study to find the relationship between vocabulary size and reading comprehension. He used four versions of the 2,000 word level from the VLT for 496 Japanese high school students and four versions of the UWL from the same test for another 464 students. He found that scores on the Reading Comprehension subsection of the TOEFL test correlated with scores on versions A and B of the 2,000 word level at .66 and .62, respectively, and with scores on versions A and B of the UWL section at .67 and .71, respectively.

Zhang and Annual (2008) explored the role of vocabulary in reading comprehension. Thirty-seven secondary students of a school in Singapore participated in this study. The Vocabulary Levels Tests were used to measure students' vocabulary knowledge and some different measures were used to test their reading comprehension and summary abilities. Results suggest that students' vocabulary knowledge at the 2,000-word ( $r = .423$ ,  $p < .01$ ) and at the 3,000-word levels ( $r = .848$ ,  $p < .01$ ) correlated with their reading comprehension.

In fact, the relation of breadth of vocabulary knowledge with reading comprehension is recently paid much attention and viewed as a striking point by numerous ESL/EFL lexical and reading researchers who believe that the more

words the EFL/ESL readers know, the better their reading (e.g. Huang, 2001, 2004; Hu & Nation, 2000).

#### **D. Basic Assumption**

Vocabulary knowledge breadth is very important factor in order to know the meaning of words. It is one of major components in reading comprehension. Whereas, reading is an important skill in learning English that students have to understand the text that is read. It is called reading comprehension. Reading comprehension and vocabulary knowledge breadth that students have is different in each student, so it is important to know the influence of vocabulary knowledge breadth in students' reading comprehension.

#### **E. Hypothesis**

According to explanation above that vocabulary knowledge breadth can influence on reading comprehension, it can be taken an assumption that there is a positive influence of the vocabulary knowledge breadth on reading comprehension.