An Exploratory Study of Vocabulary Learning Strategies for Chinese EFL Students

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Abstract

This paper presents findings from a survey which explored the vocabulary learning strategies of Chinese EFL students. From this study one major finding is that instead of using only strategies that involved mechanical means or repetition, the Chinese EFL students also used many deeper strategies. Another finding is that social strategies, which require interaction between them and others, were among the less used, or even the least used, ones. Third, while these Chinese EFL students were not satisfied with many of the strategies they most frequently used, they didn't have enough knowledge about the strategies they considered helpful and didn't try to use them. Finally, the results, especially the interview data, point to the connections between preferred learning strategies and social-cultural upbringing.

This paper concludes with a number of pedagogical suggestions for the teaching of vocabulary and vocabulary strategy training.

1. Introduction

The increasing interest in language learners and their learning strategies over the past few decades or so has coincided with the growing awareness of the importance of L2 lexical knowledge. This has led to a number of recent studies on L2 vocabulary learning strategies overseas (Hell & Mahn, 1997; Lawson & Hogben, 1996; Sanaoui, 1995; Schmitt, 1997). Most of these studies compared the use of one strategy with a zero strategy condition, or compared two opposing strategies. In contrast, Schmitt (1997) used a questionnaire with 58 items, and was able to collect data on the array of strategies that his subjects had at their disposal. Schmitt also explored the subjects' perceptions of the helpfulness of these strategies.

In the EFL context in China, there have also been several studies on vocabulary learning strategies (Dong, 2001; Gu & Johnson, 1996; Zhang, 2001). Most of the studies, however, focused on no more than a limited number of strategies. Gu and Johnson (1996) may have been the only exception. They had a large sample in their survey, and the questionnaire used consisted of 91 strategies. However, they only collected data on the students' strategy use and beliefs about vocabulary learning, not on their perceptions of strategy helpfulness.

The study reported in this paper, exploratory and descriptive in nature, was conducted to gain

an insight into the repertoire of vocabulary learning strategies that students exploit. A total of 100 students participated in this study. The instrument was a questionnaire that consisted of 17 discovery strategies and 35 consolidation strategies. The students were asked to indicate if they had used each strategy and thought it was helpful. In addition, 23 of the students were interviewed. They named the two least helpful strategies and accounted for their selection.

The three research questions were:

1) What strategies do Chinese EFL students frequently use in learning English vocabulary?
2) Do they perceive their frequently used strategies to be helpful?
3) Why do they view certain strategies as helpful/not helpful?

2. Method

2.1. Subjects

One hundred intermediate or high intermediate students from Northeastern University in China participated in this study. Nineteen of them were English majors in their second year, while the rest all had at least a BA/BS degree and a few with a Master's degree were from two classes in a two-year English continuing education program on the same campus. They ranged in age from 20s to mid 30s and specialized in a variety of disciplines. As is typical with most people in China with a college education, they had usually studied English in junior high and high school, and for at least two more years at university.

2.2. Instruments

Two instruments were used in this study. The first was a vocabulary learning strategy questionnaire based on Schmitt (1997), which consisted of determination, social, memory, cognitive, and metacognitive strategies. According to Schmitt, determination strategies include guessing and using reference materials. Social strategies include asking someone who knows an answer or group work. Memory strategies, or mnemonics, involve relating the word to be retained with some previously learned knowledge. Cognitive strategies are those that require mechanical means, with verbal and written repetition being two examples. Finally, metacognitive strategies are used to evaluate and control one's learning.

In light of the tertiary EFL context in China, 12 strategies in Schmitt (1997) foreign to many Chinese students were deleted, four were split into eight more specific ones, and two others were added to the list. This resulted in a 52-item questionnaire, 17 of which were discovery strategies used when encountering a new word, including both determination and social strategies, and 35 of which were consolidation strategies used for consolidating a word after initial encounter, including social, memory, cognitive, and metacognitive strategies.

When completing the questionnaire, the students were asked to indicate if they had used each strategy, and if they thought it was helpful, whether they had used it or not. In addition,

within each of the two strategy types, they had to choose five most helpful strategies and rate them by assigning a number to each.

The second instrument was an open-ended interview. For each of the two types, they were asked to give the rationale for choosing the 5 most helpful strategies for the helpfulness rankings, and to indicate two least helpful strategies and justify their selections.

2.3. Procedures

The study was carried out in the students' regular classes. About 40 minutes of a 50-minute session were allowed for this task. In each class, the questionnaire items were explained in Chinese by the instructor.

Immediately after the students had finished the questionnaire, 23 of them were interviewed, with 6 of them being English majors. The interviewees were selected randomly, among those interested in the interview. The interviewer spoke Chinese, whereas a few students used English and most students used Chinese.

3. Findings

3.1 Discovery Strategies

Table 1. Most-, and Least-used, and Most-, and Least-helpful Discovery Strategies

Rank/17	%	Most-used	Rank/17	%	Most-helpful
1	81	Bilingual dictionary	1	69	Analyze affixes and roots
2	80	Guess form textual context	2	58	Analyze part of speech
3	71	Analyze affixes and roots	3	57	Bilingual dictionary
4	68	Try to sound word out	4	54	Guess form textual context
5	67	Analyze part of speech	5	48	Try to sound word out
		Least-used			**Least-helpful**
13	34	Analyze any available pictures and gestures	13	33	Ask teacher for a L1 translation
14	28	Monolingual word lists	14	30	Monolingual word lists
15	17	Discover new meaning through group work activity	15	29	Bilingual flash cards
16	17	Bilingual flash cards	16	23	Monolingual flash cards
17	12	Monolingual flash cards	17	20	Ask classmates for meaning

Table 1 above shows the percentage of subjects indicating YES to whether they used each strategy and whether each one is helpful. Only the extremes of each range are given, since it is

difficult to draw conclusions about strategies in the middle.

Similar to Gu and Johnson (1996) and Zhang (2001), 81% of the students selected "bilingual dictionary" as the most used strategy. It is also the 3rd most helpful strategy, though only at 57%. This seems to reflect the grammar-translation method that was dominant in China until around the late 1980s. The Chinese definitions found in bilingual dictionaries are appealing because they are easy to understand, but they may be misleading since the meaning might be lost in translation.

The second most used strategy "guess from textual context," selected by 80% of students, is also the 4th on the Most-helpful list. This also mirrors findings from other studies, for instance, Gu and Johnson (1996) and Zhang (2001). Such a preference for guessing is likely to do a disservice to these students, and calls for more professional attention. On the one hand, this shows that Chinese students may not rely only on dictionaries as they often viewed, and attempts to use context clues which are perhaps often encouraged by teachers. On the other, incidental vocabulary acquisition, a possible result of guessing from context, has proved to be extremely challenging. For instance, it is believed that for accurate contextual guessing a reader has to know 98% of the words in the text. Also, up to 5 to 16 exposures to a word are needed for full acquisition (Huckin & Coady, 1999; Nation, 2001).

That Chinese orthography consists of many characters made up of a sound radical and a meaning radical may have been the reason why "analyze affixes and roots" was considered the most helpful strategy. It is the 3rd most used strategy.

To sum up, there is considerable overlapping between the two lists – the Most-used and the Most-helpful, with all the top five strategies shared between the two, though in different orders.

3.2 Consolidation Strategies

In Table 2 below are listed the percentage of subjects indicating YES to whether they used each consolidation strategy and whether each one is helpful. Once again only the extremes of the range are given.

Unlike in a previous study (Zhang, 2001), in which "written repetition" and "verbal repetition" were the two most used strategies, this time they are only 4th (65%) and 9th (56%) on the most used list. However, this is somewhat similar to the findings from the study by Gu and Johnson (1996), where the students only favored oral repetition among all the memorization / rehearsal strategies. Therefore, even though some Chinese students have an affinity for repetition, which may be a result of the long cherished tradition of recitation and repetition in Chinese education, students in China are not all alike. One size does not fit all.

Whereas there is significant overlapping between the most used and most helpful discovery strategies, sharp contrasts overshadow the slight overlapping between the most used and the most helpful strategies within the consolidation category. First of all, the memory strategy of

"study the spelling of a word" was chosen by 70% of the students as the 1st most used. But on the Most-helpful list, it is not even among the top 5, reported by fewer than half (49%) of the students. This is probably not unexpected, considering that Chinese has a logographic rather than alphabetic writing system, and therefore the study of English spelling may be time-consuming and often less than effective. But such a contrast between most used and most helpful lists shows that perhaps more attention is paid to form than necessary. Also, it may mean that many Chinese students are not aware of the lack of correspondence between English spelling and sound, though this lack frustrates them.

Table 2. Most-, and Least-used, and Most-, and Least-helpful Consolidation Strategies

Rank/35	%	Most-used	Rank/35	%	Most-helpful
1	70	Study the spelling of a word	1	63	Use new word in sentences
2	67	Use new word in sentences	2	61	Connect the word to its synonyms and antonyms
3	67	Take notes in class	3	57	Interact with native speakers
4	65	Written repetition	4	55	Use English-language media (songs, movies, newscasts, etc)
5	65	Study the sound of a word	5	54	Associate the word with its coordinates
		Least-used			**Least-helpful**
31	24	Teacher check students' flash cards or word lists for accuracy	31	24	Group words together spatially on a page
32	22	Study word with a pictorial representation of its meaning	32	24	Use physical action when learning a word
33	19	Use physical action when learning a word	33	22	Bilingual flash cards
34	18	Bilingual flash cards	34	19	Skip or pass new word
35	12	Monolingual flash cards	35	19	Monolingual flash cards

Similarly, "connect the word to its synonyms and antonyms", a memory strategy considered one of the deeper ones (Cohen & Aphek, 1981; Schmitt, 1997), is the 2nd on the Most-helpful strategy list but not even among the top 10 on the Most-used list. This strategy

presupposes a sizable vocabulary. The fact that not many students used it perhaps means that these students were not getting adequate exposure to English so that they did not know many synonyms or antonyms. Or they simply might not have been at such a level where they can use this strategy.

"Interact with native speakers," a social strategy and the 3rd on the Most-helpful list, is not even among the top 10 on the other list. One possible explanation is that even in Beijing, a city with over 13 million people and the capital of China, with hundreds of thousands of businessmen, tourists, and the teachers from English-speaking countries, it still may not be very easy for students to find native speakers to practice English with. Another possible reason is that some of them were too shy to do so.

An encouraging finding is that "use new word in sentences" is the second most used and also the most helpful. Since this strategy shows their attention to word meaning in context and to connections between word meaning and that of a sentence, it can be viewed as a deeper strategy. Deeper activities, which can enhance retention of words, are considered more powerful than shallower ones, especially at intermediate and advanced levels (Cohen & Aphek, 1981; Schmitt, 1997).

Students were also asked to assign helpfulness rankings to the 5 most helpful strategies. Given that approximately 30% of them did not do this or did not do this correctly, this data will not be reported here.

3.3 The Interviews

Since seven of the 23 subjects either did not discuss their reasons for the helpfulness rankings as required, it was decided to drop this data. On the other hand, although not all subjects selected the required four least helpful strategies, with two each for discovery and consolidation, they all elaborated on the least helpful two strategies. This information was not captured by the questionnaire, and will be reported below.

The students centered on the following disfavored strategies, among others. Monolingual and bilingual flash cards, two strategies listed under both "Consolidation" and "Discovery", were mentioned by six students, reflecting the bottom or near bottom rankings for the two strategies on both the used and helpful lists. One student said cards are for children. Another said that cards do not have enough information. However, according to Nation (2001), learning from word cards helps with learning the written form, learning the concept of word, and making the connections between form and meaning, which are 3 of the 9 aspects involved in knowing a word. Nation continues to say that since cards can help learners focus on the underlying concept of a word that runs through its related uses, cards can reduce the number of words to be learned. The Chinese students' lack of interest in flash cards is a possible result of card use being rarely encouraged in schools in China. This seems to be different from second

language learners in some Western countries.

"Physical action" and /or "physical representation", selected by 7 students are, according to one student, for children. Perhaps this has to do with the traditional concept for learning in China: It is a serious matter, not a game.

"Ask classmates for meaning" were named by 7 students. Several of them also mentioned "study and practise meaning in a group". As for the rationale, two students said that learning new words is a private matter, your own business. The infrequent use of such social strategies was also reported in some other studies involving Chinese and other Asian students (Bedell & Oxford, 1996), though such findings should not be considered conclusive.

3.4 Summary

The major findings from this study, summarized as answers to the three research questions, are presented below:

1) Instead of relying only on such strategies as "verbal repetition" and "written repetition", which seems to be part of the folk wisdom held about Chinese EFL students among many EFL teachers both in China and abroad, these students used both deeper or meaning-oriented learning strategies, as well as strategies requiring mechanical means. Social strategies, however, were among the less -- or even the least used -- ones, especially for the discovery of the meaning of a new word.

2) While these Chinese EFL students were generally satisfied with their discovery strategies, they felt doubtful or even negative about many of the consolidation strategies they most frequently used, and did not use or even might not have been aware of other strategies they perceived to be helpful.

3) The interview data were inconclusive and the rationale for these students' judgments of strategy helpfulness, but they at least hint at connections between students' perceptions of strategy helpfulness and their learning from teachers and parents ever since childhood, and hence, the social nature of learning strategies.

4. Conclusion

As this is an exploratory study with only 100 subjects, the findings reported in this paper should not be generalized. However, they seem to point to several pedagogical implications. First, though difficult to implement, individualized strategy training would be desirable, since whatever strategies work for one student often may not be effective for others. Second, some Chinese EFL students use vocabulary learning strategies ineffective for them, but may not be

aware of other strategies that are helpful, which warrants explicit teaching of these strategies. Third, while social strategies may not match the cognitive or learning styles of some Chinese students, teachers may teach and model some of them, which may benefit other students. Finally, it is high time to reexamine the now often frowned upon strategy of dictionary use, and to spend more time teaching vocabulary directly, in light of the recent research findings about the difficulty of guessing from context and incidental vocabulary acquisition (Huckin & Coady, 1999 ; Nation, 2001).

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