

Vocabulary Learning Strategy Use and Vocabulary Proficiency

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This study investigated vocabulary learning strategies used by EFL middle school learners in Korea and examined the relationship between the middle school learners' vocabulary learning strategy (VLS) use and their vocabulary proficiency level. One hundred and forty-one students in a public middle school participated in the study and the data for this study were collected from a vocabulary learning strategy questionnaire and a vocabulary proficiency test. Based on the result of the vocabulary proficiency test, the participants were divided into three proficiency groups: high-, mid- and low- level proficiency groups. The overall findings of the study revealed that the participants used cognitive strategies most frequently and social strategies least frequently. The most frequently used individual strategies were 'using a bilingual dictionary,' 'studying the sound of a word' and 'practicing words through verbal repetition.' The least frequently used ones were 'interacting with native speakers' and 'studying or practicing the meaning of a word in a group.' The research results also showed that the vocabulary proficiency level has a significant influence on the vocabulary strategy use. The more proficient learners used vocabulary learning strategies more actively. More specifically, the high proficiency level group used metacognitive strategies the most. The middle and low proficiency groups used cognitive strategies the most. It is suggested that language teachers should facilitate the vocabulary learning process by helping learners develop appropriate strategies.

[vocabulary learning/vocabulary learning strategy/VLS/vocabulary proficiency]

I. INTRODUCTION

Before the 1980s, vocabulary learning was considered to be a neglected area of second language learning and teaching (Maiguashca, 1993). Zimmerman (1994) claims that the teaching and learning of vocabulary have been undervalued in the field of second language

acquisition (SLA). However, since the 1990s vocabulary studies have received increased attention by researchers. In addition, in the 1980s, with the shift from a focus on teachers to a focus on learners, the notion and importance of what we know today as learning strategies began to draw attention.

Learning strategies play a crucial role in foreign language learning due to their contribution to helping learners develop language competence in many ways (Oxford, 1990; Rubin, 1981; Jung-Hwan Park, Gun-In Lee & Myung-Seon Kang, 2005). It is believed that the strategies used by successful learners may be learned by less successful learners, and language instructors can assist the language learning process by helping learners develop appropriate strategies (Lai, 2009).

In this light, the present study would provide language instructors with a great understanding of the ways learners acquire vocabulary and provide language learners with effective vocabulary strategies to facilitate their vocabulary acquisition. Training students in the use of learning strategies would maximize their potential and contribute to their autonomy (Lai, 2009). In light of the purpose of the study, the following questions guided the present study:

Research Question 1:

What vocabulary learning strategies do EFL middle school learners in Korea report using? What are the most favored vocabulary learning strategies adopted by the Korean middle school students?

Research Question 2:

Is there a relationship between vocabulary proficiency and the use of vocabulary learning strategies?

II. LITERATURE REVIEW

1. Language Learning Strategies

Several researchers have defined learning strategies. Oxford (1990) mentions that learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (p. 8), and Rubin (1987) states that learning strategies are “those which contribute to the development of the language system that the learner constructs and affects learning directly” (p. 23). According to Bialystok (1978), “language learning strategies are optional means for exploiting available information” to improve competence in a second language” (p. 71).

Some researchers have attempted to develop a framework of category of learning strategies. O'Malley and Chamot (1990) divided language learning strategies into three types: metacognitive strategies, cognitive strategies, and social/affective strategies. Oxford (1990) developed a categorization system that has been considered one of the various proposed overviews of language learning strategies. Synthesizing other researcher's classification systems, Oxford identified two distinct approaches to language learning, *direct* and *indirect* strategies. *Direct* strategies help learners to learn the target language directly, and *indirect* strategies help learners to support and manage language learning without directly involving the target language. Each class has three categories: *direct* strategies are subdivided into memory, cognitive and compensation strategies and *indirect* strategies are subdivided into metacognitive, affective and social strategies. The strategy classification system is presented in Table 1.

TABLE 1
Oxford's (1990) Strategy Classification System

Direct strategies	Indirect strategies
<p>1. <u>Memory strategies</u> Help learners store and retrieve new information (e.g., applying images and sounds, creating mental linkages)</p> <p>2. <u>Cognitive strategies</u> Applied by learners to better understand and produce the target language (e.g., summarizing, analyzing, reasoning)</p> <p>3. <u>Compensatory strategies</u> Used for overcoming deficiencies in knowledge of the target language (e.g., guessing meanings from context, using synonyms to convey meaning)</p>	<p>1. <u>Metacognitive strategies</u> Allow learners to control their own cognition (e.g., coordinating the planning, organizing, and evaluation of the learning process)</p> <p>2. <u>Affective strategies</u> Refer to the methods that help learners to regulate emotions, motivation, and attitudes (e.g., taking emotional temperature, self-encouragement)</p> <p>3. <u>Social strategies</u> Include interaction with others through the target language (e.g., asking questions, cooperating with native speakers, becoming culturally aware)</p>

(Lai, 2009, p. 256)

2. Vocabulary Learning Strategy (VLS)

Vocabulary learning strategies constitute a subclass of language learning strategies, which are applicable to a wide variety of language learning tasks, ranging from the more isolated (vocabulary, pronunciation, grammar) to integrative tasks like oral communication and reading comprehension.

A number of studies have been conducted in the past to investigate the use of vocabulary learning strategies. In the area of vocabulary learning strategy taxonomy development, Schmitt (1997) made the most notable effort in terms of range of strategies. Schmitt argued that the lack of attention on vocabulary learning strategies is due to the lack of their comprehensive list or taxonomy and developed a comprehensive inventory of individual vocabulary learning strategies. He distinguished the strategies that learners use to determine the meanings of new words when they first encounter them from the ones they use to consolidate meanings when they encounter the words again. The former includes determination and social strategies and the latter includes social, memory, cognitive and metacognitive strategies. The social strategies are included in the two categories because they can be used for both purposes. Schmitt's taxonomy of vocabulary learning strategies is presented in Table 2.

TABLE 2
Schmitt's (1997) Taxonomy of Vocabulary Learning Strategies

Vocabulary Learning Strategies	
Discovery strategies	Determination strategies Social strategies
Consolidation strategies	Social strategies Memory strategies Cognitive strategies Metacognitive strategies

Schmitt defined each category as follows. *Determination* strategies are used “when faced with discovering a new word’s meaning without resource to another person’s expertise” (p. 205). *Social* strategies are used to understand a word “by asking someone who knows it” (p. 210). *Memory* strategies are “approaches which relate new materials to existing knowledge” (p. 205). The definition of *cognitive* strategies was adopted from Oxford (1990) as “manipulation of transformation of the target language by the learner” (p. 43). Finally, *metacognitive* strategies are defined as “a conscious overview of the learning process and making decisions about planning, monitoring or evaluating the best ways to study” (p. 205). Compared to other classification schemes, Schmitt’s taxonomy is considered the most extensive.

With regard to *memory* and *cognitive* categories, they have similar characteristics in that their goals are to help recall words through some form of language manipulation. However, Schmitt distinguished *memory* from *cognitive* categories, claiming that *memory* categories are more obviously linked to mental manipulation.

Other notable classification schemes have been proposed by Nation (2001) and Gu and Johnson (1996). Nation suggests, “Three general class of strategies to separate aspects of vocabulary knowledge (what is involved in knowing a word) from sources of vocabulary knowledge, and learning processes” (p. 218). The taxonomy of VLS relates to the planning of vocabulary learning (e.g., choosing words, planning repetition) from strategies involving access to sources of vocabulary knowledge (e.g., analyzing word parts, using context), and learning processes (e.g., noticing, retrieving). The latter involves ways of establishing vocabulary knowledge (noticing, retrieving, and generating) (see Table 3).

TABLE 3
A Taxonomy of Kinds of Vocabulary Learning Strategies

General class of strategies	Types of strategies
<i>Planning</i> : choosing what to focus on and when to focus on it	Choosing words Choosing the aspects of word knowledge Choosing strategies Planning repetition
<i>Sources</i> : finding information about words	Analyzing the word Using context Consulting a reference source in L1 or L2 Using parallels in L1 and L2
<i>Process</i> : establishing knowledge	Noticing Retrieving Generating

(Nation, 2001, p. 218)

Gu and Johnson (1996) have developed a vocabulary learning questionnaire containing a considerable number of strategies, divided into the following major categories: beliefs about vocabulary learning, metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal and encoding), and activation strategies.

3. Vocabulary Learning Strategy Use and Vocabulary Proficiency

In the 1970s, individual variations in language learning began to be noticed by researchers, based on the idea that strategies are affected by a number of factors. These factors include age, metacognitive awareness, gender, level of language learning, and so on (e.g., Riazi, Sedighi & Zare, 2005). Gu (2003) also pointed out that the learner himself, the learning task at hand, and the learning environment affect strategies used by a learner and their effectiveness.

The factor, proficiency level, was addressed in studies related to language learning strategies by researchers. In some research, proficiency level affected the choice of language learning strategies (Chamot, O'Malley, Küpper & Impink-Hernandez, 1988; O'Malley, Chamot, Stewner-Manzanares, Küpper & Russo, 1985; Oxford, 1993; Oxford & Nyikos, 1989; Politzer, 1983). O'Malley, Chamot, Stewner-Manzanares, Küpper and Russo (1985) did a survey that involved seventy high school age students enrolled in ESL classes from three high schools in an Eastern metropolitan area of the United States. The results indicated that intermediate level students tended to use proportionally more metacognitive strategies than students with beginning level proficiency did. The researchers found that cognitive strategy use decreased and metacognitive strategy use rose as the foreign language course level increased, but social affective strategy use remained very low across all course levels.

In the Korean context, Jun-Eon Park (2001) made a comprehensive study of Korean EFL learners' vocabulary learning strategies. The results revealed that throughout different age levels the learners increasingly depended on cognitively more complex strategies as they grew older. In-Jae Jeon (2007) examined the relationship between Korean EFL high school learners' vocabulary ability level and vocabulary learning strategy use. According to the overall findings of the study, there were some noticeable differences in using vocabulary learning strategies among different proficiency groups. The advanced and intermediate group tended to use a much wider range of vocabulary learning strategies more actively than the lower group. The researcher indicated that the higher vocabulary achievement level students have, the more positive attitude they have in using vocabulary learning strategies.

Overall, empirical research has provided evidence that there is a positive relationship between vocabulary learning strategies and vocabulary proficiency, which means that the use of effective learning strategies is related to higher levels of language proficiency. However, as to whether there are certain strategy patterns or specific strategy types that associate with effective learners, no common consensus has yet been reached (Lai, 2009).

Much research has been made to investigate vocabulary learning strategies. The majority of past studies, however, have been conducted not only with high school and college students but also among mixed groups of learners with different level of vocabulary proficiency. The current study tries to extend the work into vocabulary area for more specific information.

III. METHOD

1. Participants

One hundred forty one EFL Korean middle school students in their third year participated in this study. They came from four classes of a Korean public middle school located in a metropolitan city. One hundred fifty two copies of questionnaire were distributed to all the students of four classes. However, one hundred forty one were included in the data analysis because incomplete questionnaires were excluded from the analysis.

The participants were 52 % (73) female and 48% (68) male. They were divided into three proficiency groups, high-, mid-, or low- proficiency groups, based on the scores they earned on the vocabulary proficiency test. As shown in Table 4, the high-level group consisted of 47 students with scores ranging from 39-50; the mid-level group consisted of 47 students with scores ranging from 25-38; and the low-level group consisted of 47 students with scores ranging from 9-24.

The distribution of participants in each of the groups is shown in Table 4.

TABLE 4
Distribution of Participants by Proficiency Level

Level	N	M	SD	Score Range
High	47	84.93	3.13	39-50
Mid	47	64.12	6.82	25-38
Low	47	35.82	7.91	9-24

2. Instruments

1) VLS Questionnaire

Data of vocabulary learning strategy use were gathered using a VLS questionnaire that was developed with reference to Schmitt's (1997) work and Shinwoong Lee's (2007) survey. Even though Schmitt's work is considered the most comprehensive and is widely used as a vocabulary strategy questionnaire, it includes some strategy items which Korean students are not aware of or familiar with (Shinwoong Lee, 2007). The researcher excluded some questionnaire items such as 'checking L1 cognates', 'using scales for gradable adjectives', 'skipping or passing new word', 'Loci method' and so on. On the other hand, some strategies that students reported they frequently used in their vocabulary learning were added. 'Using a vocabulary learning textbook,' 'using a new word in sentences' and

'using a new word in English conversation' were included in the survey items. As to the categories, the researcher did not make the distinction between discovery and consolidation strategy as Schmitt did. That is because a number of the students stated that it was somewhat confusing to differentiate these two categories.

The VLS questionnaire was given in Korean to make sure all the participants understand the questionnaire items, consisting of 34 statements. Items #1-16 concern the effectiveness of memory (memory strategies); items #17-27 represent the use of mental processes (cognitive strategies); items #28-30 deal with the organization and evaluation of learning (metacognitive strategies); items #31-34 concern learning with others (social strategies). Students answered each item statement using a 5-point Likert-scale that ranged from 1 (Never or almost never true of me) through 5 (Always or almost always true of me).

2) Vocabulary Proficiency Test

The vocabulary proficiency test used in this study was adapted from a 1,000 Word Level Test developed by Nation (1993) and a Vocabulary Levels Test developed by N. Schmitt, D. Schmitt and Clapham (2001). All the forty items from the former and ten items from the latter's 2,000 word level part were employed for the vocabulary proficiency test.

The original purpose of the test was diagnostic but many researchers have used it to explore vocabulary acquisition issues (Read & Chapelle, 2001). The purpose of the test in the present study was to assess students' vocabulary proficiency. Based on the test results, the participants were divided into three proficiency level groups.

3. Data Collection Procedure

Both the VLS questionnaire and the vocabulary proficiency test were administered to the middle school students in the regular English class time. The researcher gave a brief explanation on the purpose of the survey and instruction on how to answer the questionnaire. Students were told to ask questions any time during the process. One hundred fifty two students were given the questionnaire, and eleven students did not answer some statements. Their surveys were discarded.

4. Data Analysis

All the data collected from the participants were submitted to the SPSS 12.0 software package, with the alpha level set at 0.05. The mean scores and standard deviations of the ratings given by the students on the frequency of use of the 34 VLS were calculated and compared. In order to describe students' overall vocabulary learning strategy use and their

strategy use by proficiency level, descriptive statistics that show mean and standard deviation were used. In order to find out the differences among proficiency groups, an analysis of variance (ANOVA) was used. In case there were statistically significant differences among groups, the Scheffe' test as a post-hoc follow-up procedure was performed.

IV. RESULTS AND DISCUSSIONS

1. Use of VLS for the Entire Group

In order to address research question 1 (What vocabulary learning strategies do EFL middle school learners in Korea report using? What are the most favored vocabulary learning strategies adopted by the Korean middle school students?), mean scores of the entire VLS were calculated. Mean scores of the four subcategories of VLS and the individual VLS items were calculated for the entire group. Oxford (1990) claimed that mean scores between 1.0 and 2.4 are defined as “low” strategy use, 2.5 and 3.4 as “medium” strategy use, and 3.5 and 5.0 as “high” strategy use. In this study, the researcher adopted these categories of ratings to classify high-, mid-, and low- strategy use.

Table 5 displays the mean and standard deviation of the strategy use of all the items in the questionnaire, following Oxford's frequency classification guide. As indicated in Table 5, the participants reported a medium frequency for the mean strategy use on the entire VLS ($M=2.76$). The most frequently used strategy by participants was ‘using a bilingual dictionary’. The result seems to parallel that of Shinwoong Lee's (2007) survey which involved four hundred sixty six Korean university students, suggesting that both middle school students and university students are likely to use the same VLS. The result is also compatible with Schmitt's (1997) study, Young-eun Kim's (2008) study, Jun-Eon Park's (2001) study and In-Jae Jeon's (2007) study that investigated Korean high school students' vocabulary learning strategy use. The researchers indicated that EFL learners heavily depended on the dictionary use strategy. Therefore, it can be suggested that Korean EFL learners throughout the different age levels tend to use a dictionary to get the meaning of words.

TABLE 5
Use of VLS for the Entire Group

No.	Category	Questionnaire items	M	SD
High strategy use items				
18	COG	I use a bilingual dictionary.	3.98	1.0
12	MEM	I study the sound of a word.	3.87	1.1
20	COG	I practice words through verbal repetition.	3.81	1.3
21	COG	I write a word repeatedly.	3.74	1.2
11	MEM	I study the spelling of a word.	3.74	1.1
22	COG	I keep a vocabulary notebook.	3.54	1.0
Medium strategy use items				
6	MEM	I connect a word to the words that I already know.	3.25	1.3
30	MET	I continue to study words over time.	3.04	1.2
15	MEM	I learn the words of an idiom together.	3.02	1.0
29	MET	I self-test word knowledge.	2.93	1.1
25	COG	I utilize the vocabulary section in a textbook.	2.91	1.1
4	MEM	I image a word's meaning.	2.84	1.2
17	COG	I use word lists.	2.83	1.3
24	COG	I study words by taking notes in class.	2.81	1.0
27	COG	I use a vocabulary learning textbook.	2.76	1.1
31	SOC	I ask teacher for the meaning.	2.72	1.3
7	MEM	I connect a word to its synonyms and antonyms.	2.65	1.5
5	MEM	I connect word's meaning to a personal experience.	2.63	1.4
28	MET	I use English-language media.	2.61	1.4
32	SOC	I ask classmates or friends for the meaning.	2.57	1.0
1	MEM	I analyze and study parts of speech	2.52	1.2
Low strategy use items				
10	MEM	I use a new word in English conversation.	2.49	1.3
8	MEM	I group words together to study them.	2.48	1.2
2	MEM	I analyze and study affixes and roots	2.44	1.1
9	MEM	I use a new word in sentences.	2.40	1.0
14	MEM	I paraphrase a word's meaning.	2.36	1.1
13	MEM	I use Keyword Method.	2.34	1.2
16	MEM	I practice words through physical activity.	2.34	1.1
3	MEM	I study words with a pictorial representation of its meaning.	2.25	1.0
26	COG	I listen to tape (or CD or MP3) of word lists.	2.25	1.3
23	COG	I practice words using flash cards.	2.23	0.9
19	COG	I use a monolingual dictionary.	1.96	0.9
34	SOC	I interact with native speakers.	1.94	1.3
33	SOC	I study or practice the meaning of a word in a group.	1.56	0.9
Mean			2.76	

TABLE 6
Mean and Ranking Profile for Four Categories of Participants

Categories	M	SD	Ranking
Cognitive	2.98	0.68	1
Metacognitive	2.87	0.62	2
Memory	2.73	0.58	3
Social	2.20	0.61	4

The next frequently used strategies were ‘studying the sound of a word’, ‘practicing words through verbal repetition’, ‘writing a word repeatedly’ and ‘studying the spelling of a word’. The analysis of the use of the individual strategy items for the entire group indicated that the most frequently used strategies were those that involved simple work and repetition. On the other hand, the least frequently used items were ‘studying or practicing the meaning of a word in a group’, ‘interacting with native speakers’ and ‘using a monolingual dictionary’, which involved ‘working with others’ or ‘speaking and reading in English’.

As regards each strategy category (see Table 6), participants used cognitive vocabulary learning strategies the most, and used social category items such as ‘studying or practicing the meaning of a word in a group’ the least as mentioned above. Participants reported a medium frequency for the mean strategy use on the cognitive, metacognitive and memory categories, whereas, in the social category a low frequency was reported. It is suggested that Korean middle school students like to study vocabulary by themselves and without other’s help or interaction.

2. Use of VLS and Vocabulary Proficiency

1) Overall VLS by Proficiency Level

In order to address research question 2 (Is there a relationship between vocabulary proficiency and the use of vocabulary learning strategies?), data collected from each proficiency group were submitted to an analysis of variance (ANOVA). Significant differences in mean strategy use across the entire VLS as well as in the four categories of the VLS were found in relation to proficiency level. In order to find out where among the groups any significant differences lay, the Scheffe posthoc test was performed.

As shown in Table 7, the ANOVA test revealed that proficiency level had a significant effect on frequency of strategy use across the entire VLS ($p < 0.05$). The results indicate that the higher level students reported using the VLSs more frequently than the lower level students. It was revealed that the higher level students used the VLSs more frequently than the mid level students, and the mid level students used the VLSs more frequently than the

low level students. However, there was no significant difference between high and mid level groups and between mid and low level groups. Only the high proficiency group showed significantly more frequent strategy use than the low proficiency group.

The result is consistent with the majority of studies which showed that successful learners used a larger number of strategies, and used them more frequently than less successful learners did (e.g., Bruen, 2001; Chamot et al., 1988; Green & Oxford, 1995; Griffiths, 2003; Wharton, 2000, cited in Lai, 2009).

TABLE 7
ANOVA Results for Use of the Entire VLS by Proficiency Level

Dependent Variable	Group	M	SD	Comments
Overall VLS	High	2.89	0.43	High>Low*
	Mid	2.75	0.46	
	Low	2.63	0.48	

* $P < 0.05$

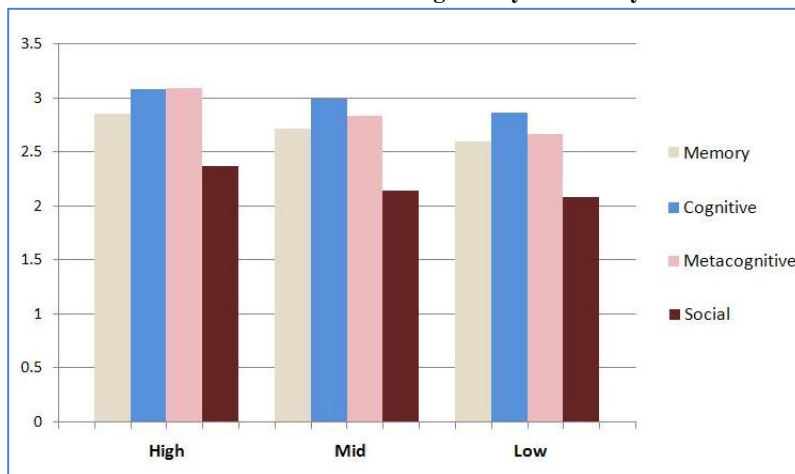
2) Categories of the VLS and Proficiency Level

The analysis by categories of the VLS - memory, cognitive, metacognitive and social - also demonstrates the differences among the proficiency groups. Table 8 suggests that the high proficiency group students used each of the VLSs of the four categories more frequently than the low proficiency group students did. The posthoc Scheffe' test indicated that for all the categories high proficiency students used the strategies significantly more frequently than low proficiency students did ($p < 0.05$). In the metacognitive category, however, there was a significant difference among all the proficiency level groups. This implies that metacognitive category is an indicator that differentiates good learners from poor learners. The result is consistent with the result of Mochizuki's (1999) study that investigated the strategy use of Japanese L2 learners, suggesting that more proficient students used metacognitive strategies more frequently than less proficient students did. Halbach (2000) also indicated that the overall frequency of strategy use is related with learners' L2 proficiency. It has been claimed that good language learners have their own special way of doing it. Anderson (2002) points out that the use of metacognitive strategies ignites our thinking and can lead to higher learning and better performance, defining metacognition as "thinking about thinking." Understanding and controlling cognitive process may be one of the most essential skills that teachers can help foreign language learners improve their proficiency.

TABLE 8

ANOVA Results for Use of the Four Categories by Proficiency Level

Dependent Variable	Group	M	SD	Comments
Memory	High	2.86	0.49	High>Low*
	Mid	2.72	0.48	
	Low	2.60	0.49	
Cognitive	High	3.08	0.45	High>Low*
	Mid	3.00	0.47	
	Low	2.87	0.50	
Metacognitive	High	3.09	0.64	High>Mid>Low*
	Mid	2.84	0.65	
	Low	2.67	0.62	
Social	High	2.37	0.46	High>Low*
	Mid	2.15	0.52	
	Low	2.09	0.59	

* $P < 0.05$ **FIGURE 1**
VLS Use of the Four Categories by Proficiency Level

As regards the memory, cognitive and social categories, the results of the posthoc Scheffe test indicated that the mid proficiency group students used the strategies more frequently than the low proficiency group students did, but there were no significant differences between the mid proficiency and low proficiency group students ($p > 0.05$).

As shown in Figure 1, the high proficiency group students reported using metacognitive strategies the most frequently and using social strategies the least frequently. On the other hand, the mid-level and low-level students used the cognitive strategies the most frequently.

Mean scores of the individual items were calculated for each of the three proficiency groups. There were similarities with regard to general individual strategy items among the

three groups.

V. CONCLUSION

This study has attempted to investigate the most frequently used vocabulary learning strategies by Korean middle school learners and to account for the difference between high-, mid- and low- proficiency group in terms of their vocabulary learning strategies.

The result of the study suggests that in general Korean middle school students are likely to use the cognitive vocabulary learning strategies most frequently. In order to investigate any significant difference in terms of vocabulary proficiency, the vocabulary learning strategy use of high-, mid- and low- proficiency groups were compared and analyzed. There was a significant effect of vocabulary proficiency on the frequency of the strategy use. The high proficiency group students used the metacognitive vocabulary learning strategies most frequently, while the mid- and low- proficiency group used cognitive vocabulary learning strategies most frequently.

The results have some implications for EFL learners, language teachers and teacher educators. Language teacher should try to have information on the strategy use of students, and to give students opportunities to explore various kinds of effective vocabulary learning strategies to help students find ones that lead them to effective vocabulary learning. Both instructors and learners need to become aware of learning strategies through strategy instruction. Teachers should try to help students to become more aware of effective learning strategies and to help them take responsibility for their learning. Especially, teachers need to be aware of the importance of metacognitive strategies. Considering the result that the more proficient learners are, the more metacognitive strategies they use, teachers should teach students how to use them effectively, and they should be trained in strategy instruction.

Finally, more research is needed to better understand learners' vocabulary learning strategy use and the relation between the strategy use and vocabulary proficiency. There is also a need for more comprehensive research on a wide range of variables affecting VLS use with students of different language backgrounds and proficiency levels.

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APPENDIX

An English Version of the Questionnaire for VLS

No.	Category	Vocabulary Learning Strategy Item	1	2	3	4	5
1	MEM	I analyze and study parts of speech	1	2	3	4	5
2	MEM	I analyze and study affixes and roots	1	2	3	4	5
3	MEM	I study words with a pictorial representation of its meaning.	1	2	3	4	5
4	MEM	I image a word's meaning.	1	2	3	4	5
5	MEM	I connect word's meaning to a personal experience.	1	2	3	4	5
6	MEM	I connect a word to the words that I already know.	1	2	3	4	5
7	MEM	I connect a word to its synonyms and antonyms.	1	2	3	4	5
8	MEM	I group words together to study them.	1	2	3	4	5
9	MEM	I use a new word in sentences.	1	2	3	4	5
10	MEM	I use a new word in English conversation.	1	2	3	4	5
11	MEM	I study the spelling of a word.	1	2	3	4	5
12	MEM	I study the sound of a word	1	2	3	4	5
13	MEM	I use Keyword Method.	1	2	3	4	5
14	MEM	I paraphrase a word's meaning.	1	2	3	4	5
15	MEM	I learn the words of an idiom together.	1	2	3	4	5
16	MEM	I practice words through physical activity.	1	2	3	4	5
17	COG	I use word lists.	1	2	3	4	5
18	COG	I use a bilingual dictionary.	1	2	3	4	5
19	COG	I use a monolingual dictionary.	1	2	3	4	5
20	COG	I practice words through verbal repetition.	1	2	3	4	5
21	COG	I write a word repeatedly.	1	2	3	4	5
22	COG	I keep a vocabulary notebook.	1	2	3	4	5
23	COG	I practice words using flash cards.	1	2	3	4	5
24	COG	I study words by taking notes in class.	1	2	3	4	5
25	COG	I utilize the vocabulary section in a textbook.	1	2	3	4	5
26	COG	I listen to tape (or CD or MP3) of word lists.	1	2	3	4	5
27	COG	I use a vocabulary learning textbook.	1	2	3	4	5
28	MET	I use English-language media.	1	2	3	4	5
29	MET	I self-test word knowledge.	1	2	3	4	5
30	MET	I continue to study words over time.	1	2	3	4	5
31	SOC	I ask teacher for the meaning.	1	2	3	4	5

32	SOC	I ask classmates or friends for the meaning.	1	2	3	4	5
33	SOC	I study or practice the meaning of a word in a group.	1	2	3	4	5
34	SOC	I interact with native speakers.	1	2	3	4	5

Examples in: English**Applicable Languages: English****Applicable Levels: Secondary**

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