# Guessing Word Meaning from Context Has Its Limit: Why? 

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#### Abstract

This study highlights the relationship between guessing strategy and the acquisition of passive and controlled active vocabulary knowledge among Malaysian university students. Two strategies make up the guessing strategy in this study namely using backward knowledge and using linguistic cues. Vocabulary Learning Questionnaire was used to measure the preference level of guessing strategy as one of the vocabulary learning strategies. Simultaneously, their passive and controlled active vocabulary knowledge were assessed using the Vocabulary Levels Test. 360 university students aged between 18 to 21 years old were involved. Though guessing strategy was preferred by the students as their vocabulary learning strategy, it does not help them in improving their passive and controlled active vocabulary knowledge. Further discussion focuses on the possible reasons why guessing strategy does not work for them. This paper concludes with a discussion on the pedagogical implications of the results.


Keywords: Guessing strategy, Passive vocabulary knowledge, Controlled active vocabulary knowledge

## 1. Introduction

One important objective of studies into language learning strategies is often to determine effective ways of learning a new language (O'Malley \& Chamot, 1990). The field of vocabulary learning strategies (VLS) is no exception as the effectiveness of strategies for learning new words has been under scrutiny for decades (Cohen \& Aphek, 1981; Gu \& Johnson, 1996; and Ahmad Azman et al., 2009).

Contextual guessing, memorizing, and repeating of new English words are some of the VLS commonly used. Schmitt (2000) compiled a list of VLS categorized according to the following two purposes: 1) strategies that discover a new word's meaning; and 2) strategies that consolidate a word once it has been encountered. Each strategy comprises of important skills that learners use in the process of acquiring new English words.

Of all the VLS commonly recognized today, arguably the most widely encouraged is guessing of the meaning of unknown words from context or referred to as "guessing strategy". Guessing strategy has a long history of research with the great majority of studies demonstrating its value. One of the claims in support of the guessing strategy is that it involves generalizable skills of interpreting surrounding text, predicting and testing predictions while reading which enhance reading skills as a whole (Coady \& Nation, 1988). In addition, guessing has been advocated instead of dictionary use because stopping to use a dictionary interrupts the flow of reading (Brown, 1972). Since guessing strategy is so widely encouraged, it is also important to take evidence against it into consideration. Therefore this paper centers on the question: Why does guessing strategy fail to help ESL students improve their vocabulary knowledge?

## 2. Objective of the Study

Given the fact that there is a relationship between ESL students' guessing strategy and their success in acquiring English words, the present study intends to find answers to the following questions:

1) Do the students prefer guessing strategy as one of their vocabulary learning strategies?
2) What are the correlations between the students' guessing strategy and their passive and controlled active vocabulary knowledge?
3) What are the students' levels of passive and controlled active vocabulary knowledge?

## 3. Literature Review

This section provides discussions on the roles of guessing strategy in vocabulary acquisition and the meanings of knowing a 'word'.

### 3.1 Guessing Strategy and Vocabulary Learning

The fact that guessing strategy should be encouraged is understandable considering the enormous number of words in the English language, the size of the average adult's working vocabulary, and the number of words one needs to know to recognize a reasonably high
percentage of words on the average written page (Dycus, 1997). Webster's Third New International Dictionary, for example, contains 460,000 words, and this number excludes plural forms of nouns, different present and past tenses of verbs, neologisms, and some technical items (Denning \& Leben, 1995).

Although estimates of the size of the working vocabulary of the average English-speaker vary widely, commonly accepted figures hover around 20,000 words (Nation, 1990). Word frequency counts indicate that this number is more than sufficient for understanding the vocabulary of most non-technical texts though estimates again vary. Diller (1978) states that the 25 most common words account for one-third of the words on a page and 135 words takes one up to $50 \%$. After that, the number of words needed increases in lognormal distribution. Therefore, while it takes 2500 words to cover $78 \%$ of the page, vocabulary size has to be doubled to 5000 to reach $86 \%$, and doubled again to 10,000 to cover $92 \%$ of the text. One would need to know another 200,000 to cover the low frequency words that make up the remaining $8 \%$. However, Nation (1990) claims that the 2000 most frequently occurring words account for $87 \%$ of the average text, and that 2800 will account for $95 \%$, is widely accepted today.

Regardless of the exact size of a native speaker's vocabulary, it is clear that the average second or foreign language learner faces a major challenge in trying to match it. Therefore, it is not surprising that the main reason given for encouraging use of the guessing strategy is the perception that it is the reasonable and fastest way for ESL learners to learn enough words to form suitably large active and passive vocabulary. Not every study, however, supports the utilization of this strategy as a sound strategy for identifying semantically unfamiliar words (Hossein \& Hamdollah, 2010).

Rodriguez and Sadoski (2000) for instance scrutinized the effects of rote rehearsal, context, keyword, and context-keyword methods on immediate and long-term retention of EFL vocabulary in a natural classroom setting. The experimental words consisted of 15 English nouns. Obscure and low-frequency words were used to ensure the unfamiliarity of them to the students. Findings revealed that the immediate performance of the students using the combined-keyword method was significantly better than of students using the keyword method. After a week, the combined context-keyword was also significantly better than all other methods. Students in the combined context-keyword condition in fact were able to retain 1.5 to 4 times as many correct definitions as students in the other conditions. Interestingly, the combined context-keyword method proved effective for students with different levels of English vocabulary knowledge.

A large scale study was carried out in Hong Kong by Fan (2003) concerning the learning of English by Cantonese speakers. The aims of the project were basically to identify the vocabulary size of the tertiary students, the vocabulary learning strategies beneficial for learning English words, and the actual usefulness of those strategies. Among the 56 vocabulary learning strategies identified, 'guessing from context' was reported as the second strategy used most often and perceived as most useful. Another finding was that the students who were the
most proficient in L2 vocabulary used significantly more often both 'guessing from context' and 'dictionary strategies' in learning new English words.

Redouane (2004) examined the efficacy of the guessing-from-context strategy versus a word-list strategy in learning French words and their meanings as well as retention of those words at the university level. The findings manifested the facilitation role of guessing-from-context strategy in learning more French words. Moreover, the guessing-from-context technique proved to have an impact not only on immediate recall but on long-term retention.

Alesweed (2005) in a study examined whether and how the students would use different word-solving strategies mentioned in the literature such as guessing, using dictionary, and skipping. The results indicated that contextual guessing was the second strategy used by the students in terms of priority. They used global and local clues almost identically.

The notion that L2 learners can easily learn a big amount of vocabulary through guessing is relatively convincing. Nevertheless, due to the methodological weakness, studies are only possible to generate inconclusive findings. The present study is an attempt to fill up the vacuum in the research database into the impact of using guessing strategy on vocabulary acquisition.

### 3.2 What Does it Mean to Know a 'Word'?

Many people believe that knowing a word means knowing its meaning. However, Cook (2001, p. 61) states that "a word is more than its meaning". For Cook, knowing a word involves four aspects: form of the word such as pronunciation and spelling, grammatical properties such as grammatical category of the word and its possible and impossible structures, lexical properties such as word combinations and appropriateness, and meaning such as general and specific meanings. Stahl (1999, p. 15) suggests that there are four levels of word knowledge: (1) word that one never saw, (2) word that one has heard of but does not know what it means, (3) word that one recognizes in context and can explain that it has something to do with..., (4) word one knows.

It should be agreed that, "...learners appear to have differing degrees of knowledge of their second language lexicon" (Gass \& Selinker, 2001, p. 374). There is a list of elements to be considered for a complete knowledge of a word: spoken form, written form, grammatical behavior, collocational behavior, frequency, stylistic, register constraints, conceptual meaning, and word associations (Nation, 1990, p. 31). There is yet another dimension in vocabulary which is often termed as receptive and productive or passive and active vocabulary. Normally, these two sets of terms are defined in relation to the language skills of reading, listening, speaking, and writing. An individual's active vocabulary includes words which are used in speech and writing. Contrarily, one's passive vocabulary is understood as words occur in reading materials or while hearing something (Azadeh, 2010).

Hatch and Brown (1995, p. 374) classify five steps to learning new words: encountering new words, getting the word form, getting the word meaning, consolidating word form and meaning in memory, and using the words. These steps lead to the conclusion that a learner
will reach the receptive comprehension of new words before reaching the production comprehension.

## 4. Sample

There are 5413 university students available to be taken as samples. According to Wunsch (1986), for a group of 5413 students, at least a sample of 346 is needed to make estimation with a sampling error of $\pm 5$ percent at 95 percent confidence level. Nevertheless, 360 students are chosen. The sample size for this study is determined using the formula for estimating sample size and the table for sample size (Wunsch, 1986).

## 5. Methodology

Gu and Johnson's (1996) Vocabulary Learning Questionnaire, translated into Malay language, is used to elicit students' self-reported vocabulary learning strategies. The questionnaire is pilot-tested where 78 out of 92 vocabulary learning behaviors are selected. The 78 vocabulary learning behaviors are divided into seven major parts namely metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal), memory strategies (encoding) and activation strategies. Respondents are asked to rate each statement on a 4-point scale, ranging from Extremely Untrue of Me (1) to Extremely True of Me (4).

The Passive Vocabulary Test for passive vocabulary size (Nation, 1990), one out of the three vocabulary tests in the Vocabulary Levels Test, is used to measure the respondents' passive vocabulary knowledge.

The Passive Vocabulary Test measures passive vocabulary knowledge and is originally based on words from five word-frequency levels namely the first 2,000 words, 3,000 words, 5,000 words, the University word level (beyond 5,000 words) and 10,000 words. However, in this study only the first four levels are used. Each level is intended to relate to specific vocabulary learning objectives. According to Nation (1990), the 2,000- and 3,000-word levels contain the high-frequency words that all learners need to know in order to function effectively in English. For instance, it is difficult for learners to read unsimplified texts unless they know these words. The 5,000 -word level represents the upper limit of general high-frequency vocabulary that is worth spending time on in class. Finally, words at the University level should help students in reading their textbooks and other academic reading materials.

As for the format, the Passive Vocabulary Test involves word-definition matching although, in a reversal of the standard practice, the respondents are required to match the words to the definitions. That is, the definitions are the test items rather than the words. Each frequency level of the test comprises six sections and each section includes 6 words and 3 definitions. In other words, there are 36 words and 18 definitions at each level. Although there are only 18 words at each level, Nation (1990) argues that 36 words are tested because the respondents need to check every word against the definitions in order to make the correct matches. Words in each level of the test are representative of all the words at that level. In fact, the test is designed to be sensitive to any vocabulary knowledge held by the respondents. Therefore, each word in the test is distinctly different within each set of words being tested.

The words for each level are also selected on a random basis but with proper nouns and compound nouns excluded so that the results of the test give a reasonable indication of what proportion of the total number of words at each frequency level the learner has some knowledge of. In addition, all the words in each group belong to the same word class in order to avoid giving any grammatical clue as to the correct definition. On the other hand, apart from the correct matches, care is taken not to group together words definitions that are related in meaning. The test is intended as a broad measure of word knowledge, without the respondents to distinguish between semantically related words.

The Passive Vocabulary Test has 72 items (18 in each level). It tests the target words out of context because context might provide clues to their meanings. The researcher is only interested in the number of words the students could understand without any clues, rather than their guessing ability. The answers are scored as correct or incorrect. Each correct answer is given one point. Since the test has 72 items, the maximum score is therefore 72 . "A weak score at any level is defined as knowing fewer than 15 out of 18 items, or less than $83 \%$ " according to Nation's experience using the test (Nation, 1990, pg. 140).

## 6. Findings

## Research Question 1

Do the respondents prefer guessing strategy as one of their vocabulary learning strategies?
Table 1. Students' Guessing Strategy Preference

| VOCABULARY LEARNING QUESTIONNAIRE |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |  |  |  |
|  | Semester 1 | Semester 2 | Semester 3 |  |  |  |  |
|  | M | SD | M | SD | M | SD |  |
| Guessing Strategy | 2.92 | .30 | 2.97 | .37 | 3.01 | .31 |  |
| Using backward knowledge | 2.99 | .29 | 3.05 | .42 | 3.09 | .33 |  |
| Using linguistic cues | 2.76 | .43 | 2.81 | .47 | 2.84 | .43 |  |

The students reported extensive use of guessing strategies when dealing with vocabulary problems. Semester 3 students were the main users of the guessing strategies ( $\mathrm{M}=3.01$, $\mathrm{SD}=.31$ ) followed by Semester $2(\mathrm{M}=2.97, \mathrm{SD}=.37)$ and Semester $1(\mathrm{M}=2.92, \mathrm{SD}=.30)$. The guessing strategies which had two sub-strategies namely using backward knowledge such as making use of the knowledge of the topic when guessing the meaning of a word and using linguistic cues such as analyzing the word structure (prefix, root, suffix) when guessing the meaning of a word, produced different results when analyzed. Their backward knowledge was
more extensively used where the mean score for Semester 1 was 2.99 whereas $\mathrm{M}=3.05$ for Semester 2 and $\mathrm{M}=3.09$ for Semester 3. The mean scores for the linguistic cues, on the other hand, were lower where $\mathrm{M}=2.76$ for Semester $1, \mathrm{M}=2.81$ for Semester 2, and $\mathrm{M}=2.84$ for Semester 3 were recorded.

## Research Question 2

What are the students' levels of passive and controlled active vocabulary knowledge?
Passive Vocabulary Test which has four word-frequency levels namely the first 2000 words, 3000 words, University Word List (UWL), and 5000 words was used to evaluate the students' passive vocabulary knowledge. Each level was intended to relate to specific vocabulary learning objectives. According to Nation (1990), the 2,000- and 3,000-word levels contain the high-frequency words that all learners need to know in order to function effectively in English. For instance, it is difficult for learners to read unsimplified texts unless they know these words. The 5,000 -word level represents the upper limit of general high-frequency vocabulary that is worth spending time on in class. Finally, words at the University Word List (UWL) level should help students in reading their textbooks and other academic reading material. A weak score at any level is defined as knowing fewer than 15 out of 18 items, or less than $83 \%$ according to Nation's (1990, p. 140) experience using the test.

Table 2. Passive Vocabulary Test Results

| PASSIVE VOCABULARY TEST |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 Word Level |  |  | 3000 Word Level |  |  | University Word List (UWL) |  |  | 5000 Word Level |  |  |
| Score | Sem. <br> 1 | Sem. <br> 2 | Sem. <br> 3 | Sem. 1 | Sem. <br> 2 | Sem. <br> 3 | Sem. <br> 1 | Sem. <br> 2 | Sem. 3 | Sem. 1 | Sem. <br> 2 | Sem. <br> 3 |
| $\geq 83 \%$ <br> (Pass) | 6 | 9 | 21 | 5 | 10 | 30 | 1 | 3 | 11 | 0 | 1 | 6 |
| $<83 \%$ <br> (Fail) | 120 | 93 | 111 | 121 | 92 | 102 | 125 | 99 | 121 | 126 | 101 | 126 |
| Total <br> Students | 126 | 102 | 132 | 126 | 102 | 132 | 126 | 102 | 132 | 126 | 102 | 132 |

Sem= Semester

In Table 2, at the 2000 word level, 120 Semester One students, 93 Semester Two students and 111 Semester Three students were in the weak group. For the 3000 word level, 121 Semester One students, 92 Semester Two and 102 Semester Three students were categorized as weak. Then, 125 Semester One, 99 Semester Two and 121 Semester Three students were in the weak group for the UWL level. Finally, none of the Semester One student managed to pass the test at the 5000 Word Level; only one Semester Two and six Semester Three students passed. Those results suggested that majority of the respondents had weak English passive vocabulary knowledge.

The Controlled Active Vocabulary Test was modeled on the Passive Vocabulary Test and it was used to measure the students' controlled active vocabulary knowledge. It elicited target items from four frequency levels in short sentences with the items' first few letters provided in order to eliminate other possibilities. The test-takers provided the missing word in each sentence. A weak score at any level is defined as knowing fewer than 15 out of 18 items, or less than $83 \%$ according to Nation's (1990, pg. 140) experience using the test.

Table 3. Controlled Active Vocabulary Test Results

| CONTROLLED ACTIVE VOCABULARY TEST |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Score | 2000 Word Level |  |  | 3000 Word Level |  |  | University Word List (UWL) |  |  | 5000 Word Level |  |  |
|  | $\begin{aligned} & \text { Sem. } \\ & 1 \end{aligned}$ | $\begin{aligned} & \text { Sem. } \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { Sem. } \\ & 3 \end{aligned}$ | Sem. $1$ | $\begin{aligned} & \text { Sem. } \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { Sem. } \\ & 3 \end{aligned}$ | Sem. <br> 1 | $\begin{aligned} & \text { Sem. } \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { Sem. } \\ & 3 \end{aligned}$ | $\begin{array}{\|l} \text { Sem. } \\ 1 \end{array}$ | $\begin{aligned} & \text { Sem. } \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { Sem. } \\ & 3 \end{aligned}$ |
| $\geq 83 \%$ | 29 | 40 | 62 | 2 | 7 | 17 | 6 | 15 | 17 | 8 | 15 | 17 |
| (Pass) |  |  |  |  |  |  |  |  |  |  |  |  |
| < $83 \%$ | 97 | 62 | 70 | 124 | 95 | 115 | 120 | 87 | 115 | 118 | 87 | 115 |
| (Fail) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total <br> Students |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Sem= Semester
In Table 3, at the 2000 word level, 97 Semester One students were categorized as weak as compared to 62 for Semester Two and 70 for Semester Three. As for the 3000 word level, only two Semester One students were not in the weak category. However, Semester Two and Three students comprised of seven and 17 respectively. Moving to the UWL level, 120 Semester One, 87 Semester Two, and 115 Semester Three students failed to get the minimum scores of 15
correct answers out of 18 which could make them eligible to be put in the good group. Finally, results in the 5000 word level indicated that more students failed the test- Semester One 118 students, Semester Two 87 students, and Semester Three 115 students. Those results suggested that majority of the respondents were still weak in terms of their English controlled active vocabulary knowledge.

Research Question 3
What are the correlations between the students' guessing strategy and their passive and controlled active vocabulary knowledge?

Table 4 clearly showed the positive and significant correlation between guessing strategy and passive vocabulary knowledge at the 0.01 level ( 2 -tailed) $(\mathrm{r}=.19, \mathrm{r}=.00$ ). The two guessing strategy variables, using backward knowledge ( $\mathrm{r}=.17, \mathrm{p}=.001$ ) and linguistic cues ( $\mathrm{r}=.17$, $\mathrm{p}=.001$ ) to guess the meanings of unknown English words, also produced similar correlational results.

Table 4. Correlation between Guessing Strategy and Passive Vocabulary Test Results

| Vocabulary Learning Strategy | PVT |
| :--- | :--- |
| Guessing Strategy | $.19 * *$ |
| Use backward knowledge | $.17^{* *}$ |
| Use linguistic cues | $.17^{* *}$ |

** Correlation is significant at 0.01 level (2-tailed)
PVT = Passive Vocabulary Test
Table 5 also clearly showed the positive and significant correlation between guessing strategy and controlled active vocabulary knowledge at the 0.01 level ( 2 -tailed) ( $\mathrm{r}=.24, \mathrm{r}=.00$ ). The two guessing strategy variables, using backward knowledge ( $\mathrm{r}=.23, \mathrm{p}=.00$ ) and linguistic cues ( $\mathrm{r}=.17, \mathrm{p}=.001$ ) to guess the meanings of English words, also produced similar correlational results. This showed that a high preference of using guessing strategy would produce high levels of passive and controlled active vocabulary knowledge.

Table 5. Correlation between Guessing Strategy and Controlled Active Vocabulary Test Results

| Vocabulary Learning Strategy | CAVT |
| :--- | :--- |
| Guessing Strategy | $.24^{* *}$ |
| Use backward knowledge | $.23^{* *}$ |
| Use linguistic cues | $.17^{* *}$ |

** Correlation is significant at 0.01 level (2-tailed)
CAVT $=$ Controlled Active Vocabulary Test

## 7. Discussion

The finding which shows that guessing strategy is one of the preferred vocabulary learning strategies is identical with other findings of previous studies (Rodriguez \& Sadoski, 2000; Fan, 2003; Redouane, 2004 and Alesweed, 2005). Nevertheless, this study finds that though guessing strategy is preferred by the students, it does not help to increase ESL learners' vocabulary knowledge. This finding demands an answer. There are several possible reasons why such a phenomenon occurs.

First of all, it is an unquestionable fact that guessing vocabulary from context is how English native speakers most frequently learn the meanings of new English words. One of the advantages they have is the rich exposures to the language. They live in an environment where English is used everywhere and all the times. However, as explained by Martin (1984), "The luxury of multiple exposures to words over time and in a variety of meaningful contexts is denied to second and foreign language students. They need prodigious amounts of information within an artificially short time" (p. 130-131). ESL or EFL learners, not being in an English speaking environment, have fewer opportunities of such exposures. Lacking of exposures makes them unable to utilize the strategy to the fullest. As a result, they become incompetent when applying it.

The use of context clues is problematic for learning new English words. For non-native, one problem with learning words in context is that in the real world, context is often not very clear in terms of revealing the meaning of the word if the reader really does not know the word. Schatz and Baldwin (1986) found that high school students were not very successful at guessing word meanings from real contexts. In this study, half of the students worked with English sentences from actual published sources such as newspapers and magazines. Each sentence contained a target word that the students did not know. The target word was a real English words and the context was a natural context. The target word was underlined and the sentence was followed by five words, one of which was a suitable synonym for the target word in this context. The other half of the students saw only the underlined target item and the five words. The researchers used a large sample ( $n=224$ ) but they found no significant
difference between the group that had access to an actual context for the words and the group that merely guessed randomly at the meanings of the words.

L2 learners also find some context clues more difficult than others. Haynes and Baker (1993) note this difficulty difference between two types of context clues namely local and global context clues. Local context clues are clues that are very near the unknown word such as an unknown adjective just in front of a known noun. On the other hand, global context clues are clues that are not located near the unknown word. They found that L2 learners of different language groups were all rather good at using local context clues but a high percentage of L2 learners were not able to use global context clues to ascertain basic information regarding a short reading passage. In other words, L2 learners find it difficult to integrate longer sections of a text to guess a word's meaning even when that word appears several times.

Though it is not impossible for ESL learners to derive vocabulary meanings from context, guessing strategy by itself does not foster retention of meanings. Sternberg (1987) says that in L1 most vocabulary is learned from context and this might be the reason why teaching students to learn vocabulary from context is regarded as a very effective way of increasing vocabulary growth. Nevertheless, Sternberg cautions that "the naturalness or typical use of a method does not imply its optimality" (p. 94). Research by Prince (1995) is worth discussing since it directly compared learning vocabulary from translation-pair lists versus vocabulary in context. In this study, French EFL learners worked with 22 concrete nouns as target words. There were two learning conditions: words presented in a translation-pair list and words presented in a simple L2 context. Students had to figure out the correct meanings of the L2 words by themselves. There were two testing conditions for all students: a translation recall in which students had to translate a word and a context recall in which students had to fill in the blanks with the correct target word. The most important finding of this research is that L2 words were more successfully learned when presented with their translations. Adding a sentence context did not raise learners' retention of these words. Earlier Nagy and Herman (1987) state that experimental studies conducted by Margosein, Pascarella, and Pfaum in 1982 also revealed that inferring meanings from context is less effective than more intensive or explicit forms of instruction.

In a study of Hebrew speakers studying EFL, Laufer and Shmueli (1997) compared four modes of presentation. Mode 1 was a listing of the word and its Hebrew translation or an English synonym. Mode 2, 3, and 4 had three levels of context. Mode 2 was minimal context (i.e., in one meaningful sentence), mode 3 was in a brief text, and mode 4 was an elaborated text. In each mode, half of the target words were translated into the learners' L1 and the other half were explained in English. Words glossed in L1 were always retained better than words glossed in L2. As for the context effect, words presented in lists and in sentences were remembered better than words presented in text and elaborated text. Thus, in this study, less information was better. Retention scores were higher when less information or limited context was given about the word and lower when more information or extended context was given.

One explanation for this is that learners remember most easily what they notice the most easily. If a word is buried in a long text and the word itself does not stand out such as by being unique looking or by being repeated several times, then learners are less likely to pay attention to it. Learning can occur with noticing but not without it. Longer contexts do not promote noticing.

Guessing strategy is normally applied during reading; ESL learners are always encouraged to read a lot because reading is believed would improve their vocabulary inventory. Nevertheless, reading passages as a means of acquiring vocabulary is problematic. Maiguashca (1984) stated that the reading of texts presents three methodological drawbacks from the point of view of vocabulary. First, the text is the main focus and the vocabulary is incidental. Second, the study of texts is often pedagogically uneconomical. It is inevitable that texts contain words and expressions that the teacher does not have any intention to explain or teach at that time and texts do not always contain items that the teacher would like to include. Thus, dealing with texts can be extremely time-consuming. Finally, while reading, learning of words is only partial and passive. A key factor here may be the passive aspect. For teaching vocabulary, it is desirable to involve the learner actively in the noticing, practicing, and ultimately learning of a familiar word. As has been pointed out, new words encountered in reading passages are frequently not dealt or interacted with by the learner.

Hulstijn, Hollander, Greidanus (1996) note that it is generally an accepted principle that extensive L2 reading is good for vocabulary growth and at first glance vocabulary growth stems largely from reading and listening. On closer inspection, it turns out that learners often fail to learn the meaning of an unknown word in a text. This could be because learners simply fail to notice the new word or that learners notice the new word but choose to ignore it. Sometimes the contextual information surrounding the word is so redundant that the reader can understand the meaning of that part of the passage without knowing the exact meaning of the unknown word. Thus, the reader does not pay attention to the word. For learning to take place, "...attention must be focused not exclusively on the meaning of the target word, but also on the connection between the word's form and its meaning" (p. 1).

In this study, the three researchers found that even when readers consult a dictionary and even when the meaning of unfamiliar words has been made available through marginal glosses, or even when such words appear not once but three times in the text, readers usually forget the meaning immediately. These findings suggest that incidental vocabulary learning through reading can only explain a small percent of word knowledge. Learners tend to ignore words that are not relevant for the particular reading goal. Incidental learning is not adequate; learners must engage in additional activities such as paying attention to words deemed to be important, marking down new words, or reviewing new vocabulary regularly. Here is where practice exercises can be helpful in increasing L2 vocabulary retention.

Reading is a very interactive process and interactive theorists argue that guessing from context actually requires a vast vocabulary (Pino-Silva, 1993). Thus, it is the good readers, normally English native speakers and advanced L2 learners, who use context clues to guess the least because they do not have to. They already know the vocabulary. On the other hand,
because of their limited vocabulary knowledge, averaged L2 readers will always be at a disadvantage and must therefore make use of context clues to the extent possible to infer the meaning of the numerous unknown words they encounter. Unfortunately, it is exactly the averaged L2 readers' very limited vocabulary knowledge that hinders their being able to make full use of context clues as well. In other words, compared to L1and advanced L2 readers, averaged L2 readers' lack of vocabulary knowledge forces them to guess about word meanings much more often. However, this lack of vocabulary knowledge also severely limits L2 readers' ability to make use of the remaining context as context clues for guessing. To use context clues effectively, a learner has to have a large vocabulary at the very first place. Those who know more words are more likely to be able to use those known words successfully to learn even more words from context.

Finally, no discussion on context clues would be complete without talking about the distinction between using context clues to guess the meaning of an unfamiliar word and using context clues to learn and remember the meaning of a new word. There is support for the former but not the latter. In other words, the true value of guessing may be for reading comprehension and not for vocabulary learning. If the word is important for the reading task, then the learners is more likely to notice the word, and noticing greatly increases the likelihood of acquisition (Folse, K.S., 2004).

## 8. Conclusion and Recommendations

Since the possible reasons why guessing strategy does not work for ESL learners to increase their vocabulary growth have been identified, the root of the problem should be tackled first. According to Folse (2004), there are several teaching approaches which can be applied.

First, teach the use of context clues as a good reading strategy but recognize that learners cannot rely on this strategy for vocabulary growth. The use of context clues is undoubtedly a good strategy to improve reading in L1 and L2 but it is a reading-improvement strategy not a vocabulary-improvement strategy. When readers encounter a new word or a piece of information that they do not understand, they use their interactive reading skills such as making predictions, using context clues, and locating specific information to figure out the message. It is true that the interactive reading skills are not so efficient in rapidly improving ESL learners' vocabulary, but practicing them can improve learners' overall language ability as well as reading ability. Since reading can result in improved vocabulary knowledge, then anything that improves reading is a good thing.

Second, choose context clue exercises and activities that match the proficiency level of the students. Teachers need to remember that students need to know a great deal of vocabulary in order to effectively use context clues for any unknown words. Asking students to guess words from a context that contains too many unknown words is frustrating and disheartening. Students already know that they do not know enough vocabulary thus do not worsen the problem.

Exercises that ask students to guess word meanings from context should be done in class so that the teacher can give immediate feedback. Another option is to have the students do these
exercises on a computer-based program that gives immediate feedback. The rationale for having students guess word meanings from context is that mental effort involved causes learners to remember that word and meaning better. It is a fact. The only problem is that ESL learners are just as likely to guess a wrong meaning as a right meaning and the students will remember whatever meaning was guessed regardless of its accuracy. Thus, the best learning situation is one in which the learners complete the context clues activity and then receive immediate feedback so that learners are not faced with incorrect guesses.

Finally, reading can be a conduit for vocabulary growth especially when done with vocabulary exercises. Students can be given exercises and activities that focus on vocabulary in class and for homework. Reading can result in vocabulary improvement but it must be accompanied with exercises or activities that focus student attention on the words. In other words, explicit practice is highly beneficial. Students learn not only more words (breadth) but also deeper knowledge of those words (depth).

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