

## **VOCABULARY LEARNING STRATEGIES OF ADULT ESL LEARNERS**

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### **ABSTRACT**

Recognizing the importance of lexis and vocabulary learning strategies (VLS) in any language learning, this study tries to identify vocabulary learning strategies preferred by university students. The aim of this study was to identify the types of learners based on their VLS preferences and to discuss the impact of their preferences on the acquisition of English vocabulary. Seven vocabulary learning strategies namely metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, rehearsal strategies, encoding strategies, and activation strategies were tested. 360 first- and second-year students of Universiti Teknologi MARA, Perlis, from five diploma programmes were involved in the study. A vocabulary learning questionnaire developed by Gu and Johnson (1996) was used to gather the data. Before the questionnaire was used, it was first translated to the Malay language and pilot-tested. Results showed that the respondents preferred guessing and dictionary strategies the most; the other five namely metacognitive regulation, note-taking strategies, rehearsal strategies, encoding strategies, and activation strategies were less preferred.

### **Introduction**

One approach to facilitating vocabulary learning that has attracted increasing attention is vocabulary learning strategies (VLS). VLS are actually a component of language learning strategies which are also considered a part of general learning strategies. There have been numerous attempts to develop a taxonomy of VLS (Oxford, 1990; Gu & Johnson, 1996; Schmitt, 1997). Thus, to avoid confusion, Schmitt (2000) categorizes the VLS into two categories: (1) strategies that are useful

for the initial discovery of a word's meaning, and (2) those useful for remembering that word once it has been introduced. Some of these strategies are "shallow" but others are "deeper".

Normally, "shallow" strategies such as simple memorization, repetition, and taking notes are more commonly used by beginners. More complex ones or "deeper" strategies, on the other hand, which require significant active manipulation of information, for instance, imagery, inferencing, and the Keyword Method are normally preferred by intermediate or advanced learners (Schmitt, 2007). If the depth of the processing perspective is followed, the relatively "shallow" strategies may be less effective than "deeper" ones. In fact, research into some "deeper" VLS such as forming associations (Cohen & Aphek, 1981) and using the Keyword Method (Hulstijn, 1997) are shown to enhance retention better than rote memorization.

The question of which VLS are chosen by ESL learners depends on a number of factors such as motivation, culture, and proficiency (Schmitt, 2000). Gu and Johnson (1996, p. 648) divide ESL learners into several groups based on their VLS preferences. The different types of learners are listed below:

1) *Readers*

They are the best learners but their number is usually small. They believe in learning vocabulary through natural exposure such as from reading, but not memorization. They seek words that they consider to be useful and deal with them in context.

2) *Active strategy users*

The next best students, they are hardworking and highly motivated. They use a variety of strategies to learn the words they consider important. These include natural exposure, memorization, dictionary use, guessing, etc. They generally use strategies more than other learners.

3) *Non- encoders*

4) *Encoders*

Non-encoders and encoders are very similar to each other in the sense that they make average use of the various strategies. The only difference between them is that the encoders use more deliberate memorization strategies such as association, imagery, visualizing the form of a word, and breaking the words into parts.

5) *Passive strategy users.*

This group is the least successful. They believe in memorization but are well below other learners in their use of strategies. They are the reverse image of the active strategy users.

This article will firstly categorize the learners based on their VLS preferences as proposed by Gu and Johnson (1996). The probable effects of their choices will then be discussed.

### **Methodology**

The Vocabulary Learning Questionnaire (VLQ), developed by Gu and Johnson (1996) was used to collect data on the respondents' preferences of vocabulary learning strategies. The VLQ enabled the researcher to look at the clustering of the various strategies of the learners in learning English vocabulary. By examining the learners' various strategies, the researchers were able to distinguish four different types of learners as mentioned above.

### **Sample**

There were 5413 diploma students and according to Wunsch (1986), for a group of 5413 students, a sample of at least 346 students was needed to make an estimation with a sampling error of  $\pm 5$  percent at the 95 percent confidence level. Nevertheless, 360 students were chosen. The sample size for this study was determined using the formula for estimating sample size and the table for sample size (Wunsch, 1986).

### **Vocabulary Learning Questionnaire (VLQ)**

Gu and Johnson's (1996) vocabulary learning questionnaire, translated into the Malay language, was used to elicit students' self-reported vocabulary learning strategies. Originally it consisted of 92 vocabulary learning behaviours but after running the reliability test, 78 items were chosen. The questionnaire was chosen due to its comprehensiveness. The 78 vocabulary learning behaviours were divided into seven major parts namely metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal), memory strategies (encoding) and activation strategies. Each part comprised several subcategories. The details are shown in Table 1. Respondents were asked to rate each statement on a 4-point scale, ranging from Extremely Untrue of Me (1) to Extremely True of Me (4).

Table 1: Reliability Test Results of the Vocabulary Learning Questionnaire

Dimensions and Categories	No. of Items	Variable Labels	Reliability
Part I: Metacognitive Regulation	7	MR	$\alpha = .67$
Section A: Selective Attention	4	SEL	$\alpha = .56$
Section B: Self-Initiation	3	SELF	$\alpha = .78$
Part II: Guessing Strategies			
Section A: Using Background Knowledge Wider Context	9	GS	$\alpha = .65$
Section B: Using Linguistic Cues / Immediate Context	6	WIDER	$\alpha = .65$
Section B: Using Linguistic Cues / Immediate Context	3	IMM	$\alpha = .65$
Part III: Dictionary Strategies	15	DS	$\alpha = .74$
Section A: Dictionary Strategies for Comprehension	4	DIC	$\alpha = .86$
Section B: Extended Dictionary Strategies	7	EXT	$\alpha = .68$
Section C: Looking-Up Strategies	4	LOOK	$\alpha = .69$
Part IV: Note-Taking Strategies	8	NTS	$\alpha = .76$
Section A: Meaning-Oriented Note-Taking Strategies	4	MEAN	$\alpha = .68$
Section B: Usage-Oriented Note-Taking Strategies	4	USAGE	$\alpha = .84$
Part V: Rehearsal Strategies	11	RS	$\alpha = .74$
Section A: Using Word Lists	6	USING	$\alpha = .88$
Section B: Oral Repetition	2	ORAL	$\alpha = .74$
Section C: Visual Repetition	3	VISUAL	$\alpha = .59$
Part VI: Encoding Strategies	24	ES	$\alpha = .67$
Section A: Association / Elaboration	4	ASS	$\alpha = .54$
Section B: Imagery	4	IMAGERY	$\alpha = .68$
Section C: Visual Encoding	3	ENCO	$\alpha = .61$
Section D: Auditory Encoding	3	AUDI	$\alpha = .71$
Section E: Using Word-Structure	3	WORD	$\alpha = .73$
Section F: Semantic Encoding	3	SEM	$\alpha = .70$
Section G: Contextual Encoding	4	CON	$\alpha = .69$
Part VII: Activation Strategies	4	ACT	$\alpha = .72$

## Results

Table 2 presents the descriptive statistics of the seven vocabulary learning strategies and their sub-strategies. The first is metacognitive regulation which basically means learning through natural exposure. Metacognitive regulation has two sub-strategies namely selective attention such as having a sense of which word meanings can be

guessed and which cannot and self-initiation for instance deciding to read other English reading materials besides textbooks to expand one's vocabulary knowledge. Metacognitive regulation was not their preference.

The respondents showed extensive use of guessing strategies when dealing with vocabulary problems. Semester 3 students were the main users of the guessing strategies followed by Semester 2 and Semester 1. The guessing strategies which had two sub-strategies namely using prior 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 prior knowledge was more extensively used compared to the linguistic cues.

Table 2: Ways Adult ESL Learners Learn Vocabulary

Vocabulary Learning Questionnaire	Semester 1		Semester 2		Semester 3	
	M	SD	M	SD	M	SD
<b>Categories and Strategies</b>						
Metacognitive regulation	2.85	.32	2.74	.32	2.83	.34
Selective attention	2.90	.34	2.87	.37	2.89	.36
Self-initiation	2.78	.45	2.58	.49	2.74	.49
Guessing strategies	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
Dictionary strategies	3.00	.29	2.93	.31	2.94	.30
Dictionary strategies for comprehension	3.29	.40	3.21	.42	3.28	.44
Extended dictionary strategies	2.80	.38	2.76	.38	2.75	.35
Looking-up strategies	3.07	.41	2.98	.42	2.94	.37
Note-Taking strategies	2.63	.34	2.58	.38	2.52	.35
Meaning-oriented note-taking	2.60	.38	2.55	.47	2.50	.38
Usage-oriented note-taking	2.67	.44	2.61	.41	2.54	.43
<b>Rehearsal strategies</b>	2.58	.26	2.52	.38	2.48	.29
Using word lists	2.42	.32	2.36	.39	2.31	.32
Oral repetition	2.90	.44	2.82	.43	2.85	.38

Visual repetition	2.69	.38	2.62	.46	2.57	.48
Encoding strategies	2.61	.22	2.70	.22	2.64	.27
Association/ Elaboration	2.61	.32	2.71	.35	2.64	.32
Imagery	2.49	.35	2.60	.37	2.49	.40
Visual encoding	2.54	.39	2.61	.35	2.54	.44
Auditory encoding	2.59	.53	2.64	.47	2.64	.49
Using word-structure	2.69	.36	2.80	.36	2.77	.39
Semantic encoding	2.37	.40	2.54	.41	2.48	.41
Contextual encoding	2.92	.36	2.96	.39	2.91	.40
<b>Activation strategies</b>	<b>2.77</b>	<b>.41</b>	<b>2.77</b>	<b>.35</b>	<b>2.81</b>	<b>.42</b>

They also seemed to use dictionary strategies widely, both for comprehension and for vocabulary learning. The dictionary strategies consisted of three sub-categories as follows, using the dictionary for comprehension, for instance, looking up words that are crucial to the understanding of the sentence or paragraph in which it appears, extended dictionary strategies such as paying attention to the examples of use when looking up a word in a dictionary, and looking-up strategies such as trying the entry for the stem if the unknown word seems to have a prefix or suffix. The most preferred sub-strategy was using the dictionary for comprehension followed by looking-up strategies and extended dictionary strategies. In addition, Semester 1 students used dictionary strategies the most followed by Semester 3 and Semester 2. Semester 1 students were also the most frequent users of the dictionary for comprehension and extended dictionary strategies. They also used looking-up strategies the most frequently to enrich their vocabulary storage.

The fourth category was note-taking strategies which had two sub-categories, namely, meaning-oriented note-taking strategies such as writing both the Malay equivalent and the English synonyms of the word looked up and usage-oriented note-taking strategies such as making a note when encountering useful expressions or phrases. Analyzing the different mean scores of the note-taking strategies and the two sub-strategies, the conclusion could be drawn that these were not preferred by the respondents.

### Discussion

Based on the findings, it was obvious that the respondents employed a limited number of VLS when trying to learn English vocabulary. Out of seven VLS tested, only guessing and dictionary strategies were preferred. Thus, they could be labeled as “passive strategy users” as categorized by Gu and Johnson (1996).

Being labeled as “passive strategy users” carries a negative connotation. For VLS, rather than being used individually, multiple vocabulary learning strategies are often used concurrently. This means that active management of strategy use is important. Good learners do things such as use a variety of strategies, structure their vocabulary learning, review and practice target words, and are aware of the semantic relationships between new and previously learned L2 words; they are conscious of their learning and take steps to regulate it. Poor learners, on the other hand, generally lack this awareness and control (Sanaoui, 1995).

The two preferred strategies may have certain advantages for the students in learning English vocabulary. Extensive use of the guessing strategy in learning English vocabulary has its benefits. To a certain extent, several studies have proven that a certain amount of vocabulary could be learned from context. Studies with native speakers, for example, have found that there is between a 1 in 10 and 1 in 20 chance of an unfamiliar item being learned to some degree (Nagy et al., 1985; Nagy et al., 1987; Shu et al., 1995). Swanborn and Glopper (1999) confirmed these findings after conducting a meta-analysis of 20 studies involving native speakers which found that students incidentally learned an average of 15% of the unknown words they met while reading. In all these studies, the unknown words made up 3% or less of the running words. Smaller proportions of unknown words typically resulted in more learning. Though studies with ESL learners have generally not been as carefully conducted as studies with native speakers (Day et al., 1991; Dupuy & Krashen, 1993), Horst et al. (1998), in a study using a long text and two kinds of vocabulary test, found that about one in five of the unknown words were learned to some degree.

Using the dictionary to learn English words was the most preferred strategy. This finding is in line with Scholfield’s (1997) which reports ESL learners commonly consult dictionaries to check spelling, look up the meaning of unfamiliar words and confirm the meaning of partially known words. The advantages are that dictionaries can be aids to learning (Nation, 1989) and Fraser’s study (1999) also shows that consulting a dictionary to confirm inferences is a valuable metacognitive strategy for lexical acquisition. The combination of inferring and consulting produces a 50% rate of recall, compared to only 31% and 30%, respectively, for either of these activities alone.

Other than the two preferred VLS, the other five VLS were not the preference of the participants. One of non-favoured strategies is metacognitive regulation or learning from natural exposure. Not using this strategy may cause the learners to lose an opportunity to be independent learners. According to Sanaoui (1995), the respondents can be categorized as unstructured learners who depend more on class materials, take less initiative and do less regular review. As a result, they are not in

command of their own learning. For Pintrich et al. (2000), say that there are three main components of metacognition which could lead learners to be independent. The first component is metacognitive knowledge which entails cognitive learning strategies which the learner uses to regulate the process of knowledge acquisition such as note-taking. The second, metacognitive monitoring, consists of metacognitive strategies such as planning and monitoring learning activities. The third, self-regulation and control, is dedicated to resource management and self management such as time management and management of the learning environment. Structured learners, on the other hand, are better organized and systematically carry out independent study and self-initiated activities, regularly record new words in notebooks and review them, and seek out opportunities to use previously met lexis.

The respondents also did not favour note-taking strategies though vocabulary notebooks have been recommended by many writers (Allen, 1983; Gairns & Redman, 1986; McCarthy, 1990; Woolard, 2000). When writing a vocabulary notebook, according to Schmitt and Schmitt (1995), several entries besides L1 translation are recommended such as parts of speech, pronunciation, examples of sentences, and collocations. This indirectly encourages students to develop strategies for learning and remembering words so that they become more effective word learners. Furthermore, because teachers do not have enough time to teach everything about a word, students have to become independent word learners. Vocabulary notebooks encourage learners to be independent. They teach them how to learn vocabulary effectively by encouraging them to make better use of their dictionaries, and ultimately make them independent of teachers, dictionaries and textbooks. Moreover, taking notes also invites learners to create their own personal structure for newly learned words, and affords the chance for additional exposure during review. Thus, it is evident that vocabulary notebooks are beneficial to ESL learners (Waring, 2002).

Rehearsal was another strategy ignored. Ignoring such a strategy however may put the learners at a disadvantage because there are several research findings which show the superiority of the rehearsal strategy. As Carter (1987, p. 153), for instance, says, "Quantities of initial vocabulary can be learned both efficiently and quickly by methods such as rote learning which are not always considered to be respectable. It may be dangerous to underestimate such a capacity." Since rehearsal can enhance one's initial vocabulary quickly, it is undeniably useful to beginners and weak ESL learners. This group of learners, according to Waring (1995) needs a basic vocabulary before they can even start to learn from context as they have insufficient knowledge and the text is too dense with unknown and partly known words. Waring (1995) even recommends that guessing from context



be left to a later stage when the learners have enough of the knowledge base from which to work. Furthermore, Hulstijn and Laufer (2001) also suggest that if learners are supposed to have a rich L2 lexicon, which is the pre-requisite of a fluent communicative ability, it is a must to include procedures such as regular rehearsal of words, rote learning, and training in automatic word recognition as one component of vocabulary learning because such procedures enable learners to learn large numbers of words in a short time.

Encoding strategies or mnemonics, techniques to relate the new word to be retained with some previously learned knowledge, using some form of imagery, or grouping (Schmitt, 1997), was less used by the respondents. Nevertheless, mnemonics have been proven to be extremely effective in helping people remember things (Mastropieri & Scruggs, 1989; Bulgren et al., 1994). In the field of vocabulary learning, the keyword technique is one of strategies. The Keyword technique allows learners to connect the sound of a word they are learning to one they already know in either their first or the target languages. They then create an image to help remember the association (Pressley et al., 1982). The Keyword method works superbly with words which have a high degree of "imageability" (Richardson, 1980) or for word pairs between which the learners can form some kind of semantic links (Ellis, 1995). Learners will find this technique useful with words that are particularly difficult to remember.

Finally, activation strategies were also ignored by the respondents. Activation strategies are strategies ESL learners use to interact with other people in order to discover or practice new words. Ellis (1995) explains how learning takes place in an interaction based on the interaction hypothesis which says, "When second language (L2) learners experience communication problems and have the opportunities to negotiate solutions to them, they are able to acquire new language" (p. 188). The interaction hypothesis was then tested in their two studies in Japan. They found that "comprehending input does not guarantee the acquisition of new word meanings...However, negotiated comprehension may facilitate acquisition because it induces learners to notice unknown items in the input" (p. 215). Thus, in other words, learning by interaction occurs when the L2 learners are negotiating meaning. When learning vocabulary, ESL learners should realize that the input alone is not enough if they cannot produce an output; activation strategies provide the venue to test their competence.

## **Conclusion**

In short, among the seven vocabulary learning strategies analyzed, only two strategies, guessing and dictionary strategies, were preferred by the respondents.

It is insufficient because, as Hatch and Brown (1995, p. 374) point out, vocabulary learning involves five steps: encountering new words, getting the word form, getting the word meaning, consolidating word form and meaning in memory, and using the word. The two preferred strategies however are only strategies for the discovery of a new word's meaning, according to Schmitt (2000). The purpose of vocabulary learning should include both "recalling" words and the ability to "apply" them automatically in a wide range of language contexts when the need emerges. Vocabulary learning strategies, therefore, should incorporate strategies for "recognizing and knowing" as well as "using" words. Thus, what is/are the best strategy/strategies to be employed to maximize vocabulary acquisition? The answer is no single strategy is capable of addressing all the above skills. An effective approach to word learning should be multifaceted in nature. Nevertheless, most recent vocabulary researchers have come to the conclusion that the most efficient and practical vocabulary learning approach involves a carefully selected combination of both explicit and implicit instruction and learning.

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