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INCREASING STUDENTS VOCABULARY IN EFL CLASS

	The Jury		

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ABSTRACT

Increasing students' vocabulary in E.F.L. Classroom.

After reviewing the literature, this work tries to show the importance of teaching vocabulary for students' literacy skills, especially, reading comprehension. Many researchers suggest that the greatest amount of vocabulary growth occurs through incidental word learning in wide reading, and, research indicates that vocabulary instruction is an important vehicle for vocabulary learning. (Anderson& Nagy, as cited in Harmon, 1992, p.306). Word knowledge is one of the best ways of successful reading and comprehension. "Reading enhancement correlates with reader's vocabulary" (Im, 1994, p.12). Therefore, today's language teachers and researchers have realized the important role of vocabulary in reading comprehension.

A survey carried out on 10th, 11th and 12th grade students, regarding their reading comprehension, shows that unknown words is one of the factors which influences their ability to read and comprehend a passage. It also shows that students feel the need to be instructed on strategy when encountering new words and consequently improving their vocabulary. This inhibits their understanding of a reading selection. As a result it is crucial that teachers equip students with methodological tools to be employed when they encounter unknown words.

There are a lot systematic approaches for discerning which skills and words a teacher should focus on and meaningful classroom activities to reinforce the words and strategies that teachers can use to help students increase their word knowledge. Finally research indicates that developing students' vocabulary correlates with success in all areas of curriculum (Edger, 1999, p.14). The success of vocabulary development depends on students' active process of learning and strategies used by teachers.

I. INTRODUCTION

Vocabulary is an important part of language learning and teaching. Students sometimes are considered to have reading problems when in fact they have vocabulary problems which inhibit them from reading and discussing a passage. Researchers have identified vocabulary development as a critical aspect of successful reading and have found reading instruction that focuses on growth of students' vocabulary can result in enhancing their abilities to infer the meaning (Rupley, Logan, Nichols, 1998, p. 52). As noted by Deneman, vocabulary is partially an outcome of comprehension skills and reading comprehension is partially an outcome of vocabulary (cited in Rupley, Logan & Nichols, 1998, p. 337). Although some scholars suggest that students through wide reading can acquire vocabulary incidentally, research shows that vocabulary instruction plays an important role in students' learning new words. Anderson and Nagy for example note that "direct instruction in word meaning is an important vehicle for vocabulary learning" (cited in Harmon, 1999, p. 306). Research also indicates the importance of developing students' knowledge of words. Since, as Ediger (1999) points out, "developing students' vocabulary skills correlates with success in all areas of curriculum," students with a wide range of vocabulary show a higher reading ability (p. 9).

Teachers generally understand the importance of teaching vocabulary and the need of encountering effective ways to enable students mastery in learning the word. As Alderson (1984) writes "It is essential that classroom teachers give more emphasis to exploring the most effective approaches for enhancing and solidifying EFL reader's vocabulary" (p.9). Anderson & Nagy (1992) state that word knowledge is highly correlated to successful reading comprehension and it is therefore crucial that teachers equip students with methodological tools to be employed upon encountering unknown words (p. 306).

Vocabulary development challenges all teachers and students, and its incorporation into the curriculum is essential for increasing students' literacy skills, not only in the EFL classroom but in all areas. There are several different ways that scholars define vocabulary development. Vocabulary development can include "providing extensive information to students about when and where to apply strategies, as well as information about the learning benefits produced by use of strategies" (Pressley, 1998, p. 211). Gunning (1996) conceptualises vocabulary development as a rich store of words, which allows us to transmit

knowledge with precision and imagination (p. 163). Finally, Harmon (1999) defines word learning as "employing multiple strategies to gain knowledge of new words, including making use of context, drawing on different types of content connections, doing word level analysis, synonyms" (p.304). While each of these definitions provides us with an important perspective, for the sake of this study, the definition of vocabulary development suggested by Roberts (1999) will be used. He writes that vocabulary development as instruction in word meanings must go beyond definitions and include experiences in which the students build relationships between new words and what they already know (p. 65).

There are many strategies through which vocabulary development can be encouraged by teachers and learned by students. This work will discuss the effectiveness of several of these strategies. This study will also address the importance of direct vocabulary teaching on students' literacy skills by attempting to answer the following research questions: How can students most effectively develop their vocabulary proficiency? What are the best ways of increasing students' ability in attacking unknown words?

Through a comprehensive review of the literature and an analysis of original data collected through a distributed survey, I will be able to discuss the relevance of vocabulary in the Cape Verdean context. I will also examine the difficulties that students experience in acquiring new vocabulary and improving their reading skills. I also hope to provide teachers enough information about this question to show the importance of adopting vocabulary instruction as a tool.

II. RATIONALE

It is clear that in order to communicate; students need to know a certain amount of words. Communication will break down if there is lack of vocabulary needed to express our thoughts. It is for this reason that the lack of vocabulary interferes in students' language learning. Students with low vocabulary knowledge are those most likely to show poor achievement across all curriculum areas. In the classroom, for example, students with limited vocabulary frequently do not score well on their written tests because of the simple fact that they are not able to understand unfamiliar words that appear in the instructions given. Consequently the possibility of earning a good grade is limited. If they do not master or know words, they cannot a have a conversation, write, listen or read in a foreign language. Research suggests that vocabulary difficulties also inhibit students' motivation and reduce the possibility that they will succeed in learning a foreign language.

Vocabulary is linked to all areas of learning. In order to develop students' skills, students need to know a certain amount of words. Research indicates that developing students' vocabulary skills correlates with success in all areas of curriculum (Ediger, 1999, p.8). This assumption is based on the principle that students who show excellent abilities in listening, reading, speaking or writing are those who possess larger vocabulary knowledge, and students with little or less vocabulary knowledge improve their listening, writing, reading or speaking ability after being exposed to vocabulary instruction (Anderson and Nagy, 1992, p. 306). Therefore, vocabulary instruction will facilitate better listening, speaking, reading and writing skills.

2.1 Vocabulary development correlates with other languages skills

a) Listening/speaking relate to vocabulary

Listening and speaking skills are closely interrelated. Students' oral vocabulary can provide teachers with information regarding their word knowledge, which helps find out instruction strategies for teachers. Relevant activities should be selected to enhance these skills through the use of vocabulary instruction. Ediger (1999) suggests that one way of doing this is to give students books to read and ask them to report what they have read. This

strategy requires students to present information clearly in order to facilitate listening comprehension. Ediger states, "Use of language during such activities helps pupils to achieve more optimal in speaking" (p. 8). He also recommends that students should be familiar with key word vocabulary in the report or inevitably they will tune out as unfamiliar vocabulary obstructs their comprehension. Another possibility of reinforcing this skill, for instance, is giving students a word to explain and some other words that they cannot use in their explanation and the audience must find out the word through the explanation given. For example, Bride is the word the audience must guess and words they cannot use in their description are: wedding/ marry/ wife/ church/ dress. It will be impossible to carry out these activities if students do not possess vocabulary knowledge (Ediger, p. 10). However, listening and speaking skills cannot and will not develop throughout lessons and activities unless students are familiar with key words throughout the text. Therefore, it is obvious that before introducing listening and speaking activities, teachers must think about words that students already know and those that they will probably encounter and not know. Students may also not know how to incorporate unfamiliar words into class activities. Certain words must be taught and time must be taken to help in students' understanding of the most important words which in their understanding, are essential for students to get the main ideas in the reading selection or in any class activities.

b) The relationship between writing/Spelling and vocabulary

There are direct correlations between student's writing and spelling skills when they receive vocabulary instruction. Gunning (1996) defines vocabulary development as a "rich store of words, which allows us to transmit knowledge with precision and imagination" (p.163). Research suggests that students with low vocabulary knowledge experience major difficulties in the process of writing and spelling, while students who have been exposed to vocabulary instruction frequently show improvement in their writing skills and are better able to express and convey their thoughts and feelings (Anderson and Nagy, 1992, p. 307). That is to say, students will do better in reading activities when they share good writing experiences, and if they show poor writing abilities they will have difficulties in expressing themselves in other aspects of communication. Students engaging in writing activities will develop their spelling skills. Having them write to express their feelings and thoughts will not only help students with their written expression but also their spoken, spelling, reading and comprehension vocabulary.

Research in developmental spelling has shown that words students spell correctly have patterns that make sense to students in the theory of how words are spelled. Research by Bear and Templeton (1998) suggest that "it is crucial to make the link between the spelling of word, its meaning in text and its structural relationship to other words" (p. 230). Teachers must encourage students to be curious about new words that they encounter in their reading for further word study. Teachers can help students with their spelling by introducing them to the element in word-bases, such as prefixes and suffixes and show them how the spelling of these elements influences the understanding of their meaning. Bear and Templeton (1996) "Importantly, spelling and vocabulary instruction come close together through sorting base words and suffixes. Students examine how the suffix -ment affects the meaning of a word, such as in agreement or movement" (as cited in Cunningham, 1998, p. 235). Having students instructed on word knowledge will improve their spelling and their understanding of spelling/meaning relationships. Meanings are conveyed through visual word recognition. From the words they already know students can form new words with similar meanings. "Thinking of a word that looks and sounds the same as a new word will help you quickly remember how to pronounce and spell the new word" (Cuningham, 1998, p. 203). Activities, which will help students increase their knowledge of the words, will be discussed in this work.

c) The relationship between Reading and vocabulary

Lack of vocabulary is one of the most important factors interfering in reading comprehension. Research indicates that students with poor vocabulary are less able to comprehend texts at grade level than their English classmates (August, et. al, 1999). For example, August, et al. write that students with limited vocabulary are likely to perform poorly on assessments in reading and comprehension and are at the risk of being diagnosed as learning disabled. These students are unable to read and understand a written text; as a result these students cannot discuss and interpret a passage. In this case, the possibility of succeeding on assessments is reduced. Studies have shown that teachers who look for auxiliary materials and strategies minimized students' vocabulary inadequacy in the classroom.

Studies on vocabulary instruction identify vocabulary knowledge as a major factor influencing reading ability and that comprehension can be improved as a result of teaching vocabulary (La Flamme, 1997, p. 374; Nagy, 1988). Students with a large range of word

knowledge possess better reading skills than those in the opposite position. Researching a link between reading skill and comprehension through vocabulary instruction, Rekrut (1996) found that the "inescapable bottom line is that good and frequent readers have better vocabularies than poorer or reluctant readers" (p. 66). Johnson and Ramussen (1998) similarly found that "There is a cyclical effect between vocabulary, reading and knowledge" (p. 204). Having students reading frequently is the best indirect way of acquiring words. The more students read, the more words they encounter, and the more familiarity they will have with new words in various contexts.

III. LITERATURE REVIEW

Vocabulary plays an important role in language teaching. All EFL teachers know that students must learn a great deal of words that are common to speakers and writers of English use to communicate. The importance of vocabulary teaching is one of the curriculum areas, which is recognized among teachers and students. In spite of this, vocabulary learning and teaching was given little or no attention in the past. Until the mid 1980s vocabulary was considered to be a "neglected aspect" and "poor relationship with EFL teaching and learning" (Maiguashca, 1993; Meara, 1981). Some authors said that it had been given too much attention before and students did not need help to learn words; they could do it alone.

Many factors underlie this belief. Allen (1983) stated that vocabulary was neglected in teachers' preparation programs because teachers felt that grammar should be emphasized more than vocabulary because it was already given too much attention in language classrooms. Allen also pointed out that specialists in methodology fear that students would make mistakes in sentence construction if too many words were learned before the basic grammar was mastered. Consequently, teachers were led to believe that it was best not to teach much vocabulary. They also believed that word meaning could be learned only through experience and cannot be adequately taught in a classroom.

All these facts are true, in the sense that if students know the meaning of the words without learning the sentence construction they will make mistakes when they put words together in a sentence. Furthermore, when you know a word you have to try it in a variety of situations until you get a full understanding of the word. Research suggests that students' understanding of the words depends on the number of times they encounter a word and the variety of contexts where it is embedded (Nation & Coady, 1988, p. 15). Carrell (1989) argues that vocabulary learning does not usually occur through a single reading context, no matter how rich the context is. Clearly students should be exposed to a word repeatedly, in a multiple contexts, to learn new vocabulary items (p. 554).

In the last two decades, vocabulary study has been given more importance and relevance in the classrooms as one of the most important areas of language teaching. There is no understandable language learning theory that explains the renewed interest in studying vocabulary in the last two decades. However, three recent developments in the theory and practice of language teaching may explain why a reassessment of the role that vocabulary can play in second language learning has occurred at this time. First, the notion that second language learners can develop their own internal grammar in predetermined stages. At the

same time, there has been the shift toward communicative methodologies that emphasize the use of language rather than the formal study of it. These two notions have led a view of language teaching as empowering students to communicate, and obviously, one of the best ways of increasing students' morale to communicate is to increase their vocabulary. Finally, research suggests that teachers tend to notice that non-native students have a significant disadvantage in their academic studies due to their low amount of vocabulary study. These reasons have had the effect of elevating the importance of vocabulary teaching. As teachers have rediscovered the importance of vocabulary teaching they have been forced to consider the ways in which foreign language learners best assimilate new words. nature second language (L2) words in a learner's long-term memory has been researched and found that first language (L1) mental lexicon can be applied to L2 acquisition. We can learn a second language in the same way we acquire our mother tongue. For example, Morgan (1986) argues that language may best be learned incidentally to substantive cognitive and emotional learning, as was the case when we learned our mother tongue. We learn isolated words and later we understand them in structured ways. Through repetition we memorize the meaning, which is associated with the sense of touch. That is why concrete words are easier to learn than abstract words. Therefore, the first stage of English vocabulary usually contains words for things in the classrooms. One reason for introducing classroom items is that it is easy to convey meanings of those words. By pointing out the object, students will associate what they hear with what they see. Allen (1983) stated that things in the classroom should be taught because success in learning often depends on the number of senses that are used in the learning process. There are a lot of things that surround teachers that can be used to teach foreign words in the classroom. Touching objects helps students in memorization and understand the meaning of the words. Allen reinforces the idea that when students touch something in addition to hearing and seeing the words, there is a strong chance that the word will be learned.

Literature on aspects of bilingualism seems to show that there is interaction between the lexicons of the languages in one user. Albert & Obler (1978) confirm that words in one language and their translation equivalents in the other (when such exist), are related in the brain in a non-random way (p. 246). Therefore, L2 can be learned based on the same principle as L1.

3.1 The methodological principle of L2 teaching and learning

Literature says that the acquisition of a word goes beyond its definition or context. Carter and McCarthy (1988) regard an L2 word as having been acquired by a learner when a) its meaning can be recognized and understood (rather than guessed at), both in and out of context and b) it can be used naturally and appropriately to situation. Learning then covers the conscious strategies employed to lead to acquisition. From this point of view, learning is a process and acquisition is the end result. It is also necessary to consider the distinction between productive and receptive use of vocabulary. Carter and McCarthy defend that students gain receptive control of new words before active control. They also defend that receptive acquisition precedes productive acquisition either for L1 or L2 acquirers.

The definition of acquisition is completely different from what happen in the classroom. Normally, students are required to say the words whose meanings are completely new to them in their reading and the teachers try to say the words when they cannot get the meaning from the context. According to the principle of acquisition, this does not represent any evidence of acquisition. It is necessary that students master the words in all dimensions before acquiring them. Carter and McCarthy (1988) say that many vocabulary items never become part of productive capacity but remain part of receptive competence (p. 84). So acquisition of individual items consists first of comprehension, then (for some items only) of comprehension plus production.

IV. COMPREHENSION SUCCESS

Research done on direct vocabulary instruction of student's comprehension reveals that vocabulary instruction is one of the most important factors for increasing student's comprehension. Blachowicz (1999) says that when we examine the relationship between vocabulary knowledge and reading comprehension we typically find a very high correlation (p. 213). Yap (1979) says that causal links probably do exist between vocabulary and comprehension and that vocabulary is likely to be the predominant causal factor (p. 58). This paper is trying to show that there is a strong association between vocabulary instruction and student's comprehension. "To be able to understand a text it requires knowing the meaning of the word and it is through the words that students can reach their stores of knowledge and understanding of the text. Student's mental dictionary depends on the frequency of exposure to certain words in context" (Carter & McCarthy, 1988, p. 39). Therefore, students who possess a limited number of vocabulary words will most likely have problems in deciphering word meaning throughout their reading experiences. Comprehension of a text largely depends on the portion of unknown key words in a passage. Blachowicz points out that a large number of unknown words in a predictable text should not obstruct comprehension; whereas, even a few unknown key concepts can severely disrupt comprehension (p. 215). Consequently, the more words students know, the better the possibility to understand and enjoy what they are reading. Carter & McCarthy (1998) indicate that vocabulary knowledge would seem to be the most clearly identifiable subcomponent of the ability to read.

Harmon (1999) defines comprehension as a process in which the reader constructs meaning while or after interacting with the text through the combination of prior knowledge and previous experience, such as information in the text, the stance taken in relationship to the text and immediate, remembered, or anticipated social interactions and communication (p. 305). So it is a complex skill. Sometimes, when students have comprehension problems it is due to the amount of unknown words they encounter. Therefore, teachers should put more emphasis on teaching students specific strategies that enable them to attack unknown words independently. Ewers and Brownson (1999) research on vocabulary acquisition advocates that vocabulary knowledge has consistently been found to be a strong predictor of reading comprehension (p. 11).

Blackowicz (1999) states that when students fail to show good comprehension and print skills, the problem can be traced to lack of familiarity with words (p. 214). In this case, teachers necessarily must teach new words before students start reading a passage. It would be

more beneficial for students, if teachers provided them with abilities that enable the students to get the meaning of unknown words independently. Graves, Juel & Graves (1998) state that strategic readers need the ability to self-select strategies and derive meaning from texts of various genres (p.935). They also state that strategic readers are risk takers who interact with the text and apply decoding strategies to increase comprehension.

4.1. What is a word? - Word and word form

Research says that there are several aspects of lexis items that need to be taken into consideration regarding vocabulary teaching. Gairns and Redman (1986) state that learners can only achieve a clear and comprehensive understanding of lexical items through an exhaustive analysis of the conceptual boundaries that separate it from related items (p. 16). These aspects have to do with complex function and interaction of the words as lexemes. A lexeme is the abstract unit, which underlies some of the variants observed in connection with words (Carter, 1998, p.7). For example, run is the lexeme for the words ran, running, runner and runs. Each lexeme stands on its own as individual word although it has several different word forms. Carter defines a word as any sequence of letters bounded on either side by a space or punctuation mark (p. 4). Bloomfield (1993) stresses the stability of a word by the fact that it can stand on its own as a reply to a question or as a statement of exclamation. Lexemes in a certain way help in understanding the polysemy. Carter (1998) defines polysemy as the existence of several meanings in an individual word (p.12). For instance, the word *head* can be associated with head of a person or head of an organization. There is not any approximate link between the words and their meanings. Therefore, understanding the meaning depends on the students' familiarity with the words.

McCarthy (1990) states that hyponymy offers an organizing principle for vocabulary teaching and learning (p.19). Hyponymy is the relationship of inclusion; it organizes words into taxonomies, or hierarchical tree-type diagrams. Gairns (1986) in the hyponymy relation, "orange" would be the hyponymy of "fruit" which is a superordinate. In the same way, "cow," "horse," "pig" and "dog" are all hyponymy of the superordinate "animal." The importance of the hyponymy in vocabulary teaching is the contribution it gives in classifying the items according to their categories. Classifying or categorizing exercises are useful ways to reinforce student understanding of vocabulary words. This will be discussed later on this paper.

Other concepts related to the word are morpheme and collocation. Morpheme is a smallest unit in a word. When it is added in a word it includes its own meaning. For example, the word *cook* possesses two morphemes - cook and *ed*. By adding *ed* to the word, cook changes its meaning and tense.

Collocation is a term used to describe a group of words that occur repeatedly in a language. McCarthy (1990) states "the relationship of collocation is fundamental in the study of vocabulary; it is a marriage contract between words, and some words are more firmly married to each other than others" (p.12). Knowledge of collocation is knowledge of which words are most likely to occur together. For instance, "beige" collocates with "car" but not with "hair", just as "blond" collocates with "hair" but not with "car." Knowledge of collocational appropriateness is part of vocabulary competence and fluency.

4.2. Level of word knowledge

Knowing words requires knowledge of different aspects of what is said to fully get the sense of the words. Nation (1990) defines productive knowledge of a word as "knowing how to pronounce the word, how to write and spell it, how to use it in correct grammatical patterns along with the words it collocates" (p. 32). Similarly, Ryder and Graves (1994) discuss three levels of words students know (and learn): unknown words, words with which students are acquainted, and words whose meanings are firmly established. Unknown words are those that are completely alien to the student. Acquaintance words are those with which the student is familiar. Although they may have seen it before, they are unable to transfer the word into other contexts and uses. Firmly grounded words are ones that the student recognizes, are part of their oral vocabulary, and are known in such depth that they can use them in a variety of contexts and associate them with range of experiences (Calfee & Drum, 1986). Therefore knowing a word in the fullest sense goes beyond simply being able to define it or get the gist of it from the contexts. Active vocabulary growth is evidenced when students elaborate on words and demonstrate meaning in varied contexts. According to Dale and O'Rourke (1971) students who encounter new words in the text will say to themselves: "I never saw it before, I have heard of it, but don't know what it means, I recognise it in the text – it has something to do with...or I know it" (as cited in Gunning, 1996, p. 46). This shows that even when a student recognises an unfamiliar word, there are different degrees of knowledge. After students are able to read and sound out unfamiliar words, they should learn the word's meaning through rich, contextualized activities.

In order for students to truly acquire and remember new words that will become part of their oral and written vocabulary, they must have multiple exposures to the new words in assorted contexts (Beck, Mckeown & Omanson, 1987, p. 509). They also suggest that students encounter new words at least ten times; however, Stahl and Fairbanks (1996) found that as little as two exposures were effective (p. 73). Multiple exposures are due to the fact that students encounter these new words in a variety of different meaningful contexts. Polysemy, the existence of several meanings of a word, can produce meanings, which are close or distant. This can be semantically problematic for students when a word is presented in only one form. Multiple exposures to the word in different contexts would allow students to discern which definition was being applied.

J. Richards in The Role of Vocabulary Teaching (1976) points out six principles, which show to what extent knowledge of a word exist (p. 79). The first is the knowledge of the frequency of the word in the language. To know a word is to know the probability of encountering that word in print. Richards said that some words are more frequently used in speech than in writing and teachers should be aware of this when determining student's word knowledge. The second one is the knowledge of the register of words. Students must know the limitations of usage on words. This has to do with colloquial English usage of words verses slang usage. Third, knowledge of collocation is having an awareness of syntactic behaviour associated with the word and conjoining words. The fourth principle is that students who truly know a word, understand its morphology, meaning, form of a word and the relate derivations that are formed from the base word. Fifth, the understanding of semantics, which implies the understanding of what a word denotes as well as words that are analogous, opposite, and similar in connotation. Sixth, is the knowledge of polysemy, which means the understanding of various meanings associated with a word.

4.3. Word selection

When a teacher selects lexical items to teach, they should be useful. But determining which item is useful depends on the teaching situation, which is always different. One item in one context may be quite useless in another. Gairns (1986) states that the relative importance you attach to the various criteria of selecting a word depends on your own teaching situation (p.57). There are a lot of systematic rules and guidelines for choosing words for vocabulary instruction. Teachers face great problems in teaching words due to the time constraint and the number of students they have in the classroom. However, there are a lot of benefits for

including vocabulary development strategies in the content instruction. It is clear that rote memorization and dictionary definitions will not help much in retention, and in order to learn the words, they must be presented in different and meaningful contexts. When choosing words, select words based on content, students, and time (Misulis, 1999, p. 26). Words that are selected should be important to developing an understanding of related content in other subject areas. "There is a direct association between the knowledge of a word meanings and understanding of what is to be learnt" (Misulis, 1999, p. 25). This will make the meanings of words relevant to the context they appear and also help students build connections between what they know and new vocabulary. Misulis reinforces that students will then encounter new words in a confirmatory and relevant manner rather than as unknown words in an irrelevant piece of text. It is also important to help students make associations between the vocabulary words they are learning and their prior knowledge. If teachers select words according to students' prior knowledge and connection with words, it will increase students' interest in learning the new words. "It is essential to relate new words to experiences that students may have had" (Gunning, 1996, p. 166). It also leads students to better retention of what is learned. Consequently, the selection of words is based on the principle that students' previous knowledge will contribute to their understanding of the new content being read. "Given the content to be learnt, the nature of the learners themselves, and the anticipated time for a unit of study, the teacher makes decisions related to what is deemed a reasonable number of words for instruction" (Misulis, 1999, p. 26). It also includes what students already know, prior knowledge, when initiating and implementing vocabulary development. After assessing prior knowledge, teachers can provide students with synonyms, antonyms, analogies, homophones and homonyms of the words already known. Having students brainstorm, categorize, organize, or analyze can help them in understanding the meaning of the words in relation to other words.

Another aspect of selecting words for study is to choose words relate to students content areas. La Flamme (1997) suggests that vocabulary instruction must be formalized, structured, and related in a meaningful way to the content that students are learning (p. 378). Words selected must have a purpose for students to learn them. They will feel more comfortable when they see that what they are learning is something useful for them not only in the classroom but also in their everyday activities. If the word selected does not match a student's need, the probability of being retained is very slim.

Teachers can give students a list of vocabulary words to look up in the dictionary. It is normal because students can practice their dictionary skills and spelling; however, there is a tendency for them to memorize words and definitions. So in order to learn the words they must be presented in meaningful ways. Surely, one of the ways of presenting words for students is through their content areas. "Vocabulary words should be selected that reflect students' learning needs in light of the content to be studied" (Misulis, 1999, p. 26). Students' learning needs are very important for understanding and retention of the words that contribute to content learning in all subject areas.

4.4. What to teach?

Choosing words to incorporate into vocabulary instruction has not until very recently been established, but some researchers as Leu & Kinzer (1999) suggest three categories of words that should be taught, they are function words, content words and content- specific words.

Function words are the "glue" words of a sentence, meaning that they are often articles (a, an, the), conjunctions (and, but or), prepositions (at, into, over), and auxiliary verbs (could run, had snowed) (p. 335). If function words "are taught out of context, they can be difficult for young children to conceptualize because the concepts they represent are not concrete" (Leu & Kinzer, 1999, p. 335). Like other researchers, Leu & Kinzer advocate teaching content words such as nouns, pronouns, verbs, adjectives and adverbs in context. It is the only way that meaning and usage of key content words can be clarified. Last are content-specific words. Content-specific words "always have specialized meanings within a particular subject area and must be learned within the context of that area" (p.337). For example, the words amendment, succession, and ratification all are content specific to history and should be taught in context because of the probability of encountering these words on their history test.

Another way of choosing words to incorporate into vocabulary instructions is students' self-selection of words. Barr & Johnson (1997) suggest several ideas for continually developing vocabulary. They have shown "that students self-selection of words is an important factor in vocabulary development" (p.129). Students' interest and curiosity in words can significantly contribute to word development. They are much more eager to know words that they have heard or seen before. Barr & Johnson also suggest creating direct experiences to learn new words. They state, "Young children learn best if they can experience the meaning of a word" (p.130). This assumptions is based on the principle of L1 acquisition which advocates that learning or reading a word will be more effective if we have

direct experience with it, adding the sense of seeing and feeling it. Allen (1983) reinforces the idea that when students touch something in addition to hearing and seeing the words that name it, there is a strong chance that the word will be learned.

White, Sowell, and Yanagihara (1989) analyzed the words in the Carroll et al. (1971) and found that 20 prefixes accounted for 97% of the prefixed words. Prefixes are chunks at the front of words that have predictable pronunciations and spellings. The possibility of encountering prefixes and their word parts in almost every single sentence, require their incorporation into vocabulary instruction. They seem advantageous to students' vocabulary development. According to the above study, four prefixes -un, -re, in- and dis-, account for 58% of all prefixed words. The prefixes accounting for the other 39% of the words were: en-, em-,non-, in-, im-, over-, mis-, sub-, pre-, inter-, fore-, de-, trans-, super-, semi-,ant-,mid-, and under-. Suffix instruction is also important for students to understand how they can change the word from a verb form to a noun form, as seen with the change of frustrated to frustration. Teaching the suffixes -ly, -er, -or, - ion,-tion,-ible.-able,-al,-y,-nes,-ity, and ment accounts for 87% of suffixed words. While, the suffixes,-s,-es,-ed, and -ing account for 65% of the suffixed words. The remaining suffixes, -ic,-ous,-en,-ive,-ful, and -less account for less than 1% of the suffixed words. This information is important because students will profit from explicit instruction with the common prefixes and suffixes. White, Sowell, and Yanagihara (1989) estimated that "the average third grader would encounter 230 words, the meaning of which would be obvious if the base word and the four most common prefixes and suffixes were known" (p. 193-194).

V. DIRECT INSTRUCTIONAL STRATEGIES

When the students find unknown words in a reading passage it is clearly an opportunity for them to learn the new words and extend their vocabulary knowledge and consequently construct the meaning of the text given. Unfortunately, many of them do not possess strategies that skilled readers already possess. So, they need to be taught these strategies. Teachers can help students to increase their motivation by showing them the purposes of learning vocabulary strategies. Roberts (1999) reinforces the purpose of strategies in helping them understand why they should implement vocabulary strategies when they are experiencing difficulties making the meaning of words (p. 68). Research also emphasizes the importance of teaching students to use cognitive skills to enhance learning. There are several direct strategic skills that students can learn to use effectively, such as contextual analysis, structural analysis, semantic analysis and other less formal strategies such as definitional approaches.

5.1 Contextual analysis

Carnine, Silbert & Kameenui (1990) defines contextual analysis of a sentence surrounding an unknown word to help the reader determine the meaning of the unknown word. Contextual clues include syntactical analysis where students must use their knowledge of sentence structure to figure out the meaning of unknown words, so contextual clues include syntactical analysis. Providing student with the contextual analysis skill and strategy is supported by many researches due to its importance. It permits students to get the meaning of many unknown words that they will encounter. Research suggests that "students whose vocabularies are most in need of being increased are least likely to be able to get information from context" (Goerss, Beck, & McKeown, 1999, p. 153). Context clues can be evident in the text, but as Gunning (1996) says students may fail to take advantage of them (p. 146). Nagy, Anderson & Herman (1987) "estimated that the average reader is able to use context successfully only 5 and 20 percent of the time" (p.146). However, Nation (1990) states that "once learners know around two or three thousand words, they can use reading skills they have developed to infer the meaning of unknown words that they meet" (p. 60). Students will be more capable of getting the meaning of the word from context if they are instructed on it. According to a study conducted analysing how students guess the words from the context, "There is no question that learning from the context is an important avenue of vocabulary

growth and that it deserves attention and practice in the classroom" (Nagy, 1988-89, p.7). Their studies indicated that a large proportion of unknown words (at least 80%) can be successfully dealt with using the following strategy. Teachers begin instruction by having students look closely at the unknown word; next they look at its immediate context, and then take a much broader view of how the clause containing the words relates to others clauses, sentences or paragraphs. Sternberg and Powell (1983) indicated a three-step process where students can use context to determine meaning (as cited in Gunning, 1996, p, 142). First is selective encoding where students gather information from the sentence that will help them to construct meaning for unknown word. The second step is selective combination, combining the relevant clues into a tentative definition. Last is selective comparison where students use their past experience to help determine meaning for substitution. Carnine, Silbert & Kameeunui (1990) suggest strategies similar to the one above. They identify three steps where students identify unknown words, find words in the surrounding context that helps reveal the meaning, and finally students restate the sentence using a substitution word. After oriented practice with these strategies, students will be able to practice independently with unknown words.

Context is far more helpful than a dictionary definition; it teaches students the correct usage and meaning of the word in a sentence. Goodman (1965) found that "students correctly identified more words meaning when they were presented in context rather than isolation" (p.52). Contextual clues include different parts of a sentence, surrounding sentences, or paragraph to discern the meaning. Gunning (1996) points out several types of context clues students can look for in sentences. The first is explicit information or definition, where the unknown word is directly defined in the sentence preceding or following the word. The second are appositives. Appositives restate or redefine the unfamiliar word. Synonyms and examples are two other ways to infer meaning from the context. Other ways to use context clues are: comparison and contrast, classification and experience. Last are function indicators where context provides clues to meaning by elaborating on the words' function, purpose or use. Contextual analysis can be used in the classroom through different direct and structured activities.

Another component of contextual analysis is the syntactical analysis. It can be used to strengthen students' word attack skills through an understanding of language. Syntax as defined by Webster's dictionary (1997) is "the way in which words are put together to form phrases, clauses or sentences" (p. 734). The knowledge of sentence structure is an important instrument for deciphering unknown words because at first glance the learner might not

recognize the word, but one's knowledge of sentence structure can help determine the meaning. Rupley, Logan & Nichols (1998) provide a description of the importance of syntax in vocabulary development, "Randy became very nervous as the doctor's assistant approached him with the sphygmomanometer" (p. 337). The context gives us the setting of the event. However, none of the context clues are helpful here to infer meaning of the unknown word. Rupley, Logan & Nichols state that when the context is not enough to derive meaning from unknown word skilled readers use their language knowledge to help in inferring meaning (p. 336). If a student understands the syntax, he or she will be able to discern that "sphygmomanometer" is a noun, a thing. Only an understanding of syntax would permit him to determine its part of speech and consequently to know that the object is a noun. And that in the space provided neither verb, adjective, pronoun nor could adverb fit there. Only an understanding of syntax can provide prior clue necessary for completion. "Most studies found syntactic factors to be highly related to reading comprehension, second only to those of vocabulary" (Chall, 1983, p. 198).

Ways of implementing vocabulary in the classroom

There are many different ways of developing vocabulary in the classroom. The activities used by teachers must be useful and should stimulate students' interest and background. Research suggests that students need multiple exposures to new words. Barr & Johnson (1997) suggest thirteen exposures to a word are needed to learn new vocabulary (p.129). Therefore new words should be developed before, during and after the reading text. One way to have students demonstrate their reading comprehension using words from the text is to have students construct an outline of important concepts from the text. Teachers should teach them the idea of main concepts and subordinate ideas that relate directly to one another. Another idea for application within the classroom is to preface each reading assignment by asking students to look and select words they want to know more about. Maryann Manning (1999) suggests having students act as etymologists. Students select a word they like to know more about, propose the origin and meanings based on Greek and Latin roots, and give examples of the word in context. Students then vote on the correct definitions of the word. After review of correct definitions, students record words in a personal dictionary (p.107).

5.2. Literature

Teaching vocabulary in the context of literature is very helpful in classroom activities "Without teacher attention and instruction to to improve students' comprehension. terminology, students' comprehension will necessarily suffer. For this reason, considerable attention to vocabulary development is basic to effective instruction in the content areas" (Dishner, Bean & Readance, 1981, p. 137). Dole, Sloan & Trathen (1995) conducted a study within tenth grade classroom. The students were reading, The Secret Life of Walter Mitty. The teacher asked the students to use three criteria for selecting important words from a chapter in the book: the word must not be established in their vocabulary, the word must be the one that is used in the selection, and the word must accurately describe a key character, place, theme or event. The students were asked to underline and predict the meanings of these words in the text as they read. They were also instructed to look up the words in the dictionary and then select the definition appropriate to the context. The following day, the vocabulary words that the students had chosen were discussed and integrated into instruction. Through scaffolding and guided practise students were able to independently use the strategy for selection of key words, which may obstruct comprehension.

5.3. Possible sentences

Moore and Arthur (1981) suggest using a method called *possible sentences*, which help the student to independently identify the meaning and relationships of unfamiliar words in content reading. In the first step of *possible sentences* the teacher selects key terms of a passage that are defined by surrounding sentences. The new vocabulary words, in their sentences are presented to the class, and written on the blackboard. In step two, the students pair two words in the list, and write *possible sentences* for each word as it is connected to the other. Step three requires having students read the passage checking for appropriate usage of the target vocabulary words. Last, students evaluate definitions, and eventually modify and produce original sentences using the words correctly (as cited in Dishner, Bean & Readence, and p.141). Moore and Arthur state some key components related to the implementation of the *possible sentences* strategy. He says that when students are choosing target words they, "must comprise key vocabulary with clear definition context" (p. 139). Also, the credibility of each student's sentence "Suggests that the students' conceptual backgrounds be appropriate for the passage and that the accuracy of the students' final sentence provides evidence that the

meaning and the relationships of the words were identified correctly" (140). *Possible sentence* is a strategy that embeds vocabulary development and comprehension in content passages.

5.4. Context strategy

Joan Gipe (1980) created a strategy called *context strategy*, where students use context clues in applying word meaning to unknown words (as cited in Barr & Johnson, 1997). Context strategy "encourages students to integrate information across sentences and at the same time incorporates the definition of the target word" (116). This strategy requires that the teacher chooses target words from a selected passage and generate four sentences ranging from the more obscure usage to the most precise. Gipe (1980) suggests that initially teachers use a sentence from the passage so that concepts can "be used to further link vocabulary learning to text comprehension" (p.118). Teachers ask students to predict the definition of the words after they have reviewed the four sentences. This strategy is time consuming because a lot of time is spent on each word; however, the multiple exposures, student involvement and the words taken from the text are very important for vocabulary development and retention.

5.4.1. Knowledge Rating

Knowledge Rating is used to establish word learning. Barr & Johnson (1997) state that "students learn to self- assess their level of word knowledge so they are better prepared to comprehend text" (p.116). The teacher is responsible to choose the words from the text that might either enhance or inhibit students' comprehension. Students are given a list of words and asked to rate their level of word knowledge by using the following statements: I have no idea, I have seen and heard the word, I can define the word, or I can use it in speaking and writing. After the students have completed the chart, the teacher will have a clear idea which words he or she needs to discuss and develop before students read the text. If the teacher stimulates class discussions about the new word certainly it will be an opportunity for students to express their understanding or lack of understanding of the word before they read. "Knowledge rating is designed to infuse responsibility and develop word consciousness in students" (Barr& Johnson, 1997, p. 116).

5.4.2. Vocab-O-Gram

Blachowicz (1986) developed a strategy called the *vocab-O –Gram*. It is used before beginning a new unit, text, or story. When using this strategy students "are going beyond the definition of the word to consider its application in text and are engaged in much higher thinking about words and their relationship to text" (as cited in Barr & Johson, 1997, p. 127-128). The teacher selects nine key words from the text that students will use to predict the plot of the story. Students must place each word in a box labelled: Setting, characters, problem, actions / events and resolution. Students will place the words according to their knowledge of story structure and their familiarity with the words. After students have made their predictions the class will read the text to confirm or change predictions about the words.

5.4.3 K-W-L

Similar to the vocab-O-Grams, the K-W-L chart is an acronym for know - want to know - what have I learned. The K-W-L chart is a great way to introduce new vocabulary to students, while increasing comprehension. It "emphasizes students prior knowledge, categorizes their ideas, encourages them to develop questions for reading, directs them to seek answer to their questions and determines sources to search for answers" (Barr & Johnson, 1997, p. 135). After introducing a new topic to the class, the teacher asks students what they know about the concept. For instance, if you were to begin a lesson on mammals, you may ask the students what they already know about mammals. The class would generate a comprehensive list of information pertaining to mammals. The teacher may elicit information by introducing words such as warm-blooded, or vertebrates." After introducing the words students can begin to expand their knowledge of mammals while acquiring new vocabulary. Before reading, the class also fills in the section that asks; what do I want to know the students' interest is raised and they begin to produce questions they want answered pertaining to mammals. After the lesson, and after the class has found the answers to their questions (w -want to know) the students fill in L-what I learned. Whereby they demonstrate new vocabulary, and a solid grasp on the new concept.

5.4.4 Semantic Cues

Semantic, as defined by Webster's dictionary (1997) is "the study of meaning in language" (p.664). Gunning (1996) also defines semantics as "words that have special meanings that have to be learned if the words are to be understood fully" (p.187). It is sometimes very difficult to select words appropriately for students due to generalized meaning that words may present. Dufficy (1996) says that some single word forms can have a lot of related meanings; some words have the same form but have totally different meanings in different contexts, different words sometimes share a general meaning sense, and some words do not have a set of opposites (p.11). Several important features such as homographs, homophones, synonyms, antonyms, figurative language, multiple meanings, connotation, and denotation will be discussed in this section.

According to Gunning (1996) homographs are two or more words that have the same spelling but different origins and may have the same or different pronunciations. He gave an example of "word bank" that may mean a place where the money is stored or the side ways slope of a surface along a curve. If the context is not provided here the meaning may be confusing for the students. We know that in the English language many word forms occur in different contexts with different meanings. Gunning (1996) also says that homographs make the spelling easier but reading more difficult (p. 188). There are some homographs that have different pronunciations with the same spelling: lead, bow, sow, dove, sewer, desert lead and read. Their meaning and pronunciation are completely different in spite of having the same spelling. Giving students more reading activities they will be used to the variation of the same spelled words with different meanings, and consequently learn the importance of relying on contextual clues. Research suggests, "learning a new word from an old word is more difficult than learning new meaning for a new word" (Gunning, p. 188). Consequently, students need guided practice for recognizing and developing awareness for homographs.

Homophones "are words that are pronounced the same but differ in spelling and meaning and often have different origins as well" (Gunning, p. 188). For example, there their, they're, principal, principle, stationary, stationary, your, you're, whether, weather and two, to and too. These words are confusing for students because they have different spellings but have the same sounds. Here context also will provide the reader with adequate meaning.

Synonyms and antonyms are important components of semantical analysis for vocabulary development. Synonyms can help students to get the meaning of the new words from old words. Synonyms are not interchangeable in all contexts, but in most cases, where

they are substituted, the overall meanings of the sentences remain unchangeable. Barr & Johnson (1997) say in using synonym and antonym clues an easier word is used to define the more difficult target word (p. 131). For example, the word *begin* has multiple synonyms, such as *start*, *commence*, *originate* and *initiate*. It also can be define by its antonyms: *end*, *close*, *terminate conclusion finish* and *stop*. By giving students an opportunity to explore new synonyms and antonyms of old words, the connection between prior knowledge and new knowledge will be more easily associated. Although every synonym and antonym may not have the same contextual meaning and may not be entirely interchangeable. Carnine, Silbert &Kameenui (1990) say that initial synonyms and antonyms do not have to be precise. They must, however, be designed to give students an approximate meaning that can be redefined as they encounter the word in later reading (p. 139). Synonyms should be introduced carefully. Students must know that synonyms are new words which correlate to old words, and that new vocabulary is being explained by expanding on existing knowledge of old words.

Antonyms can also help student to understand better a familiar word by introducing its opposite meaning. When antonyms are taught along with synonyms as strategy for vocabulary development, students will expand their word knowledge. Rubin (1983) says that antonyms make students' writing clearer and more expressive (p. 83). Antonyms are an effective strategy to teach word meaning. They can also be used as "non examples" of words. For example, a lesson might include showing students a picture of something white in order to teach the colour black. White would be a "negative" or "non example" used to explain black. Cunningham (1998) suggests that teachers should "rely on examples more than abstract principles or definitions and begin with familiar words" (p. 210).

5.5. Semantical analysis

Semantical analysis includes two classroom activities: semantic feature analysis, semantic mapping, synonym substitution and mnemonic method. Each of these word learning activities is designed to build on words that students already know.

5.5.1. Semantic feature analysis

Semantic feature analysis as defined by Rekrut (1996) as a way of teaching significant concepts and vocabulary of a passage by developing a relationship chart (p. 68). Normally semantic feature analysis is applied before students start reading to help them establish the meaning between words that are closely related. The teacher selects the key vocabulary

words, differentiating between superordinate (across) and subordinate (down) terms. Next he or she should elicit a discussion about features or characteristics amongst the words. Rekrut suggests that the discussion should alert the students to the relationships among general and specific concepts, and focus their attention on related new vocabulary (p. 68). For example, if a teacher is about to begin a lesson on volcanoes, he or she might begin the lesson by having students participate in creating semantic feature analysis. The superordinate terms, such as magna, lava, eruption, earthquake, pressure and avalanche on the left side of the chart; whereas, the subordinate terms, such as shockwaves, caused destruction, flows down mountains, blast, explosions, melted rock, pushing, pressing, landslide, barrage would appear across the top of the chart. The students would then complete the chart with positive or negative signs that would suggest the presence or absence of each feature according to the terms. After reading the text, teacher should encourage the students to make changes, additions and corrections in the chart. By using semantic feature students create graphic representation of the words relate to suprordinate terms. This strategy is useful for teachers because it can be used as a means to assess student's knowledge of the subject matter. However after a guided practice, teachers should allow students to complete the matrix independently.

5.5.2. Semantic mapping (webbing)

Semantic mapping "is a device for organizing information graphically according to categories" (Gunning, 1996, p. 169). Lots of strategic activities are considered to be in the field of semantic mapping: graphic organizing, brainstorming, or webbing. In regards to the same goal they seek to accomplish. Rekrut (1996) says that they seek to represent an important concept and have students list as many related words as possible, putting them in broad categories (p. 68). Semantic webbing is sometimes used as a means to assess prior knowledge as well as to explore meanings of unknown words, concepts, and topics. Semantic webbing always starts with a central word (or concept) and allows students to build on that word by adding related concepts and words to the central word and connecting categories. For example, the teacher might encircle the word plants on the board. The teacher directs the students to generate subcategories pertaining to plants such as how they grow, where they live, what they need in order to survive, and different kinds of plants. Each of these broad topics is a related form of the key word plants. Students then will brainstorm as many words as they can and place them in appropriate place. After reading more about plants, students

continually add and revise the map to include new vocabulary and terminology related to plants. Research indicates that semantic mapping seemed to help students categorize words and focus on their similarities and differences, qualities that may serve as a structure which enhances recall (Rekrut, 1996, p. 68).

5.5.3. Synonym substitution

Synonym substitution is a strategy created by group of graduate students from the State University of West Georgia, and is conjoined in Elaine Roberts' article (1999), "Critical Teacher Thinking and Imaginations: Uncovering Two vocabulary Strategies to increase comprehension" (p. 66). Unlike the other strategies, this strategy requires that students first read the assigned passage or text before new words are introduced. Students then are asked to self-select difficult words from the passage, where they then decide on a definition and check that definition in context or dictionary. Next, students substitute a synonym for the word in the passage. After, students illustrate their selected word to the rest of the class where they are asked to guess the word. Finally, the word is presented as an analogy. For example, if the difficult words selected were *dagger* and *saber*, students could then draw an analogy between "dagger: knife and saber: sword" where old words are connected to new words (Roberts, p. 74). This strategy is extremely time consuming, but it leads to a significant amount of interaction with words selected; which leads to greater retention and word building. Roberts (1999) says that the purpose of this strategy is to make comparisons of vocabulary words and their meanings (p.74). A variation of the strategy is to have students work in groups where they select difficult words from a passage and substitute synonyms for difficult words. Next, the group teach the analogies to the class where they illustrate the words and present it to the class. Students will be able to substitute synonyms for difficult words, check them in context and draw analogies between old words and new vocabulary.

5.5.4. Mnemonic method

Rekrut (1996) defines mnemonic method as a way of improving the learner's memory for items having an associative component (p.69). This method was developed by Atkinson and his collaborators in 1975 and the objective of it is to help students associate new words with old words by using mnemonic devices so that retention is optimal. The learner first creates "a keyword that sounds like a salient part of the unknown words, and then links the

keyword to the unknown words by means of a visual image or sentence" (Rekrut, p. 69). For example, a native English speaker could learn that the Spanish word *pato* means duck, using the English word *pot* as the keyword and creating an interactive image of a duck sitting in a pot (Atkinson & Raugh, 1975). The underlined assumption of the keyword method is that an encounter with the foreign language word (here pato) will evoke the keyword (here pot), which in turn revokes the keyword – based image (here a duck sitting in a pot) involving the native – language translation (here duck). Research shows the "effectiveness of the keyword method in enabling students to recall and apply their newly learned vocabulary as much as two weeks after instruction" (Rekrut, p.70). Foreign language learners often use this technique when transferring words over from their L1 to L2. For example, if an Indonesian student were trying to remember the word *parrot*, they may link it to the Indonesian word *parit*, which means ditch and then link the two words together by remembering an image of a parrot lying in a ditch (I.S.P. Nation, 1990, p.166).

Theorist Paivo (1971) advocates the use of combined method (context and keyword method) because of the two distinct systems that support cognitive phenomena: The verbal system that deals with language and non-verbal system (also referred as the imaginary system) that deals nonverbal objects and events. Although functionally distinct, they are assumed to be interconnected so activity in one system can trigger activity in another. The activation of both systems can have additive effects on recall. Consequently, teachers should take advantage of context/keyword methods to increase and strength their students' vocabulary knowledge since in the context method the verbal system is more extensively activated and the nonverbal system is activated by keyword imagery in the keyword method (p.255-287).

5.5.5. Structural Analysis

Structural analysis is the last of three formal cueing systems discussed in this chapter. Nagy and Anderson (1984) estimate that "approximately 60% of English words have meanings that can be predicted from the meanings of their parts" (as cited in Cunningham, 1998, p. 193). Instruction in structural analysis involves teaching students the importance of morphemic analysis in relation to polysyllabic words, and syllabication. Dorothy Rubin (1983) states that structural analysis is "a powerful tool, but it is dependent on your having at your fingertips knowledge of word parts and their meanings" (p. 77). Learning structural analysis is an important part of learning how to read, spells, and comprehends.

Structural analysis depends on morphemes "the smallest units of meanings" so that instruction in morphemic analysis entails instruction in compound words, prefixes, suffixes and roots words" (Gunning, 1996, p. 138). Carnine, Silbert and Kameeenui (1990) define morphemic analysis as "a vocabulary aid which involves dividing word into its component morphemes, then using the meanings of the individual morphemes to figure out the meaning of the entire word" (p. 287). The principle under this assumption is if the students can pick up the meaning of the smaller parts of a word, he or she may be able to synthesize its word parts to make sense of the whole. O'Rourke (1974) describes morphemic analysis as one of the most powerful word-attack skills, but also one of the most neglected (as cited in Gunning, 1996, p. 137). When teaching morphemic analysis skills to students, concepts should be taught incrementally, introducing its different components over time. Structural analysis concepts taught should be generative, rather than taught mechanically and in isolation. Carnine, Silbert & Kameenui (1990) underscore two rules for introducing morphemes to students: introducing the most functional affixes first (un-, re-, pre-), and separate morphemes likely to be confused e.g. - er, est. These two rules will help make the input more comprehensible for all students. Root and base words should be taught in conjunction with affixes. "As with prefixes and suffixes, roots that should be taught are those that appear with high frequency," such as,-graph-, astro-, port-, tele-, or auto- (Gunning, 1996, p.141). Teachers should take advantage of every opportunity to enhance students recognition of root words.

Compound words "come in three different forms: solid, hyphenated, or open" (Gunning p.138). For example, *upstairs* (solid), *high* –*rise* (hyphenated), and *top hat* (open). Compound words often define themselves by the fact that the conjoined words reveal its meaning. The words backdoor, midnight, and nutshell provide clues to the words meaning, while *password*, *powerhouse* and *sand dollar* do not help the reader to decipher the meaning. Teacher should introduce compound words from the context and teach them to look for word meaning within the confines of the words themselves.

Prefixes and suffixes were already mentioned in contextual analysis but they also play an important role in structural analysis. Research indicates, "prefixes are easier to learn than suffixes" (Gunning, 1996, p.139). Prefixes are easy to identify because they come in front of words and also have a predictable pronunciation; while suffixes usually change the meaning and the part of speech of a word. For instance, adding the suffix - *ence* to the word *preference* changes it from the verb form to noun form. White, Power& White (1989) words prefixed by un-,401 words prefixed by re-,313 words prefixed by *in-im-ir-il-* and 216 prefixed by dis- (as

cited Cunningham, 1998). This provides pertinent information to teachers about which prefixes to introduce to students. White et al. (1989) also found that average third grader would encounter 230 words, which would be obvious if the base word and the four prefixes were known. It means that the more familiarity students have with prefixes and suffixes, the more effectively they will deal with unknown words. They further concluded that "the number of analyzable words for each grade level would double if all prefixes, not just most common four, were included in morphemic analysis" (p. 194-195). This skill is especially relevant to multisyllabic words where morphemic complexity elevates.

Multisyllabic words are words that usually contain three or more morphemes. White, Power & White (1989) concluded that "skilled readers use structural analysis in three ways: to recognize known words more efficiently, to remember the meanings and spellings of partially learned words, and to figure out the meanings and pronunciations of new words" (as cited in Cunningham, 1998, p. 198). More instruction in morphology will impact students who undoubtedly will have difficulty in reading long words. Showing the students the parts of words directly contributes to word meaning is an essential component of morphemic instruction. Fundamental to decoding multisyllabic words is an ability to discern root or base words within the larger words. The root of a word is "the part of word that is left after all the affixes have been removed" (Gunning, 1996, p. 141). For examples the word nonexportable contains three morphemes non-, export-, and- able. If students were taught the prefix non-and the suffix-able then their chances of recognizing the root word export would be greater and thus help define the word for them. Although multisyllabic words may not occur frequently, they usually carry important meaning essential for comprehension and "morphological relationships are the keys to unlocking pronunciation, spelling and meaning" (Cunningham, 1998, p. 214). As example, he suggests writing nine words that begin with the prefix re on index cards. Of these nine words, three words should mean "back" (rebound, return, rewind) and three words should mean "again" (redo, replay restate). The words chosen should be words that students are familiar with. Students are then asked to place the words in columns according to whether the prefix re -makes the word mean "back" or "again". At the end of the lesson "review the chart and help students summarize what they learned about re- as a pronunciation, spelling, and sometimes meaning chunk in words" (p. 205-206).

VI. RESULTS FROM RESEARCH

In the Cape Verdean classroom context, lack of vocabulary has a great influence on reading comprehension of students' success throughout their academic careers. In spite of this, vocabulary is not incorporated into the classroom activities. Most of the teachers interviewed said that they normally discussed the unknown words with students by asking them to look up the words in the dictionary or teachers give them the meaning of the unknown words before reading a passage. These procedures do not represent what literature says. Students will never retain the words after using them. "It is necessary that students master the words in all dimensions before acquiring them" (Carter and McCarthy, 1988, p. 84). This chapter will present the results, the analysis and the results of the data colleted regarding the survey made among the students. Some questions directed to the students and conclusion drawn will be discussed in this chapter.

Specific research questions

- 1. How do you consider your understanding of a written passage?
- 2. What do you think is the best way to improve your vocabulary?
- 3. If there are a lot of unknown words do you feel like keeping on reading?
- 4. What factors interfere in your understanding of a given text?
- 5. What should teacher do to improve your written text comprehension?

Method

The participants in the study were 33 students attending 10th, 11th and 12th grade in high school of Constantino Semedo and students from private school in Tecto Zero with 4, 5 and 6 years of English instruction (3 to 4 hours\ week). I surveyed students from private school in sake of getting more information about their needs that eventually they might have regarding vocabulary knowledge and reading comprehension. It is also important to mention that students from private school are adult students (of the ages 30 and higher) with different backgrounds and interest. Many of the students from private school are attending English class to fulfill their high school academic study requirements and consequently get better income in their work. They will be paid more if they have higher education. These students are not planning to attend university, do vocational studies or even think about living in an English speaking country as are the case of most students from public schools. The students from public school are under twenty years of age. I have a sample of eleven students for each level in a population of 33 students surveyed. The survey was conducted in a period of thirty

days and data collection right after the end of the month. This study was conducted by finding from some researchers that vocabulary knowledge plays an important role in reading comprehension and also as a teacher we have noticed that the lack of word knowledge inhibits students' reading comprehension and other components of the curriculum areas. In order to achieve valid and reliable results, I used multiple-choice questions. And I did so because students have difficulty in answer questions that they have to express their opinion about. Therefore, I did not include many open questions to avoid information that does not deal with this study.

Addressing the research questions

Research question 1 asked how you consider your understanding of a written passage.

73% considered that although they understand a part of texts, they are unable to comprehend the over all text and only 27.5% are able to understand a text. This percentage is fairly high which leads us to think that those students vocabulary needs to be improved.

Research question 2 asked what you think is the best way to improve your vocabulary.

61% think that if it would be easier for them to comprehend the reading passage if the teachers give them the meaning of unknown key words; 35% think use of a dictionary and 4% think that if they know how to pronounce unknown words and activities like songs, audio visual and games would be the best way to help them in understanding of the meaning. This percentage shows that students feel that vocabulary should be incorporated into classroom activities and that sometimes several word meanings must be taught before they are assigned a reading selection.

Research question 3 asked if there are a lot of unknown words you feel like keeping in reading.

60% think that they sometimes do not feel like reading if there are a lot of unknown words in the text; 12.5% say that they often feel like reading; 21% say that they always do not feel like reading; 6.5% say they never feel like reading if there are a lot of unknown words. These numbers reinforce the idea that vocabulary problems discourage students when they are assigned reading selection, and the importance of word knowledge to question or discuss the reading passage.

Research question 4 asked what factors interfere in your understanding of a given text.

82% they pointed out the lack of familiarity with words they encountered as being one of the most important reasons. 18% pointed out pronunciation as being the cause of their unsuccessful reading. This percentage shows that the effects of lack of word meanings are

relatively high in reading success and that teachers need to help students increase their understanding of reading passages.

Research question 5 what should teacher do to improve your written text comprehension?

50% say that teacher should give them activities where they have to get the meaning from the context, 35% think that activities with list of words they have to look up in the dictionary, 11% prefer film or TV and 14% prefer reading poetry. Teachers should give more relevance to activities that stimulate students analysing and comprehending the words independently and to build their vocabulary skills upon encountering unfamiliar words.

These claims show that vocabulary instruction is more and more necessary not only to fulfill the students' need to increase their reading comprehension but also to equip them with strategic skills that they need to attack unknown words independently. Their opinions regarding those questions are supported in the literature review which underscores this as being the reason for unsuccessful reading comprehension, unfamiliar key words and student's low vocabulary growth. Blackowicz (1999) states that when students fails to show good comprehension, and print skills, the problem can be traced to lack of familiarity with words (p. 214).

All teachers are facing with the need of teaching vocabulary although as Herber (1970) states that vocabulary must be taught in spite of fact that there are more words to teach than a teacher has time to teach. Teachers must select the most important key words to teach before giving a reading passage, and they must use guided vocabulary instruction activities into their classroom. There are a lot of strategic ways which vocabulary can be incorporated into classroom activities and are useful to help students understanding of a reading selection. Therefore, some the strategies presented in the literature like context analysis might be difficult for our students due to their low vocabulary knowledge. Beside that sometimes few or non-existent context clues in the passage may lead students to fail in getting the meaning from the context. Nagy, Anderson and Herman (1987) estimated that the average reader is able to use the context successfully only between 5 and 20 percent of the time. This score is fairly low to support this strategy as being successful for our students. Even, Nation (1990) states that if the learners know around two or three thousands words, they can use the reading skills they have developed to infer the meaning of unknown words that they meet. It is far behind from what our students know. It is not my intention to underestimate neither the importance of context analysis strategy nor its use in the classroom by teachers. Rather, literature supports that through instruction and practise students can and will be more proficient at evaluating word meaning from context. It also suggests the use of more than

single strategy because of individual differences play important role toward language learning (Nation, 1990). Capeverdean students do not have reading habits. Low financial income, expensive course books and non-existing material in their mother tongue are some of the factors that affect students' reading habits. Consequently, teachers cannot expect them to be familiar with unknown words or know the words incidentally through wide reading. For the factors mentioned above, teachers should help students dealing with unfamiliar words rather than select a passage for them to read and answer the questions about the text. From the strategies presented in the literature I am suggesting two strategies: structural analysis and mnemonic method (keyword method). First, structure analysis entails instructions in compound words, prefixes, suffixes and root words which are important for students to decipher the word meanings. During my teaching experience, I have noticed that many students mistake a familiar word for another similar word. Other students have serious word recognition problems which causes them to reverse words; reading was for saw or no for on. If they are instructed in morphemic analysis, the accuracy of their reading and the recognition of words will certainly be improved. Researchers recommend its use after have been instructed in prefixes and suffixes, to reinforce the strategy. Students should practice decoding multisyllabic words using morphemic analysis. Second, prefixes and suffixes were mentioned earlier in word selection that *play* important role in students vocabulary development. Finally, I suggest mnemonic method because its effectiveness with other strategies regarding word retention either in long term or short term retention intervals. In the structural analysis, researchers recommend the use of morphemic analysis after students have been instructed in prefixes and suffixes, to reinforce the strategy. Students should practice decoding multisyllabic words (Gunning, 1996, p. 142). By writing words such as "enrollment, unimaginable, unfavourable, irregular, uncomfortable, photographer, and disagreeable" on the board and have students break the word apart into their respective morphemes. An extension of this activity would be to have students create webs of roots and affixes. For instance, using the root expl students would create a web based on all of the words containing the prefix. Words such as, explain, explode, explosion, exploit, and explore would be a part of the web for *expl*.

The second strategy suggested is the mnemonic method for the reason mentioned above and some instructional recommendations follow. Literature suggests that when teachers begin first using the keyword method to teach vocabulary, the instructions given to students must be very specific if they are to make the most effective use of the key word method. Kasper (1983) suggests the following instructions: you will be learning some foreign

vocabulary words. In order to learn the words, you will be using a method known as the keyword method. A keyword method is an English (in our case will be Portuguese word) which sounds like some part of the foreign word. I will show you a picture (and/ or read you a sentence) which contains the key word doing something with real English translation of the foreign word. Try to remember the picture (sentence).Do not worry about anything else. For example, The Spanish word payaso sounds like the English word "pie", and means "clown". If you remember this picture (sentence) of a clown throwing a pie at his friend, it will help you remember that payaso, which sounds like a "pie," means, "clown" (p.145).

VII. CONCLUSION

All the literature reviewed for this work advocated that wide reading is essential to word learning. Students must see and read the words in context several times in order to memorize and use them properly, and having students instructed in vocabulary skills is necessary for independent word learning and comprehension. Direct instruction has proved to be an important instrument to vocabulary development. Harmon (1999) has clearly synthesized the benefits students receive from formalized word learning, "the more words known by reader, the better are their chances to understand and enjoy what they are reading" (p. 70). Reading opens the door to a new world; giving you the sense of adventure, action, history, happiness and even sadness. The primarily goal of reading is comprehension. Without comprehension students will never enjoy reading and without a sufficient vocabulary they will never comprehend what they are reading. The long effects of large vocabulary size will be seen throughout students' academic careers and will directly affect students success in all areas of curriculum. "Vocabulary size correlates with success in all areas of curriculum" (Manning, 1999, p. 103).

The purpose of this study was to show the importance of teaching vocabulary to improve students' literacy skills with special focus on reading. It also aimed at empowering students word attack skills upon encountering unknown words in a reading passage. Lack of vocabulary interferes in successful reading; therefore, it is the teachers' duty to help students have good reading enhancement.

The overall objective of this project is to show the relevance of vocabulary instruction in language learning and teaching. Vocabulary plays a crucial role concerning language learning proficiency. Richards (1976) suggested that a major feature of a second language program should be a component of massive vocabulary expansion. He also stressed that in terms of the transfer of learning to other language skills, having a broad, readily available base of vocabulary is the key to acquiring proficiency in reading, writing, listening and speaking (p. 431-432). Consequently, throughout this paper I pointed out some useful strategies that teachers can directly implement to teach their students vocabulary.

In an attempt to answer my research questions, I suggested many different strategies that can be used to teach word meaning effectively and incorporated into classroom activities. As I mentioned earlier in the literature review, direct vocabulary instruction is an important vehicle for vocabulary learning (Anderson& Nagy, as cited in Harmon, 1992, p. 306). Mastering the word requires knowing its boundary, the part of speech, and the words that it

collocates with, the use of it in a variety of contexts and in order to be at these levels students need to be instructed. None of the suggested strategies attempted to neglect any other methods or ways of teaching word meaning used by teachers. Rather, I try to put at the teacher's disposal other useful ways in which word knowledge can be accomplished.

The methodology used in this paper was to come up with research questions, then collect the data through primary and secondary source, and prepare a questionnaire for students. Through a literature review, I first provided a basic background about vocabulary learning and teaching and the reason it was neglected in the past. I presented a brief principle about First and second language acquisition, I discussed comprehension success, word form and word knowledge, provided some direct strategies that can be used, and then the analysis of the results of the questionnaire followed by the suggested strategies for the Capeverdean context.

Ten teachers from Constantino Semedo high school (4) and Liceu Domingos Ramos (6) were surveyed. I did not include these results in Chapter 6 because the overall project was about the relationship between students and vocabulary. However, the teachers provide some interesting insight into vocabulary development in Cape Vede. The teachers have five to ten years of teaching experience, only three of them have less than five years of teaching, and they are graduates of Instituto Superior de Educação. 80% of them pointed out that a lacking reading habit and a lot of unfamiliar words as being the major factors interfering in students' comprehension of passages. 60% of them said that their students performed better if they were given pre-reading questions and taught the meaning of the unknown words. 80 % of them think that in order to improve students' comprehension, it is necessary to teach vocabulary and to implement more oral activities in the classroom. These findings, not only revealed how advantageous vocabulary instruction is for reading comprehension but also the need of implementing wide reading in the classroom.

As educators, we owe a large responsibility to our students, but have a limited amount of time. Therefore, vocabulary should be incorporate into the cirriculum. It should not be seen as subject itself.

There is an abundance of literature pertaining to vocabulary development. However, further research into the area, of independent word learning may be beneficial. Also, students' exposure to different strategies to determine meaning should be studied. I would also suggest submitting a group of students for a period of two or three months to a specific strategy and another group under different strategies, to compare the results. Because it seems to be a lack of information concerning which strategies students at different academic

levels, would benefit from most. In summary there is a overabundance of literature regarding the effects of direct vocabulary instruction. The overall conclusion drawn is that students will benefit a lot through the curriculum as a result of vocabulary instruction given along with wide reading.

REFERENCES

- Albert, M. & Obler, L.K. (1987) The bilingual brain. New York: Academic Press.
- Allen. F. V. (1983). <u>Techniques in teaching vocabulary</u>. New York: Oxford University Press.
- Anderson, R. & Nagy, W.(1992). The Vocabulary Conundrum. American Psycologist, 30,821-828.
- Alderson, C. (1984). Reading in a foreign Language: A Reading Problem or a Language Problem
- Atkinson, R. C. & Raugh, M.R. (1975). An application of the mnemonic keyword to the acquisition of Russian Vocabulary. *Journal of experimental psychology: Human* learning and Memory, 104,126-133.
- August, D. (1999). <u>Enhancing Vocabulary Knowledge and Reading Comprehension in English Language Learning</u>. Paper Presented at Annual meeting of American Educational Research Association, Canada.
- Barr, R. & Johnson. (1997). <u>Teaching reading and writing in elementary classroom</u>. White Plains: Longman.
- Bear, D. & Templeton, S. (1996). <u>Words their way: Word study for phonics</u> <u>Vocabulary, and Spelling instruction.</u> Englewood Cliffs: Prentice Hall.
- Bear, D. & Templeton, S. (1998) Explorations in developmental spelling: foundations for learning and teaching and teaching phonics, spelling, and vocabulary. *The Reading Teacher*, 52, 222-236.
- Beck, I.L., McKeown, M.G. & Omanson, R.C. (1987). <u>The Effects and uses of</u> Diverse Vocabualary instructional techniques. Hillsdate: Lawrence Erlbaum.
- Blachowicz, C. (1999). Vocabulary in dynamic assessment: Two case studies. *Journal of Reading Psychology*, 20, 213-236.
 - Bloomfield, L. (1933). Language. London: Allen & Unwin.
- Calfee, R. & Drum, P.(1986) <u>Research on teaching reading: Handbook of research on teaching</u>, (3rd ed.). New York: Macmillan.
- Carnine, D., Silbert, J. Kameenui, E. (1990). <u>Direct Reading instruction</u>. Colombus: Merrill Publishing Company.
 - Carter, R. (1998). Vocabulary. New York: Routledge.

- Carter, R. & Mc Carthy, M. (1988). <u>Vocabulary and Language Teaching</u>. Longaman Inc, New York.
- Chall, J. (1983). <u>Stages of Reading development</u>. New York: McGraw-Hill Book Company.
- Cunningham, P. (1998). The multisyllabic word dilemma: Helping students build meaning, spell and read``big'' words. *Reading and Writing Quarterly, 14,* 189-210.
 - Dale, E., & O'Rourke, J. (1981). Techniques of teaching vocabulary. Chicago: Field.
- Dishner, E., Bean, T., & Readence, J. (1981). Reading in the content areas. *Improving classroom instruction*. 38,452-460.
- Dole, J., Sloan, C., & Trathen, W. (1995). Teaching Vocabulary Within the context of literature. Journal of Reading, 38, 452- 460.
- Dufficy, P. (1996). Vocabulary teaching and bilingual student language development to be or not be. *Primary Educator*, 2, 9-13.
- Edger, M.(1999). Reading and vocabulary development. *Journal of Instructional Psychology*, 26, 7-15.
- Ewers, C. & Brownson, S. (1999) Kindergartens vocabulary acquisition as a function of active vs. passive storybook reading, prior vocabulary, and working memory. *Journal of Reading Psychology*, 20, 11-20.
- Gipe, G. P.(1980). Use of relevant context helps kids learn new word meaning. *The Reading Teacher*, 33, 398-402.
- Gairns, R. and Redman, S. (1986). Working with Words: a guide to teaching and learning vocabulary. Cambridge University Press
- . Goerss, L.B., Beck, L.I. & McKeown,G. (1999). Increasing remedial students ability to derive meaning from context. *Journal of Reading Psychology*, 20, 151-175.
- Goodman, K.S. (1965). A linguistic study of cues and miscues in reading. *Elementary English*, 42, 639-643.
- Graves, M., Juel, C.,& Graves, B. (1998). Children's attitude towards reading: A national survey. *Reading Research Quartetly*, 30,934-956.
- Gunning, G.T. (1996). <u>Creating Reading Instruction for all children</u>. Needham Heights: Allyn & Bacon.
- Harmon, J. (1999). Initial encounters with unfamiliar words in independent reading. *Research in the Teaching of English*, *33*, 304-334.
- Herber, H. L. (1970). <u>Teaching Reading in content Areas</u>. Reprinted by permission of prentice-Hall, Inc. Englewood Cliffs, New Jersey

Im, S. B., (1994). A study on teaching and learning procedures for improving English Reading

proficiency. Unpublished master's thesis. The Graduate School of Education of Chungbuk National University. Cheong Ju, Korea.

Johnson, A. & Rasmussen, J. (1998). Classifying and Super word web: two strategies to improve productive vocabulary. *Journal of Adolescent & Adult Literacy*, 42, 204-207.

Kasper, L. (1983). The effect of Linking Sentence and Interractive Picture Mnemonics on the Acquisition of Spanish Nouns by Middle School Children. *Human Learning*, 2, 141-156.

La Flamme, J. (1997). The effect of multiple exposure vocabulary method and the target reading/writing strategy on test scores. *Journal of Adolescent & Adult Literacy*, 40, 372-382.

Leu, D. & Kinzer, C. (1999). <u>Effective Literacy Instruction</u>. Uppersddle River: Merril Publishing Company.

Maiguashca, R. (1993). Teaching and learning vocabulary in a second language: Past, present, and future directions. *Canadian Modern language review*, 50, 83-100.

Manning, M. (1999). Helping words grow. Teaching Pre-8, 29, 103-106.

Mc Carthy, M. (1990). Vocabulary. Oxford: Oxford University Press.

Meara, P. (1981). Vocabulary Acquisition: A neglected aspect of language learning. Language Teaching and Linguistics Abstracts, 13, 221-246.

Misulis, K. (1999). Making vocabulary development manageable in content instruction. *Contemporary Education*, 70, 25-30.

Moore, W. D., & Arthur, V. S. (1981). Possible Sentences (p.p. 138-139).

Morgan, J. & Rinvolucri, M. (1986). Using Stories in the Language Classroom. Cambridge University Press.

Nagy, W. (1988-89). <u>Teaching vocabulary to improve reading comprehension</u>. Newark: International Reading Association.

Nagy, W. & Anderson, R.C. (1984). How many words are there in printed school English? *Reading Research Quarterly*, 19, 304-330.

Nagy, W., Anderson, R.C. & Herman, P.A. (1987). Learning word meanings from context during normal reading. *American Educational Research Journal*, 24, 237-270.

Nation, I.S.P. (1990). <u>Teaching and Learning Vocabulary</u>. New York: Newbury House Publishers.

- Nation, P. & Coady, J. (1988). Vocabulary and Reading. In R. Carter and M. Mc Carthy (Eds) <u>Vocabulary and Language Teaching</u>, 15 97-110.New York Longman.
- O'Rourke, J.P. (1974). <u>Toward a science of vocabulary development</u>. The Hague: Mouton.
- Paivo, A. (1971). <u>Imagery and Verbal processes</u>. New York: Holt, Rinehart, and Winston.
- Pressley, M. (1998). Reading instruction that works: The case for balanced teaching. *Reading Horizons*, 40.
- Rekrut, D.M. (Oct\Nov96). Effective vocabulary instruction. *High School Journal*, 80, 66-75.
- Roberts, E. (1999). Critical teacher thinking and imaginations: Uncovering two vocabulary Strategies to increase comprehension. <u>Reading Horizons</u>, 40, 65-76.
 - Richards, J. (1976). The Role of vocabulary teaching. TESOL Quarterly, 10, 77-90.
- Rubin, D. (1983). <u>Teaching reading and study skills in content areas</u>. New York: CBS College Publishing.
- Rupley, W., Logan, J. & Nichols, W. D. (Dec98|Jan99). Vocabulary instruction in a balanced reading program. Reading Teacher, 52, 336-347.
- Ryder, R., & Graves, M. (1994). <u>Reading and Learning in Content areas</u>. New York: Merrill Publishing Company.
- Sternberg, R., & Powell, J. S. (1983). Comprehending Verbal Comprehension. American Psychologist, 38, 878-893.
- Stahl, S. A., & Fairbanks, M. M. (1996). The effects of vocabulary instruction: A model-based meta analysis. *Review of Educational Research*, 56, 72-110.
- <u>The Merriam-Webster Dictionary</u> (1997). Springfield: Merriam –Webster, Incorporated.
- White, T., Power, M., & White, S. (1989). Morphological analysis: Implications for teaching for understanding vocabulary growth. Reading Research Quarterly, 24, 283-304
- White, T., Sowell, J., & Yanagihara, A.(1989). Teaching elementary students to use word- part clues. *The Reading Teacher*, 42, 302-308.
- Yap, K. O. (1979). Vocabulary- building blocks of Comprehension. *Journal of Reading Behaviour*.1:49-59.