

## **Vocabulary Notebooks: Attitudes and Acquisition in an Adult Context**

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Second language vocabulary acquisition and pedagogy are important concerns for professionals in the ESL/EFL field. This article describes a two-phase study focusing on the use of vocabulary notebooks as a second language vocabulary learning strategy. The study explored learners' attitudes toward using vocabulary notebooks and examined the impact of the notebooks on learner vocabulary acquisition. In addition, the effect of semantic mapping on vocabulary acquisition was investigated. The results indicate that though learners believed their vocabulary notebooks to be a useful aid to vocabulary acquisition, they were less than enthusiastic about keeping them. With regard to vocabulary acquisition, the study found a positive, but weak, effect for vocabulary notebooks on acquisition. It is suggested that the weakness of the effect may be related to the aforementioned lack of learner enthusiasm for using vocabulary notebooks. Finally, the semantic mapping strategy was not found to have a positive influence on vocabulary learning in this study, though this may have been due more to study-specific factors than the efficacy of semantic mapping.

### **I. INTRODUCTION**

This paper reports on a two-phase, action-research project which sought to determine the efficacy of vocabulary notebooks with regard to vocabulary acquisition among university-level English as a foreign language (EFL) learners in South Korea. It has been suggested by some researchers (Fowle, 2002; Nation, 2001; Schmitt, 2000) that having learners use vocabulary notebooks can have a salutary effect on EFL vocabulary acquisition by promoting independent learning and highlighting vocabulary learning strategies. This study is concerned with whether it is possible to empirically demonstrate gains in vocabulary acquisition which can be attributed to the use of vocabulary notebooks, and to try to determine whether a particular learning strategy--semantic mapping--has a

beneficial effect on vocabulary acquisition. In addition, the study sought to measure learners' perceptions of the usefulness of vocabulary notebooks as a learning strategy.

The study finds that the use of vocabulary notebooks did have a weakly positive effect on target vocabulary acquisition. It also suggests that the amount of acquisition may be influenced by learner attitudes toward using the notebooks, which in this study were somewhat negative. Furthermore, it is argued that there may be a relationship between the age of the vocabulary notebook users and their attitude, with older users regarding keeping vocabulary notebooks as onerous in comparison with the perceived benefits. Finally, the use of the semantic mapping strategy in this study did not result in improved acquisition, though it is suggested that this may have been the result of insufficient instructor support rather than the efficacy of the strategy itself.

## II. LITERATURE REVIEW

### 1. Second Language Vocabulary Acquisition

Vocabulary is clearly a central consideration when learning a second language (Adolphs & Schmitt, 2003; Coady & Huckin, 1997; DeCarrico, 2001; Lewis, 1993; Moudraia, 2001; Nunan, 1995; Pawley & Syder, 1983; Willis, 2004). McCarthy (1990) states that for second and foreign language teachers "the single, biggest component of any course is vocabulary" (p. viii). Cook (2001) writes that "Students are often acutely aware of their ignorance of vocabulary in a way they are unaware of their ignorance of grammar and phonology" (p. 66). For both teachers and students vocabulary is clearly of importance to language learning. Yet, McCarthy (*ibid.*) goes on to say that "vocabulary often seems to be the least systematized and the least catered for of all the aspects of learning a foreign language" (p. viii). Other writers (Coady & Huckin, 1997; Nunan, 1995) have noted the resurgence of interest in vocabulary acquisition among researchers.

When considering vocabulary acquisition, it is essential to consider what it means to know a word and how the learner may best gain that knowledge. According to Cook (2001), acquiring a word is not merely knowing "the translated meaning as in word lists," but entails a "complex range of information about its spoken and written form, the ways it is used in grammatical structures and word combinations, and several aspects of meaning" (p. 62). With regard to acquiring vocabulary, researchers need to examine how knowledge is initially attained and how it is best retained.

Teachers traditionally have used translation, picture association and explanation to convey meaning (Cook, 2001), while the most popular strategy for students according to Schmitt (1997) is looking up words in bilingual or monolingual second language (L2)

dictionaries. Supporting this view, Coady and Huckin (1997) list a number of studies that confirm the value of dictionary use for vocabulary learning. More recently, guessing meaning from context has become a commonplace strategy. Carter and McCarthy (1988), after Twaddle, write that

It is impossible to teach learners all the words they need to know, and so it is important to teach them guessing strategies that will enable them to tackle unknown words and lose their reliance on dictionaries. (p. 42)

To help learners manage this guessing process, Clarke and Nation (as cited in Nation, 2001) developed a five-step procedure which helps learners take advantage of contextual clues. Other ways of getting meaning linked to guessing, which Schmitt (1997) found to be in use among students, are deducing meaning from the form of the word and attending to cognates.

Having found the meaning(s) of a word, it is obviously important for the language learner to remember it. A number of strategies have been used to accomplish this including rote memorization, associating words with pictures and linking new words to previously acquired knowledge. One way of relating new words to those already acquired is semantic mapping (Nation, 2001; Oxford, 1990; Sökmen, 1997). Semantic mapping allows words to be linked by focusing on the relationships among them (hyponymy, antonymy, for example). In practice, semantic mapping involves writing the word to be learned and drawing lines from it to words that are already known. Schmitt and Schmitt (1995) suggest using tree diagrams for words which have a superordinate or subordinate structure.

Another area of importance to vocabulary acquisition is the role of the learner. Breen (2001), when discussing studies by Slimani and Dobinson, writes that increased vocabulary retention is associated with learners' personal effort to master new words. With regard to semantic mapping, Rivers (as cited in Carter & McCarthy, 1988) claims that learners have their own very personal semantic networks that will be created in accordance with the learner's needs and desires. If we accept this, we must acknowledge the inevitability of learners' choices affecting learning. One way to take advantage of this phenomenon is to give learners the opportunity to choose which words they most want to learn. About learner autonomy, McCarthy (1990) notes the importance of encouraging learners to develop a personal learning style, and cites a study by Atkinson which showed that learners who controlled their learning activities were 50 percent better at retaining words from random word lists.

Finally, it should be mentioned that there is much controversy among researchers as to which of the strategies for learning vocabulary is better (about which more will be discussed in the next section), but it is likely true as McCarthy (1990) states that "the good

learner will operate a variety of techniques” (p. 120).

## 2. Vocabulary Notebooks

Various writers have noted the importance of vocabulary notebooks in second language learning (Fowle, 2002; McCarthy, 1990; Santos, 1988; Schmitt & Schmitt, 1995; Schmitt, 1997; Taylor as cited in Cook, 2001). McCarthy (1990) writes that the “The vocabulary notebook is probably the most common form of written student record” (p. 127). As the name suggests, a vocabulary notebook entails writing words the learner wishes to learn in a notebook and associating relevant information with the target words. Schmitt and Schmitt (1995) write that creating a pedagogically sound vocabulary notebook requires that the notebook be organized with regard to principles derived from memory and language research. Justification for the use of vocabulary notebooks comes from the belief that they aid vocabulary acquisition and promote learner autonomy (Fowle, 2002). In addition, Fowle suggests that they can help learners develop their “metacognitive knowledge of learning processes” (p. 381). According to Schmitt and Schmitt, properly conceived vocabulary notebooks aid acquisition by incorporating beneficial learning strategies.

Ellis (1994) in his discussion of learner strategy training notes that good learners tend to use learning strategies more frequently than less successful learners, though he emphasizes that what is probably more important to consider is the matching of effective strategies to particular task types. Ellis also suggests that clusters of strategies seem to be more effective than individual ones as they allow learners with different learning styles to choose among strategies. He cautions, however, that more research is needed to determine which combinations of strategies produce the best results. Furthermore, Ellis notes that adults make good candidates for strategy training as they tend to use “more sophisticated strategies” which may explain why they learn faster initially than children. Finally, Medani (as cited in McCarthy, 1990) states that in his study the good vocabulary learners were the learners who actively used learning strategies to practice new words.

Schmitt and Schmitt (1995) after a survey of general memory research recommend the following guidelines for vocabulary notebooks:

- 1) *Memorize native word/L2 target word in pairs as in word lists.* Some would argue that words are better learned in context, but others support the use of word lists (Carter & McCarthy, 1988). A study by Laufer and Hadar (as cited in Nation, 2001) supports the use of translations, but combines these with L2 dictionary definitions of the target words. According to Chin (2002), research can be shown to back both the use of definitions and learning words in context. Carter and McCarthy (1988) and Carter (1987) note studies in support of translation and, in addition, mention the

supplementary use of pictures or some graphic representation of the target word to assist learning.

- 2) *New words should be incorporated into networks of already known words.* This mapping of new onto old is based on the belief that words are stored in networks based on meaning relationships. The process of positioning the word within the network requires intense cognitive processing which in turn heightens learning (Carter & McCarthy, 1988; Ellis, 1994; Oxford, 1990; Schmitt & Schmitt, 1995). Additionally, understanding of new words is increased by comparison to other words in the field; for example, a hyponym relation as in vehicle/car. Chin (2002) warns, though, that this strategy is most beneficial in learners with semantic fields of some complexity, and suggests that it would be less effective for low-level learners who might not have developed such fields. Carter and McCarthy (1988) advocate letting learners choose their own lexical associations, as this will encourage them to be more active learners.
- 3) *Features of the word beyond meaning are essential for genuine understanding.* These features include form (spelling and pronunciation), grammatical characteristics (root form and inflections), frequency of use, connections with other semantic concepts (e.g., diamond: hard, weddings), collocation, and stylistic qualities (e.g., “ask” is neutral, “request” is more formal) (after Richards, 1976; Nation as cited in Schmitt & Schmitt, 1995). Others (Chin, 2002; Cook, 2001) echo the importance of word class knowledge. One strategy suggested by Cook (2001) for developing grammatical word knowledge is for learners to use words in sentences. Also, Schmitt and Schmitt (1995) claim that using target words in sentences improves recall.
- 4) *Learners should be able to choose the words to include in their vocabulary notebooks.* This is based on the notion that learners will be more likely to learn words that they feel a need to learn (Hatch & Brown, 1995). However, Moir and Nation (as cited in Read, 2004) caution that learners may need guidance when choosing words to learn as their study showed that learners often selected unsuitable words.
- 5) *Learners should be exposed to a variety of vocabulary learning strategies to maximize the likelihood of learners encountering a preferred strategy or strategies.* Oxford and Scarcella (as cited in Coady & Huckin, 1997) argue that learners will be more effective independent learners if they are taught appropriate vocabulary learning strategies.
- 6) *Teachers should review the vocabulary notebooks to ensure accuracy.* Accuracy involves checking that the vocabulary learning strategies are being applied properly and that the learners have correctly described the various attributes of the target word (e.g., part of speech, meaning and so on).

### 3. Attitude and Acquisition

This study had two main goals: (1) To seek empirical evidence to support the contention that vocabulary notebooks do in fact improve acquisition, and (2) to assess the learners' attitudes toward vocabulary notebooks as a means of improving second language vocabulary acquisition.

With regard to learner attitude, Schmitt (1997), in a study of Japanese learners, found that language learning strategies were held to be of varying degrees of usefulness by learners depending on their age. Word lists and flash cards, for example, were regarded as less useful by older learners. Word lists and flash cards are, according to Schmitt, examples of cognitive learning strategies. Cognitive learning strategies "include repetition and using mechanical means to study vocabulary" (p. 215). As vocabulary notebooks are also a cognitive strategy, it seems reasonable to question whether they would be regarded as useful by university-level learners. Though Fowle's (2002) study found that secondary school learners had very positive attitudes toward vocabulary notebooks use, the study did not survey older learners.

In addition to learners' attitudes toward the usefulness of vocabulary notebooks, it is important to know if the notebooks actually promote vocabulary acquisition. While learners may regard vocabulary notebooks as helpful, it is certainly possible that they are not, or are only of limited usefulness.

The study is also interested in evaluating the effectiveness of semantic mapping as a vocabulary learning strategy. In one form, semantic mapping involves linking new words to previously learned words through meaning associations, and, as was mentioned above, this cognitive processing effort is claimed to promote learning. However, research into semantic mapping by Chin (2002) found only a minor benefit with regard to vocabulary learning and retention. Chin explained these results by suggesting that lower-level learners may not have sufficient L2 vocabulary to take advantage of this strategy.

## III. METHOD

This study was divided into two phases. Phase 1 was a pilot study which was intended to help rectify any vocabulary notebook implementation problems. It was more limited than Phase 2 in that it focused only on learner perceptions of the usefulness of vocabulary notebooks. Phase 2 was conducted one year later using the same procedure with the exception of two changes to the learning strategy sets, which were made in response to feedback from Phase 1. In addition, Phase 2 investigated the influence of vocabulary notebooks on vocabulary acquisition, and, in particular, studied the effectiveness of the

semantic mapping strategy.

## 1. Phase 1

### 1) Research Questions

- (1) Do the learners perceive the vocabulary notebooks to be beneficial in helping them improve their vocabulary acquisition?
- (2) If yes--why? If no--why not?

### 2) Participants

The participants were learners in two pre-established classes at a coeducational, South Korean university. They were approximately 20 to 27 years of age, and were taking a low-intermediate credit course in English conversation offered by the Department of English Language and Literature. Students typically had at least 6 years of EFL instruction prior to taking the course. One class (Group 1:  $n = 29$ ) was randomly assigned a vocabulary notebook learning strategy set which included a semantic mapping strategy, and the other class (Group 2:  $n = 23$ ) was assigned the same strategy set minus the semantic mapping strategy. (The learners were not randomly assigned to groups as the composition of the classes was pre-determined.)

### 3) Procedure

In the third class of the 16-week semester, learners using strategy sets 1 and 2 had the vocabulary notebook concept and requirements explained to them, and were given guideline sheets which described the way the notebooks were to be organized (Appendix A). Learners were asked to enter 5 words per week in their vocabulary notebooks and complete the prescribed vocabulary learning strategies. The target vocabulary for each unit of the textbook was written on the board during class, and learners were instructed to enter these words in their notebooks if they did not know them. Learners could choose words from other sources if they were already familiar with the target vocabulary.

The vocabulary learning strategies, which were chosen from those recommended in the literature (see above), were for Treatment 1: (a) Write the L2 word, (b) write the L1 translation, (c) write a sentence using the word, (d) draw a picture to represent the word, (e) write a definition of the word and (f) write the part of speech of the word. Treatment 2 learners were asked to use these same strategies, but, in addition, to complete one more, (g) write three previously learned words that are associated with the entry word in the learner's

mind (a semantic mapping strategy.)

The notebooks were collected, assessed in terms of accuracy and completeness, and returned twice during the semester. After handing in the notebooks for the last time the learners were asked to fill out a notebook evaluation/feedback form. The form was based on one described in Fowle (2002) (see below).

## 2. Phase 2

### 1) Procedure

In this part of the study, the above procedure was repeated a year later with new learners similar to those in Phase 1 who were taking the same course. In this phase, the notebook guidelines were altered so that the picture drawing strategy was optional, and a phonemic transcription writing strategy was added. The picture strategy change was made because the Phase 1 study participants reported being frustrated by being unable to draw pictures of many words, abstract words in particular. The other change, asking learners to write a phonemic transcription of the target words, was made because initial doubts about using the International Phonetic Alphabet (IPA) were allayed during Phase 1. When designing Phase 1, this strategy was not included because of a concern that learners would be unfamiliar with the IPA. However, examination of the participants' notebooks revealed that many learners included phonemic transcriptions without being required to do so. This suggested that the IPA was not unfamiliar to the learners, and that they valued such word knowledge. In addition, a third class was added to the study to act as a control group.

Treatment types were randomly assigned to the three classes. One class underwent Treatment 1 (the vocabulary learning strategy set without semantic mapping), another Treatment 2 (the vocabulary learning strategy set with semantic mapping) and the third had no treatment intervention. To avoid confusion among the various groups in Phases 1 and 2, the Treatment 1 class of Phase 2 is henceforth called Group 3, the Treatment 2 class, Group 4 and the control group class, Group 5. There were 26 learners in Group 3, 29 in Group 4 and 28 in Group 5.

On the first day of class, all study participants completed a 36-item multiple-choice pre-test of target vocabulary selected from the course text, and on the last day of class, the learners re-took the test. The test items were all taught during the course and recommended for inclusion in the learners' vocabulary notebooks.

The test is a multiple-choice test of what Laufer et al. (2004) call active recognition vocabulary knowledge. An example test question is as follows:

A \_\_\_\_\_ product is one that is designed to be thrown away after it has been used.



- a) useless
- b) disposable
- c) discontinued
- d) defective

## 2) Research Questions

- (1) Do the learners perceive the vocabulary notebooks to be beneficial in helping them improve their vocabulary acquisition?
- (2) If yes--why? If no--why not?
- (3) Does the keeping of vocabulary notebooks significantly improve the acquisition of target vocabulary?
- (4) Do vocabulary notebooks that include a semantic mapping strategy produce better target language vocabulary acquisition than notebooks that do not include one?

## IV. RESULTS

Tables 1 and 2 show the results of the learner attitude survey for both Phase 1 and Phase 2, which was completed after they handed in their vocabulary notebooks for the last time. Table 2 lists learner comments which apply to 5% of the respondents or more. For a complete list of comments see Appendix B.

**TABLE 1**  
**Vocabulary Notebook Learner Attitude Survey for Phases 1 & 2: Questions 1, 2 & 3**

1. Do you like using your vocabulary notebook?										
2. Do you think your vocabulary notebook helps you remember new/useful words?										
3. Do you think your vocabulary notebook makes you a better student?										
Phase 1	Question 1			Question 2			Question 3			
Group 1	Yes	Not Sure	No	Yes	Not Sure	No	Yes	Not Sure	No	
<i>n</i> = 29										
Number of responses	7	17	5	23	4	2	15	13	1	
%	24.1	58.6	17.3	79.3	18.8	6.9	51.7	44.8	3.5	
Group 2										
<i>n</i> =23										
Number of responses	7	9	7	12	9	2	8	12	3	
%	30.4	39.1	30.4	52.2	39.1	8.7	34.8	52.2	13.1	
Groups 1 & 2										
<i>n</i> = 52										
Number of responses	14	26	12	35	13	4	23	25	4	
%	26.9	50	23	67.3	25	7.7	44.2	48.1	7.7	

Phase 2		Question 1			Question 2			Question 3		
Group 3	<i>n</i> = 26	Yes	Not Sure	No	Yes	Not Sure	No	Yes	Not Sure	No
Number of responses		17	6	3	20	6	0	17	8	1
		% 65.4	23.1	11.5	76.9	23.1	0	65.4	30.8	3.8
Group 4	<i>n</i> = 29									
Number of responses		8	19	2	19	9	1	18	10	1
		% 27.6	65.5	6.9	65.5	31.0	3.5	62.1	34.5	3.5
Groups 3 & 4	<i>n</i> = 55									
Number of responses		25	25	5	39	15	1	35	18	2
		% 45.5	45.5	9.1	70.9	27.3	1.8	63.6	32.7	3.6
Phase 1 & Phase 2		Question 1			Question 2			Question 3		
All groups	<i>n</i> = 107									
Number of responses		39	51	17	74	28	5	58	43	6
		% 36.5	47.7	15.9	69.2	26.2	4.7	54.2	40.2	5.6

**TABLE 2**  
**Vocabulary Notebook Learner Attitude Survey for Phases 1 & 2: Questions 4, 5 & 6**

4. What do you like best about your vocabulary notebook?

Comments	Phrase 1		Phrase 2			Phrases 1&2	
	Groups						# / %
	1	2	1&2	3	4	3&4	
-Helps me remember new words	10	7	17	5	8	13	30 / 28.0
-Drawing pictures to represent words	6	5	11	2	3	5	16 / 15.0
-Helps to find the meaning of words	4	4	8	7	1	8	16 / 15.0
-Writing example sentences	4	4	8	3	3	6	4 / 13.1
-Helps to find the meaning in English	3	1	4	4	5	9	13 / 12.1
-Easy to review words (aids retention)	2	0	2	2	4	6	8 / 7.5
-Using many strategies (aids retention)	1	1	2	2	2	4	6 / 5.6
-Using a monolingual English dictionary	1	3	4	1	0	1	5 / 4.7

5. What don't you like about your vocabulary notebook?

Comments	Phrase 1		Phrase 2			Phrases 1&2	
	Groups						# / %
	1	2	1&2	3	4	3&4	
-Drawing pictures to represent words	22	15	37	3	11	14	51 / 47.7
-Time-consuming	3	7	10	2	10	12	22 / 20.6
-Semantic mapping strategy	7	NA	7	NA	0	0	7 / 6.5
-Too heavy and/or big	0	0	0	3	2	5	5 / 4.7

## 6. How does your vocabulary notebook help you to learn English?

Comments	Phrase 1		Phrase 2			Phrases 1&2	
	Groups						
	1	2	1&2	3	4	3&4	All
Number of Comments	# / %						
-Helps me remember new words	15	7	22	13	2	15	37 / 34.6
-Helps me find the meaning of words	2	3	5	5	4	9	14 / 13.1
-Writing example sentences	1	0	1	5	1	6	7 / 6.5
-Using a monolingual English dictionary	0	0	0	2	5	7	7 / 6.5
-Good study tool	2	1	3	2	1	3	6 / 5.6
-Helps me be a better student	0	0	0	3	2	5	5 / 4.7

Table 3 displays the results of the vocabulary tests that were administered before and after the learners used their vocabulary notebooks. The results represent only the learners whose pre-test scores fell between 22 and 30 out of a possible 34 correct answers. This matching procedure was used to ensure that all three groups of learners who were compared in this part of the study were at approximately the same level, with respect to the target vocabulary, when the study began. A one-way, balanced, between groups ANOVA showed no significant difference among the means of the pre-test scores for the three groups:  $F = .26 (2, 48), p < .05$ .

**TABLE 3**  
**Results of the Tests of Course Vocabulary Acquisition**

	Pre-test	Post-test	Difference	<i>t</i>	<i>df</i>	<i>p</i>
Group 3 ( <i>n</i> = 19)						
Mean (raw / %)	26.3 / 77.4	30.9 / 90.9	4.6 / 13.5	7.57	18	0.001
SD	2.54	2.36				
Group 4 ( <i>n</i> = 18)						
Mean (raw / %)	26.4 / 77.6	30.6 / 90.0	4.2 / 12.4	7.68	17	0.001
SD	2.5	2.03				
Group 5 ( <i>n</i> = 17)						
Mean (raw / %)	26.2 / 77.1	29.5 / 86.8	3.3 / 9.7	10.4	16	0.001
SD	2.37	1.87				

The differences in scores between the pre-tests and post-tests for all groups are statistically significant at the .001 level of significance. However, a one-way, balanced, between groups ANOVA revealed no significant differences among the post-test mean scores:  $F = 2.18 (2, 48), p < .05$ .

## V. DISCUSSION

### 1. Participants' Attitudes Toward Using Vocabulary Notebooks

In Phase 1, the responses to Question 1, which asked whether learners enjoyed using their vocabulary notebooks, show a majority of learners (50%) in the undecided category. Of the decided learners, almost the same number chose “yes” as chose “no,” 27% and 23%, respectively. Therefore, 73% of learners either did not like their notebooks or did not feel strongly enough about them to choose a positive response. Phase 2 learners were somewhat more positive with 46% liking their notebooks; nevertheless, 46% were undecided about whether they enjoyed using their notebooks while 9% disliked using them. Combining the results of Phases 1 and 2, we find that 48% of learners did not like their notebooks enough to choose “yes” while 16% did not like them. Together, Phases 1 and 2 reveal that 64% of learners did not feel positive about using their vocabulary notebooks.

When asked what they did not like about using their notebooks (Question 5), almost half of learners (48%) in the combined study results reported not liking the picture drawing strategy. Not surprisingly, the number of learners disliking this strategy was much higher (71%) in Phase 1, where it was required, than in Phase 2 (26%), where it was optional. As was stated above, the strategy was not required in Phase 2 because many learners in Phase 1 complained of the difficulty of drawing pictures to describe abstract words like “representative.” Others objected that drawing took an inordinate amount of time in relation to their perceived value of the strategy as a learning tool. However, the picture drawing strategy was included as an optional component of the strategy set in Phase 2 because a number of learners (15%) commented that they enjoyed using it. Finally, approximately 20% of learners found keeping the notebook to be time-consuming.

Question 2 responses indicate that despite the learners' lackluster attitude toward the vocabulary notebook, they did find that it helped them to remember new words. All five study groups responded positively to this question with 69% of learners claiming the notebooks aided retention of new or useful words. Of the remainder, 26% were unsure and 5% did not think the notebooks helped retention. In support of this, responses to Questions 4 and 6 show the most commonly cited positive factor to be that the vocabulary notebooks helped learners to remember new words. One reason for this given by learners (Question 4) was that the structure of the notebook facilitated vocabulary review, which in turn promoted retention. Another reason (Question 4) was that using many strategies for each new word acted to help the learners remember words.

Question 3 explored whether learners viewed themselves as better students by having used the vocabulary notebooks. The responses suggest that this was the case for roughly half of the learners (54%), but that many were undecided (40%). Only 6% did not think

using the notebook made them better students. It should be noted that Phase 2 learners were more positive than Phase 1 learners in that 19% more Phase 2 learners thought the vocabulary notebook helped them to be better students. Some reasons, in addition to those discussed above, given for why the vocabulary notebooks helped them be better students of English were that they (1) helped them to find the meanings of new words, (2) included the writing of example sentences, (3) promoted the use of monolingual English dictionaries and (4) were a useful study tool. With regard to using a monolingual English dictionary, a number of respondents noted the usefulness of having to work in English (e.g., to get the meaning of words, and to write new words and sentences).

Taken together the responses to these three questions suggest that the learners in this study believed that their vocabulary notebook was an aid to acquisition, but that it was not an enjoyable experience in and of itself for the majority. Furthermore, learners were approximately evenly divided between those who thought it made them a better student and those who were unsure or did not think so.

## 2. Vocabulary Notebooks and Vocabulary Acquisition

In light of the learners' belief that using vocabulary notebooks aids vocabulary learning, and the advocacy of vocabulary notebook use in the literature, one might expect to find a higher amount of learning in the two groups (Groups 3 & 4) that used vocabulary notebooks in Phase 2 of the study as compared to the control group which did not use it (Group 5). The study found that all groups made statistically significant gains (at the 0.001 level of significance) during the course in terms of vocabulary acquisition as measured by the difference between the pre-test and the post-test. Group 3 improved by 14%, Group 4 by 12% and Group 5 by 10%. However, when the mean post-test scores of the three groups were analyzed for significant difference, no such difference was found. To explain more fully, at the beginning of the study, learners in all three groups were matched for vocabulary level based on the results of the pre-test. That is, there was no significant difference among the mean pre-test scores of the three groups. At the end of the study, after two groups of learners had kept vocabulary notebooks in addition to taking the course while one group only took the course, the post-test similarly revealed no significant difference among the mean scores (ANOVA:  $F = 2.18 (2, 48)$ ,  $p = ns$ ). As a result, while the raw test scores show a greater improvement in the two classes that kept a vocabulary notebook (Group 3 = 14%; Group 4 = 12%) as compared to the class that did not keep a vocabulary notebook (Group 5 = 10%), these differences are not statistically significant. Given this, it cannot be claimed that the use of vocabulary notebooks in this study led to better vocabulary learning of the vocabulary targeted in the course when the results of all three groups are considered separately.

As this finding was somewhat unexpected given the differences in the raw mean scores, especially between Group 3 and Group 5, a further analysis was conducted in which the combined post-test scores of the two vocabulary notebook groups (Groups 3 and 4) were compared to the control group (Group 5). It was found that the groups using vocabulary notebooks had a significantly higher test score mean (on a combined basis) than the group that did not use vocabulary notebooks ( $t=2.25$ ,  $df=52$ ,  $p<.05$ ). The fact that the comparison of the groups on an individual basis did not result in significant differences whereas a significant difference was found when just the combined group of students using notebooks and the control group were analyzed is taken to reflect the similarity of the mean test scores. When only the raw mean scores for Groups 3 and 5 were compared, it was found that the two scores were significantly different at the .05 level for a one-tailed test ( $t=1.98$ ,  $df=34$ ,  $p<.05$ ). An analysis of the pre-test mean scores revealed no such significant difference for these groups ( $t=.122$ ,  $df=34$ ,  $p<.05$ ). A comparison of Groups 4 and 5 revealed no significant difference between the post-test mean scores ( $t=1.66$ ,  $df=33$ ,  $p<.05$ ). Thus, it can be said that Group 3, a class that used vocabulary notebooks scored significantly better on the post-test than Group 5 which did not keep a vocabulary notebook.

The above analyses suggest only a weak effect for vocabulary notebooks on course vocabulary acquisition in that Groups 3 and 4 had to be combined into one treatment group for analysis, or Group 4 had to be removed from the analysis to produce a statistically significant difference between learners who used vocabulary notebooks and learners who did not. One explanation for this weakness might be found in the learners' attitudes toward their notebooks. As was seen above, while learners generally agreed that vocabulary notebooks aided vocabulary learning, a majority of them were unenthusiastic about using the notebooks. This failure to engage the learners' interest seems important, as it is a truism in the field that motivated students learn better.

A study by Schmitt (1997) suggests that learners may see value in study strategies that they are currently not using, and, thus, "may be willing to try new strategies if they are introduced to and instructed in them" (p. 221). However, the present study indicates that students may acknowledge the usefulness of learning strategies, be familiar with using them and still not like using them. Schmitt also suggests that learners may find learning strategies differentially helpful as they mature. He writes that the more mature learners in his study preferred strategies that involved deeper language processing. Another explanation may be that as learners get older, they evaluate strategies more closely on a cost-benefit basis. With regard to vocabulary notebooks, a number of students in the study reported the notebooks to be time-consuming (21%), while 48% of learners disliked the drawing strategy (partly because it took so much time) and 5% of the respondents noted that the notebooks were inconvenient to carry around. This suggests that teachers of

learners, especially older learners, ought to consider the burden a particular strategy entails for learners as compared to the potential benefits when recommending or assigning learning strategy work. The age factor may also explain why the secondary school students in Fowle's (2002) study responded so favorably to using vocabulary notebooks, whereas the university-level learners in this study were less than enthusiastic.

With regard to the semantic mapping strategy, as Group 4's strategy set included this strategy, and it performed less well than Group 3 using an identical strategy set, with the exception of the semantic mapping strategy, it is concluded that in this study no advantage was gained by using the semantic mapping strategy. However, this lack of effect may be due to the way in which the strategy was used in this study. Some writers (Chin, 2002; Nation, 2001) have noted the important role that teachers play in helping learners develop the connections between target words and related words that comprise semantic maps. In this study the learners worked independently to construct their semantic maps with the belief that they would benefit from connecting new words to words already known (Nation, 2001). It is entirely possible that the lack of teacher guidance led to unproductive semantic mapping. In addition, Chin (2002) suggests that semantic mapping is less beneficial for learners at lower levels as they have insufficient vocabulary knowledge to construct helpful semantic maps. The learners in this study were at the low-intermediate level, but more research is needed to determine whether or not such learners possess sufficient vocabulary to benefit from semantic mapping.

Another explanation for the failure of the semantic mapping strategy to promote greater vocabulary acquisition may lie in the attitude of the participants toward their vocabulary notebooks. While overall, enthusiasm for the notebooks was somewhat muted, the attitude survey revealed that the group that did not use the semantic mapping strategy liked using their vocabulary notebooks much more than the semantic mapping group. Specifically, 65% of the non-semantic mapping group enjoyed using their notebooks while only 28% of the semantic mapping group liked the vocabulary notebook experience. This difference in attitude could have resulted in the non-semantic mapping group using their notebooks more often for learning purposes, which in turn might have led to higher test scores. While this explanation is speculative, it suggests that the semantic mapping finding reported in this study be viewed with caution.

### 3. Limitations

The definition of the vocabulary acquisition construct as it relates to results dependent on the pre-test and post-test in Phase 2 is limited to the recognition level of knowledge (active recognition), and this is not a sufficiently robust definition to represent vocabulary acquisition in its entirety. This study acknowledges this limitation, but claims that

recognition is a central feature of vocabulary acquisition, and one which ought to be particularly amenable to development through the use of vocabulary notebooks. This is because words entered in the notebooks begin with the L2 form and proceed to L1 equivalents (e.g., translation, definition), something which promotes vocabulary recognition knowledge.

Internal validity is a concern as it is clearly impossible to claim that the vocabulary notebooks are the only variable influencing vocabulary acquisition in this study. While it is true that all three groups in Phase 2 were taught the same syllabus by the same teacher under similar conditions during the same semester, one cannot rule out the possibility of other influences such as learners' personal problems having an effect on acquisition. However, as this is a common feature of classroom-based research, it is believed that readers are able to factor this concern in when evaluating the study findings.

Another threat to internal validity is that given that the use of vocabulary notebooks as a learning tool is an independent learning activity over which the researcher has limited control, it was not possible to control for the amount of time each learner engaged in vocabulary learning. The most that can be claimed is that the learners used the individual strategies at least once per word in order to complete their notebooks. As a result, the vocabulary acquisition in Groups 3 and 4 can at best be attributed to a single use of the strategies per word. It could very well be the case that some learners reviewed their notebooks more than others, and that this affected the acquisition results. The study cannot account for acquisition differences caused by varying amounts of study time.

Also, it should be emphasized that though the study has argued that learner attitude toward vocabulary notebook use may explain the weak acquisition finding, the results are suggestive rather than conclusive. To better support a conclusion of this kind, a future study might attempt to directly relate degree of learner motivation to vocabulary learned with the aid of vocabulary notebooks.

External validity is reduced by the lack of a randomly drawn sample from the population of learners suitable for the study. This severely limits the generalization of the results. However, the description of the participants should allow readers to determine whether their teaching contexts are similar enough to those of the study to warrant generalization.

## **VI. CONCLUSION**

This study surveyed learner attitudes toward and measured vocabulary acquisition attributed to keeping vocabulary notebooks. It was found that though learners believed vocabulary notebooks to be a useful vocabulary learning resource, a majority of respondents was not enthusiastic about using them. In addition, only about one half of the



learners reported being certain that using vocabulary notebooks made them better students. While a positive relationship was established between using vocabulary notebooks and target vocabulary acquisition, the effect was weak. The study suggests that this may be the result of low learner motivation with regard to using the notebooks, which, in turn, may have resulted from learners regarding the vocabulary notebooks as being excessively burdensome in relation to the perceived benefits. As the learners in this study were adults, it may be that younger learners would be more open to undertaking the work involved in keeping vocabulary notebooks. Finally, the addition of a semantic mapping strategy to the vocabulary learning strategy set of one group did not lead to improved acquisition. However, this may have been the result of insufficient teacher support or a difference in attitude toward the vocabulary notebooks, and not necessarily the semantic mapping strategy itself. As a result, this finding should be treated with caution.

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## APPENDIX A

### Vocabulary Notebook Guidelines: Phase 2-Treatment 2\*

#### Instructions

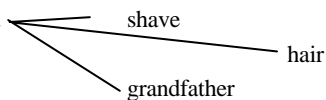
1. Buy a notebook that has 100 pages (about 200 mm. x 260 mm.).
2. Write the title of the notebook on the outside cover (e.g., Jee-Yeong's Vocabulary Notebook).
3. Write your name and student number on the inside cover.
4. Use the first four pages to list all of the words you put in the vocabulary notebook. Write A, B,

- C at the top of the first page, and D, E, F in the middle of the first page. Write G, H, I at the top, and J, K, L in the middle of page 2. Continue until you finish the alphabet. However, put X, Y and Z together in the last section as there will probably not be very many of these words.
5. Divide the notebook into 4-page sections. One section is for each letter of the alphabet (except X, Y and Z. The last section will contain X, Y and Z.)
  6. Write **at least 5** words a week in your notebook. Your teacher will highlight some words each week to put in your notebook. If you already know these words, you can choose other words.
  7. Follow the instructions below for describing each word.
    - a) Write the English word.
    - b) Write the Korean translation.
    - c) Write the phonemic form of the word.
    - d) Write the part of speech of the word (e.g., noun, verb, adjective and so on).
    - e) Write a definition of the word in English.
    - f) Write a sentence using the English word.
    - g) Write 3 words that come into your mind when you think about the word you want to remember (e.g., appearance, your opinion, function, etc.)
    - h) Draw a **simple** picture of the meaning of the word (**optional**)

Example

**B**

- a) beard
- b) 수염
- c) /bird/
- d) noun
- e) -hair that covers a man's face (sometimes on the cheeks and chin, sometimes only on the chin)
- f) My grandfather had a long black beard that I used to play with.
- g) beard



h)



**\*Phase 1 and Phase 2 guidelines were highly similar. Differences include the order of the strategies, and, in Phase 1, the omission of a phonemic transcription strategy and the inclusion of an obligatory picture strategy. Also, Treatment 2 guidelines include a semantic mapping strategy not found in Treatment 1.**

## APPENDIX B

## Vocabulary Notebook Learner Attitude Survey for Phases 1 &amp; 2: Questions 4, 5 &amp; 6

4. What do you like best about your vocabulary notebook?							
Comments	Phrase 1		Phrase 2			Phrases 1&2	
	Groups						
	1	2	1&2	3	4	3&4	All
Comments	Number of comments						# / %
-Helps me remember new words	10	7	17	5	8	13	30 / 28.0
-Drawing pictures to represent words	6	5	11	2	3	5	16 / 15.0
-Helps me find the meaning of new words	4	4	8	7	1	8	16 / 15.0
-Writing example sentences	4	4	8	3	3	6	14 / 13.1
-Helps me find the meaning in English	3	1	4	4	5	9	13 / 12.1
-Easy to review words (aids retention)	2	0	2	2	4	6	8 / 7.5
-Using many strategies (aids retention)	1	1	2	2	2	4	6 / 5.6
-Using a monolingual English dictionary	1	3	4	1	0	1	5 / 4.7
-Writing new words in English	0	2	2	1	1	2	4 / 3.7
-Using a dictionary (type not specified)	1	1	2	1	0	1	3 / 2.8
-Helps me be a better student	1	0	1	1	0	1	2 / 1.9
-Helps me use new words	0	1	1	1	0	1	2 / 1.9
-Convenient	0	0	0	2	0	2	2 / 1.9
-Index (helps to organize words)	0	2	2	0	0	0	2 / 1.9
-Translation	0	1	1	0	0	0	1 / 0.9
-Part of speech	0	1	1	0	0	0	1 / 0.9
-Having to choose words	1	0	1	0	0	0	1 / 0.9
-Semantic mapping strategy	0	0	0	0	1	1	1 / 0.9
-Use it on a weekly basis	1	0	1	0	0	0	1 / 0.9

## 5. What don't you like about your vocabulary notebook?

5. What don't you like about your vocabulary notebook?							
Comments	Phrase 1		Phrase 2			Phrases 1&2	
	Groups						
	1	2	1&2	3	4	3&4	All
Comments	Number of comments						# / %
-Drawing pictures to represent words	22	15	37	3	11	14	51 / 47.7
-Time-consuming	3	7	10	2	10	12	22 / 20.6
-Semantic mapping strategy	7	NA	7	NA	0	0	7 / 6.5
-Too heavy and/or big	0	0	0	3	2	5	5 / 4.7
-Writing definitions	0	1	1	1	0	1	2 / 1.9
-Writing example sentences	0	1	1	1	0	1	2 / 1.9
-Different from usual way of studying	0	0	0	1	1	2	2 / 1.9
-Not assessed frequently enough	0	0	0	1	1	2	2 / 1.9
-Writing phonemic transcription	NA	NA	NA	1	0	1	1 / 0.9
-Can't hear pronunciation	0	0	0	0	1	1	1 / 0.9
-Guidelines are too prescriptive	0	0	0	1	0	1	1 / 0.9

## 6. How does your vocabulary notebook help you to learn English?

Comments	Phrase 1		Phrase 2			Phrases 1&2	All
	Groups						
	1	2	1&2	3	4	3&4	
	Number of comments						# / %
-Helps me remember new words	15	7	22	13	2	15	37/ 34.6
-Helps me find the meaning of new words	2	3	5	5	4	9	14 / 13.1
-Writing example sentences	1	0	1	5	1	6	7/ 6.5
-Using a monolingual English dictionary	0	0	0	2	5	7	7/ 6.5
-Good study tool	2	1	3	2	1	3	6 / 5.6
-Helps me be a better student	0	0	0	3	2	5	5 / 4.7
-Using a dictionary (type not specified)	1	1	2	1	1	1	4 / 3.7
-Improves pronunciation	NA	NA	NA	2	1	3	3 / 2.8
-Had to work in English	0	0	0	3	0	3	3 / 2.8
-Translation of new words	1	1	2	0	0	0	2 / 1.9
-Writing new words in English	1	1	2	0	0	0	2 / 1.9
-Drawing pictures to represent words	1	1	2	0	0	0	2 / 1.9
-Semantic mapping strategy	2	NA	2	NA	0	0	2 / 1.9
-Using many learning strategies	1	0	1	0	1	1	2 / 1.9
-Improves spelling	0	0	0	1	1	2	2 / 1.9
-Can use it every day	0	1	1	0	0	0	1 / 0.9
-Feels good to have the notebook	0	0	0	1	0	1	1 / 0.9
-Teacher assesses notebook	0	0	0	1	0	1	1 / 0.9

Applicable levels: tertiary education

Key words: vocabulary acquisition, vocabulary notebooks

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