

# Use and Helpfulness Rankings of Vocabulary Learning Strategies Employed by EFL Learners in Taiwan

WEI-SHI WU

*Department of Applied Foreign Language, National Formosa University  
64 Culture Rd., Hu-Wei, Yun-Lin, Taiwan*

## ABSTRACT

The purpose of this study was to identify the vocabulary-learning strategies adopted by 303 Taiwanese EFL students by demonstrating the strategies they used, their perceptions of the helpfulness of these strategies, the helpfulness ratings of the strategies, and whether the patterns of strategy use change for students of different age groups. The subjects of the study consisted of 101 eighth-graders from a public junior high school, 90 eleventh-graders from a public senior high school, and 112 sophomore students from the Applied Foreign Languages Department at the private university in the Kaoshiung area. The survey was based mostly on Schmitt's (1997) study and on the translated version adopted in H. Chen's (1998) study. The results of the study show that the use of electronic dictionaries, bilingual dictionaries, and guessing from context are the most popular strategies shared by students from different age groups. Detailed descriptions of the usefulness rankings are given in the study. Teaching implications are made on the basis of the results of the study..

**Key Words:** vocabulary acquisition, vocabulary learning strategies

# 台灣英語學習者使用字彙學習策略之探討

吳偉西

國立虎尾科技大學應用外語系  
雲林縣虎尾鎮文化路 64 號

## 摘要

本研究探討台灣外語學習者經常使用的字彙學習策略，外語學習者認為這些學習策略對他們的幫助程度，以及不同年齡層的外語學習者是否有不同的字彙學習策略模式。研究結果顯示台灣外語學習者最常使用的字彙學習策略是：1. 使用電子辭典；2. 使用雙語辭典（英漢辭典）；3. 從文章內容猜測字義。台灣外語學習者字彙學習策略模式不因年齡層而有所差異。

**關鍵詞：**字彙習得，字彙學習策略

## I. INTRODUCTION

Before the mid-1980s, vocabulary learning was considered to be a “neglected” area of second language learning and teaching (Maiguashca, 1993; Meara, 1981). Vocabulary studies have received increased attention after 1990 judging by the number of publications in the field. To offer better vocabulary instruction requires a good understanding of learners’ vocabulary learning strategies. It is important to gain information on the vocabulary learning strategies learners actually use to facilitate their vocabulary acquisition as well as how helpful learners believe these learning strategies to be. Thus the researcher conducted the current study. The research questions are as follows:

1. What are the top five most used vocabulary learning strategies adopted by Taiwanese EFL learners?
2. What are students’ perceptions regarding the top five most helpful vocabulary learning strategies?
3. Whether the patterns of vocabulary use change among students of different age groups?

## II. LITERATURE REVIEW

Before the mid-1980s, vocabulary learning was considered to be a “neglected” area of second language learning and teaching (Maiguashca, 1993; Meara, 1981). Richards (1974) was one of the first scholars to point out the fact that vocabulary is typically neglected in foreign or second language instruction. Zimmerman (1994) claims that “the teaching and learning of vocabulary have been undervalued in the field of second language acquisition (SLA) throughout its varying stages and up to the present day.”

However, the late 1990s offer a completely different picture. Vocabulary studies have received increased attention judging by the number of publications in the field, there are more empirical studies on vocabulary learning strategies. Several books on the issue of second language vocabulary acquisition were also published during the past few years. These books are: The Bilingual Lexicon (Schreude & Weltlen, 1993), Second Language Reading and Vocabulary Learning (Huckin, Haynes, & Coady, 1993), Second Language Vocabulary Acquisition (Coady & Huckin, 1997), and Vocabulary: Description, Acquisition, and Pedagogy (Schmitt & McCarthy, 1997).

Schmitt and McCarthy (1997) indicated that the empirical research done on vocabulary learning strategies has tended to deal with individual or small numbers of strategies, with very few studies looking at the group as a whole. Some researchers have attempted to develop a framework of category of vocabulary 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 which includes a list of six major strategy categories, containing (1) memory, (2) cognitive, (3) compensation, (4) metacognitive, (5) affective and (6) social. These were different proposals of classification of vocabulary learning strategies, but none of them was satisfactory.

Schmitt (1997) claimed that the lack of attention on vocabulary learning strategies is due to the lack of a comprehensive list or taxonomy of vocabulary learning strategies. He compiled a list of vocabulary learning strategies based on the following sources. First, vocabulary reference books and textbooks were examined to provide the majority of the initial strategies. Second, Japanese intermediate level students were asked to write a report on how they studied English vocabulary words. Third, several teachers were asked to review the list and add any strategies they were aware of from their own experience. He moved on to organize a new list of vocabulary learning strategies based on Rebecca Oxford’s (1990) classification system of learning strategies and Cook and Mayer’s (1983) Discovery/Consolidation strategies.

The learning strategy system developed by Oxford (1990) contains six groups: Social, memory, cognitive, metacognitive, affective and compensation. Social strategies (SOC) use interaction with other people to improve language learning. Memory strategies (MEM) relate new material to existing knowledge. Cognitive strategies (COG) exhibit the common function of manipulation or transformation of the target language by the learner. Metacognitive (MET) strategies involve a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study. Affective strategies exhibit how to manage one’s emotions in language learning. Compensation strategies involve different ways of compensating for missing knowledge. However, Schmitt (1997) only adopted four strategy groups: Social, Memory, Cognitive, and Metacognitive. Schmitt stated there was no category in Oxford’s system which adequately describes the kind of strategies used by an individual when faced with discovering a new word’s meaning without recourse to another person’s expertise. He added another new category – Determination Strategies (DET) to the taxonomy.

Cook and Mayer (1983) suggested a basic distinction between vocabulary activities. It is between vocabulary activities which are useful for (a) the initial discovery of a word’s meaning and (b) remembering that word once it has

been introduced. When learners encounter a word for the first time, they can use Determination Strategies, such as their knowledge of the language, contextual clues or reference materials, to figure out the new meaning. They can also use Social Strategies, such as obtaining initial information about a new word by asking someone else. These strategies are labeled Discovery Strategies. Once learners have been introduced to a new word, it is worthwhile to remember it using Consolidation Strategies, which can come from the Social, Memory, Cognitive, or Metacognitive Strategy groups.

Schmitt (1997) final taxonomy of vocabulary learning strategies is organized according to both the Oxford (1990) system and the Discovery/Consolidation distinction. The taxonomy of vocabulary learning strategies contains five strategy groups with 58 individual strategies.

Schmitt (1997) claimed that culture is another learner

characteristic which has been shown to be important for vocabulary. He stated that learners from different culture groups sometimes have quite different opinions about the usefulness of various vocabulary learning strategies. Chen (1998) replicated a study using 174 college students and 81 senior-high school students in Taiwan. However, with the development of the Internet and translation software today, the researcher decided to revisit the issue of vocabulary learning strategies on the grounds of technology development, cultural and learner differences. The survey was mostly based upon the study of Schmitt. The updated version of Schmitt's taxonomy of vocabulary learning strategies contains five large categories (58 individual strategies). They are divided into the Discovery Strategies and the Consolidation Strategies. Table 1 represents the final versions of taxonomy of vocabulary learning strategies.

**Table 1. A Taxonomy of Vocabulary Learning Strategies (Schmitt, 1997)**

Strategy Group			
Strategies for the discovery of a new word's meaning			
DET	Analyze part of speech	DET	World lists
DET	Analyze affixes and roots	DET	Flash cards
DET	Check of L1 cognate	SOC	Ask teacher for an L1 translation
DET	Analyze any available pictures or gestures	SOC	Ask teacher for paraphrase or synonym of new word
DET	Guess from textual context	SOC	Ask teacher for a sentence including the new word
DET	Bilingual dictionary	SOC	Ask classmates for meaning
DET	Monolingual dictionary	SOC	Discovery new meaning through group work activity
Strategies for consolidating a word once it has been encountered			
SOC	Study and practice meaning in a group	MEM	Use Keyword Method
SOC	Teacher checks students' flash cards or world lists for accuracy	MEM	Affixes and roots (remembering)
SOC	Interact with native-speakers	MEM	Part of speech (remembering)
MEM	Study word with a pictorial representation of its meaning	MEM	Paraphrase the word's meaning
MEM	Image word's meaning	MEM	Use cognates in study
MEM	Connect word to a personal experience	MEM	Learn the words of an idiom together
MEM	Associate the word with its coordinates	MEM	Use physical action when learning a word
MEM	Connect the word to its synonyms and antonyms	MEM	Use semantic feature grids
MEM	Use semantic maps	COG	Verbal repetition
MEM	Use 'scales' for gradable adjectives	COG	Written repletion
MEM	Peg Method	COG	Word lists
MEM	Loci Method	COG	Flash cards
MEM	Group words together to study them	COG	Take notes in class
MEM	Group words together spatially on a page	COG	Use the vocabulary section in your textbook
MEM	Use new word in sentence	COG	Listen to tape of word lists
MEM	Group words together within a storyline	COG	Put English labels on physical objects
MEM	Study the spelling of a word	COG	Keep a vocabulary notebook
MEM	Study the sound of a word	MET	Use English-language media (songs, movies, newscasts, etc.)
MEM	Say new word aloud when studying	MET	Testing oneself with word tests
MEM	Image word form	MET	Use spaced word practice
MEM	Underline initial letter of the word	MET	Skip or pass new word
MEM	Configuration	MET	Continue to study word over time

### **III. METHODOLOGY**

#### **1. Subjects**

The subjects of this study were 303 Taiwanese EFL students in southern Taiwan. There were 101 eighth graders from a public junior high school. They aged from 13 to 15 years old. There were 90 eleventh graders from a public senior high school. They aged from 15 to 17 years old. There were 112 sophomore students from the Applied Foreign Languages Department at a private university in the Kaoshing area. The researcher was not able to obtain language proficiency scores for the large number of subjects.

Two English teachers at the secondary level agreed to have their students complete the survey during class time. The junior high school was located in Kaoshing city. The senior high school was located in Kaoshing county. The researcher was teaching the university EFL students "Introduction to Linguistics" when the research was conducted in 2003.

#### **2. Instrument**

The survey was mostly based upon Schmitt's (1997) study and upon the translated version adopted from Chen's (1998) study. The researcher added a few items on the grounds of cultural difference. The survey was kept anonymous to counteract the tendency of the participants to answer in a way they think their English teachers or the researcher would like. The survey was designed to identify the vocabulary learning strategies the subjects employed, the subjects' rating of the top five most helpfulness discovery and consolidation strategies. A bilingual version of each strategy was listed with two spaces next to it. In the first space, the subjects were asked to indicate if they used the particular strategy. In the second space, the subjects were asked to rate the top five most helpful discovery and consolidation strategies. Additionally, the results from each schooling group were calculated separately, trends among the three different schooling groups could be isolated.

#### **3. Data collection procedure**

The researcher tried to collect information from as many participants as possible. The researcher intended to get a cross-section of Taiwanese EFL students, so surveys were sent out to three groups of students: junior high school students, senior high school students, and university English major students. The researcher attempted to get 100 students for each group. The researcher and the two English teachers gave a brief explanation on the purpose of the survey and instruction on how to fill out the survey before students answer their surveys. Students were told to ask questions any time during

the process. However, there were 38 (out of 101) junior high school students, eleven (out of 90) senior high school students, and eleven (out of 112) university students who did not follow the instructions of the survey. Their surveys were discarded. The final numbers of valid surveys were 63 for junior high school students, 79 for senior high school students, and 101 for university students.

#### **4. Data analysis**

Data was collected and entered into Microsoft Excel to compute descriptive statistics. The Spearman rank-order correlation coefficient was used to determine whether the ratings of the vocabulary learning strategies among the three groups were correlated or not.

### **IV. RESULTS**

The percentage of participants indicating YES to whether they used each strategy was calculated and the results are given in Table 2 and Table 3. The results of the discovery strategy column indicate clearly that in Taiwan there is strong affinity for the electronic bilingual dictionary. The electronic bilingual dictionary was the most widely used strategy in Taiwan. "Bilingual dictionary" was the next most frequently used discovery strategy, reported at 75 per cent. "Ask classmates for meaning" and "guess from textual context" were both reported at 70 per cent. The fifth most used strategy was "word list", reported at 56 per cent. There are four most-used discovery strategies commonly shared by the three different age groups of students. These strategies are "electronic bilingual dictionary", "bilingual dictionary", "guess from textual context", and "ask classmates for meaning". Though their positions varied, the results indicate that the patterns of strategy use to discover a new word's meaning had a great deal of agreement among the three different age groups.

Regarding the most used consolidating strategy, the results show there is a strong preference for strategies which focus on a word's form. "Study the sound of word" is at the top of the list, reported at 75 per cent. Repetition of a word's form (written, verbal, and study the spelling followed, reported at 72 per cent, 72 per cent, and 66 per cent respectively. The traditional method of study encouraged by the Taiwanese school system is to require students to memorize English grammar and vocabulary through repetition. Vocabulary is often presented through word lists on which meaning and form are the only focus. The results could be attributed to the traditional study method.

The subjects were asked to rate the top five most helpful strategies in each section. They were asked to give a first place vote five points, a second place four points and down to a fifth

**Table 2. Most Used Strategies- Discover Meaning**

Top 5 most used strategies- Discover Meaning						Average	
JHS		SHS		US		1. Using electronic bilingual dictionary	79.66%
1. Using electronic bilingual dictionary	73%	1. Using electronic bilingual dictionary	77%	1. Using electronic bilingual dictionary	89%		
2. Ask classmates for meaning	70%	2. Bilingual dictionary	76%	2. Bilingual dictionary	85%	2. Bilingual dictionary	75.33%
3. Guess from textual context	67%	3. Guess from textual context	66%	3. Guess from textual context	78%		
4. Bilingual dictionary	65%	4. Word lists	66%	4. Ask classmates for meaning	77%	3. Ask classmates for meaning	70.66%
5. Ask teacher to provide Chinese translation	59%	5. Ask classmates for meaning	65%	5. Analyze affixes and roots	60%		
						5. Word list	56.00%

**Table 3. Most Used Strategies- Consolidate Meaning**

Top 5 most used strategies- Consolidate Meaning						Average	
JHS		SHS		US		1. Study the sound of a word	75.33%
1. Study the sound of a word	73%	1. Written repetition	76%	1. Study the sound of a word	81%		
2. Verbal repetition	71%	2. Study the sound of a word	72%	2. Verbal repetition	75%	2. Written repetition	72.66%
3. Written repetition	67%	3. Study the spelling of a word	70%	3. Written repetition	75%		
4. Study the spelling of a word	65%	4. Verbal repetition	70%	4. Say new word aloud when studying	64%	4. Study the spelling of a word	66.00%
5. Testing oneself with word tests	63%	5. Take notes in class	51%	5. Word Association	63%		
						5. Testing oneself with word tests	50.33%

place vote one point. The results are given in Table 4. When the list of the most used strategy is compared to the top five helpfulness rating list, the results indicate that there are four strategies in common. They are: “electronic bilingual dictionary”, “bilingual dictionary”, “guess from textual context” and “ask classmates for meaning”. The researcher concludes that these are the strategies which Taiwanese EFL learners already use and believe to be helpful. “Analyze part of speech” is the only item incongruent with the most-used discovery strategy.

The results of the top five most helpfulness rating list for

consolidating meaning also demonstrate a clear emphasis on a word’s form. This supports the finding of the most-used strategy list. One item “use English media” is incongruent with the most used strategy list.

To determine to what extent the rank orders correlated among the three different groups, the Spearman rank-order correlation coefficient was used. The correlation was statistically significant among the three groups. The findings show all the students believe that the most widely used strategies adopted by them are also the most helpful strategies.

**Table 4. Helpfulness Rating- Discover Meaning**

Helpfulness rating- Discover Meaning						Total	
JHS		SHS		US		1. Bilingual dictionary	481
1. Using electronic bilingual dictionary	123	1. Bilingual dictionary	175	1. Using electronic bilingual dictionary	220		
2. Bilingual dictionary	103	2. Using electronic bilingual dictionary	129	2. Bilingual dictionary	203	2. Using electronic bilingual dictionary	472
3. Guess from textual context	85	3. Word lists	99	3. Guess from textual context	160	3. Guess from textual context	341
4. Ask classmates for meaning	65	4. Guess from textual context	96	4. Analyze affixes and roots	121	4. Ask classmates for meaning	247
5. Teacher provides synonyms	62	5. Ask classmates for meaning	88	5. Analyze part of speech	99	5. Analyze affixes and roots	219

## V. CONCLUSIONS

Based on the findings of this study, bilingual dictionary is the most favored strategy adopted by Taiwanese EFL learners. However, in the reading process, teachers should encourage students to guess words from context first. If guessing strategy fails, then resort to dictionary. Students should be advised to complete reading a paragraph before checking up the dictionary to avoid interrupt reading and obstructing comprehension. Teachers should be role models to show how to use monolingual dictionary and encourage students to move gradually from the stage of using only bilingual dictionary to the stage of using monolingual dictionary most of the time. Future research is recommended to include qualitative information such as oral interview to generate in-depth results.

## REFERENCES

- Chen, H. J. (1998). *Second language vocabulary learning strategies: A preliminary investigation of Chinese EFL learners*. Proceedings of the Fifteenth Conference on English Teaching and Learning in the Republic of China (pp. 193-211). Taipei, Taiwan:Crane.
- Coady, J., & Huckin, T. (Eds.) (1997). *Second language vocabulary acquisition*. Cambridge: Cambridge University.
- Cook, L. K., & Mayer, R. E. (1983). Reading strategies training for meaningful learning from prose. In M. Pressley, & J. Levin (Eds.). *Cognitive strategy research* (pp. 14-27). New York: Springer Verlag.
- Huckin, T., Haynes, M., & Coady, J. (1993). *Second Language Reading and Vocabulary Learning*. Norwood, NJ: Ablex Publishing Corporation.
- Maiguashca, R. (1993). Teaching and learning vocabulary in a second language: Past, present, and future directions. *Canadian Modern Language Review*, 50, 83-100.
- Meara, P. (1981). Vocabulary acquisition: A neglected aspect of language learning. *Language Teaching and Linguistics Abstracts*, 13, 221-246.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know* (pp.16-22). Boston: Newbury House.
- Richards, J. C. (1974). Word lists: problems and prospects. *RELC journal*, 5, 69-84.
- Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy* (pp.199-227). Cambridge: Cambridge University.
- Schmitt, N., & McCarthy, M. (Eds.) (1997). *Vocabulary: Description, acquisition and pedagogy*. Cambridge: Cambridge University.
- Schreuder, R., & Weltens, B. (Eds.). (1993). *The bilingual lexicon*. Amersterdam: John Benjamins.
- Zimmerman, C. B. (1994). *Self-selected reading and interactive vocabulary instruction: Knowledge and*

*perceptions of word learning among L2 learners.* Ph.D. dissertation, Los Angeles: University of Southern California,

Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction. In J. Coady, & T. Huckin (Eds.),

*Second Language Vocabulary Acquisition: A Rational for Pedagogy* (pp. 5-19). Cambridge: Cambridge University.

**Received: Oct. 12, 2005 Revised: Oct. 24, 2005**

**Accepted: Nov. 2, 2005**