# An Empirical Study on Learning Strategies of Tertiary-level EFL Learners in China

## Jiongying Li

Southeast University, China

In this paper, "the valuable diagnostic tool" Strategy Inventory for Language Learning (SILL), proposed by Oxford (1990), has been employed to conduct an empirical study on learning strategies of tertiary-level EFL learners in China on the basis of a brief survey of the research into L2 learning strategies. The paper examines and analyzes the overall frequency with which they employ learning strategies. The relationship between learning strategies and three other variables (gender, time spent in English learning, and English language proficiency) is also examined through the well-known SPSS 10.0. The findings of the research suggest that the learning strategies employed most frequently by the tertiary-level EFL learners are memory, cognitive and metacognitive strategies, followed by compensation strategies, with social and affective strategies the least frequently used. The study also shows that significant difference exists between the employment of learning strategies and gender in English learning, and that strategy use demonstrates a significant relationship, to varying degrees, with the time spent on English learning and English proficiency as well. Finally, the paper discusses the causes of such a relationship between the abovementioned variables, and points out the major factors that affect the strategy use of the tertiary-level EFL learners in China.

In the early 1970's, psychologists and applied linguists began to pay

<sup>\*</sup> This paper is the partial achievement funded by a provincial research project (04SJD740002).

attention to the study of individual learner differences in second language (L2) learning, which led to a shift in their research interest from teachers and teaching to learners and learning. As one of the major factors concerning individual differences as well as one of the five processes responsible for the creation of interlanguage systems (Selinker, 1972), language learning strategy has played an increasingly important role in the development of the learner language ever since.

#### RESEARCH INTO LANGUAGE LEARNING STRATEGIES

The research into language learning strategies emerged from a concern for identifying the characteristics of good language learners (Naiman et al., 1978; Rubin, 1975; Stern, 1975). The study of good language learners has been proved to be a useful way of investigating how strategies affect language learning, providing some of the richest insights into the kinds of behaviors associated with successful language learning, and enabling L2 learning strategies to have become one of the most popular topics in applied linguistics today.

# **Different Classifications of Learning Strategies**

As was pointed out by Cohen (1998), different criteria were adopted to classify learning strategies, which, to some extent, led to inconsistencies and mismatches across the taxonomies. From the definitions listed by Ellis (1994), some strategies contribute directly to learning, such as memorization strategies for learning vocabulary items, while others don't. Some strategies are behavioral and, therefore, can be observed (for example, repeating new words aloud to help one remember them, seeking opportunities to speak to tourists), while others are purely mental and therefore not directly observable (for example, using the linguistic context to infer the meaning of a new word). Table 1 presents the literature on classifications of learning strategies by Rubin (1981,

1987), O'Malley and Chamot (1990), Oxford (1990), and Cohen (1998).

TABLE 1
Summary of Different Classifications of Learning Strategies

Summary of Different Classifications of Learning Strategies	
Sources	Classifications
Rubin (1981, 1987)	Learning strategies
	Communication strategies
	Social strategies
O'Malley & Chamot (1990)	Metacognitive strategies
	Cognitive strategies
	Social/affective strategies
Oxford (1990)	Direct strategies
	Indirect strategies
Cohen (1998)	Language learning strategies
	Language use strategies

It is universally accepted that the most comprehensive classification of learning strategies to date is that provided by Oxford (Ellis, 1994), which differs in several ways from earlier attempts to classify strategies. According to Oxford, learning strategies are divided into two major categories: direct and indirect. Direct strategies, like the performer in a stage play, consist of "strategies that directly involve the target language" in the sense that they require mental processing of the language (Oxford, 1990, p. 37). Indirect strategies, like the director of the play, are used for general management of learning. They "provide indirect support for language learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy, and other means" (Oxford, 1990, p. 151). The direct strategies are composed of memory, cognitive and compensation strategies, while indirect strategies are made up of metacognitive, affective, and social strategies.

In fact, Oxford's new system of learning strategies bears some similarities to that proposed by O'Malley and Chamot (1990). The direct strategies are much the same as the cognitive strategies put forward by O'Malley and Chamot, while her indirect strategies almost entail the metacognitive strategies

and social/affective strategies initiated by O'Malley and Chamot. However, Oxford believed that there would be no hierarchical relations between direct and indirect strategies as advocated by O'Malley and Chamot who strongly held that metacognitive strategies would play a more significant role in successful L2 learning.

Cohen's classification seems clear, but as for the specific activities displayed by the L2 learner, it is rather hard for us to judge whether it is to learn or use the language. In addition, the strategies listed by Cohen are short of metacognitive strategies, which, to a great extent, control the employment of cognitive strategies and determine the learner's success or failure in his learning of the language (O'Malley & Chamot, 1990).

# **Factors Affecting the Choice of Learning Strategies**

Ellis (1994) asserts that learners vary considerably in both the overall frequencies with which they employ learning strategies and the particular types of strategies they use. Here we take into account both learner and situational factors influencing learners' use and choice of L2 learning strategies.

## Learner Factors

Learner factors, such as age, motivation, learners' beliefs about language learning, second language proficiency, among others, are found to affect strategy use and choice, a conclusion that has been supported by empirical studies. Young children and adults have been observed to employ different strategies in L2 learning due to their physiological and psychological differences. For example, young children employ strategies in a task-specific manner, whereas adults make use of generalized strategies, which they employ more flexibly (O'Malley & Chamot, 1990). As compared with young children's strategies, the mature learners' are more sophisticated in L2 learning (Ellis, 1994).

Motivation is expected to be strongly relevant to strategy use. In a study of students learning second languages in American universities, Oxford and Nyikos (1989) found that "the degree of motivation was the single most powerful influence on the choice of language learning strategies" (p. 294). More highly motivated learners used more strategies relating to formal and functional practice than less motivated learners. Motivation is also related to language learning purpose, which is the key to strategy use. For instance, individuals, who want to learn a new language mainly for interpersonal communication, will use different strategies from learners who want to learn a new language merely to fulfill a graduation requirement (Oxford, 1990). Studies show that the learner's beliefs influence his or her choice of learning strategies. Bialystok (1981) and Wenden (1987) found in their studies that L2 learners' strategy use was, to a large extent, affected by their beliefs on language learning.

There is considerable evidence to support a link between learners' L2 proficiency and strategy use. According to Chamot et al. (1987), higher-level high school pupils in the US were reported using more strategies than beginning-level ones. Wen and Johnson (1997) also found that learners' difference in L2 proficiency contributed to different strategy use. For example, lower-level L2 learners employ more form-focused strategies than meaning-focused strategies. Although there is adequate empirical evidence to suggest that the above-mentioned variables are related to strategy use, little research has been conducted to examine the relationship between other learner factors (such as aptitude, learning style, and personality traits) and strategy use.

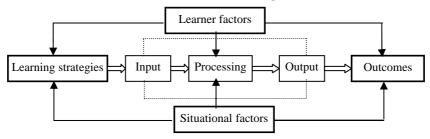
#### Situational Factors

Learner factors constitute one source of variation in the use of learning strategies. Another source is situational factors: language learning settings, teaching methods, learning purposes and tasks to be performed, all of which will inevitably result in differences in strategy use. For example, with

classroom learners, social strategies are rarely employed (Ellis, 1994).

On the other hand, while learning strategies are determined or affected by learner factors and situational factors, they, in turn, influence learners' linguistic input and the ultimate level of learning outcomes, as can be seen in Figure 1.

FIGURE 1
The Relationship between Learning Strategies, Learner & Situational Factors and Learning Outcomes



### Research into Learning Strategies in China

The research into learning strategies in China began in the 1980's. Up to now, there are twelve monographs on learning strategies and quite a few papers published in a variety of academic journals both at home and abroad. According to Wen (2003), Huang Xiaohua and her faculty advisor had their paper "Learning Strategies for Oral Communication" published in *Applied Linguistics* in 1985, the first research paper on language learning strategies published by Chinese researchers in a well-known international linguistic journal. In 1990, Chen's paper, "A Study of Communication Strategies in Interlanguage Production by Chinese EFL Learners", was published in *Language learning*, a paper that focuses on the frequency, types and effectiveness of communication strategies employed by 12 English majors. In Wu Yi'an et al's paper "A Survey Report of Undergraduate Qualities of English Majors in China", they conducted a comprehensive quantitative research in which learning strategy was taken as one of the major factors

affecting English language achievements.

In 1995, Wen Qiufang made a nationwide survey of the non-English majors' beliefs and learning strategies, on the basis of which she made a lot of qualitative and quantitative studies, and had a series of papers published in a number of key journals (See Wen, 2003). Since then, a large number of other scholars have had their articles on learning strategies published concerning both English and non-English majors in China.

In addition, two international conferences on L2 learning strategy training and research have been successfully held in Nanjing University, China, in the past two years. The internationally renowned American scholar Prof. Andrew Cohen, among others, has been invited to give plenary presentations on issues in the areas of theoretical framework of strategy instruction, relationship between learning style and learning strategy, strategy awareness and strategy activities, evaluation of strategy instruction, etc. As a result of the training events, the principles and models of L2 strategy instruction in Chinese context as well as the development of L2 learning strategy research in China have been fully discussed and reflected.

#### PURPOSE OF THE STUDY

Obviously, Chinese scholars have achieved good success in the study of learning strategies. However, there is still much to be desired. First of all, the study of learning strategies remains untouched by many researchers in the field of foreign language teaching in China. Secondly, the research in China covers only a very limited portion of the field. Thirdly, the research is usually conducted on the basis of the data collection through the samples of undergraduate English majors, with little research being conducted into non-English majors. As non-English majors occupy a much larger proportion, the study from the non-English majors' perspective, therefore, is of much more practical value. Finally, Chinese researchers have attached great importance to learner factors that influence strategy use, paying little attention to

environmental factors that affect strategy use and choice.

In this article, the present author employs the widely-adopted diagnostic tool *Strategy Inventory for Language Learning* (SILL), initiated by Oxford (1990), to explore learning strategies employed by the tertiary-level non-English majors in China and the relationship among variables such as learning strategies, gender, time spent in English learning, and English proficiency level in order to 1) identify overall learning strategies used by college non-English majors typically in the present EFL learning environment in China, 2) determine whether the strategies used interact with gender, time spent in English learning, and the level of English proficiency of the students, and 3) experiment SILL on Chinese learners to see what features will be shown in English learning.

#### **METHODOLOGY**

As was mentioned earlier, the research into learning strategies started in the early 1980's in China. To date, a great deal of quantitative research has been conducted in this field. The research, however, was largely restricted to English majors, with the majority of tertiary-level EFL learners (non-English majors) going practically untouched.

The present author, based on SILL, attempts to make a tentative study of learning strategies used by college non-English majors in China. The research project is composed of four items: 1) overall frequency of strategy use, 2) correlation between gender and learning strategies, 3) correlation between time spent in English learning and learning strategies, and 4) correlation between English language proficiency and learning strategies.

# **Procedure**

The general approach used in this study is to collect both questionnaire and interview data from tertiary-level EFL learners on their use of learning

strategies for English learning activities both in and out of the classrooms. Students are asked to write the response (1, 2, 3, 4, or 5) to each of the 50 statements in the *SILL* that tells how true of them the statement is (see Appendix), with some personal data added to the background questionnaire, including age, gender, time spent in English learning, and level of English proficiency of the participants. The interviews focus on some oral language activities in which students are asked to describe any learning strategies that they used. In addition to the personal interviews, observations are sometimes conducted in classrooms for the purpose of identifying learning strategies associated with specific tasks that are identifiable in communications.

### **Participants**

In March 2004, about 150 randomly selected non-English majors from five different colleges in Southeast University responded to the questionnaire. However, some students did not respond correctly to the questionnaire and others failed to hand in the questionnaire. Consequently, only 107 students' data were collected for statistical analysis, with 28 freshmen, 32 sophomores, 27 juniors, 20 first-year postgraduates, 62 male students, and 45 female students. Students vary greatly according to level of English proficiency, with 27 students having passed College English Test Band 6 (CET-6), 54 students having passed CET-4, and 26 non-passers of CET-4. The description of the participants is summarized in Table 2.

TABLE 2
Description of Participants

		till till till till till till till t		
	Participa	ants (107)		
English proficiency	Students	Gender	Time spent in	Average age
			English learning	
CET-6 passers (27)	undergraduates (14)	males (15)	10 years	23 years old
	ostgraduates (13)	females (12)		
CET-4 passers (54)	undergraduates(47)	males (29)	9 years	21 years old
	postgraduates (7)	females (25)		
CET-4 non-passers (26)	undergraduates (26)	males (18)	7 years	18 years old
		females (8)		

#### **Instrument**

As has been pointed out, the instrument in this quantitative study is *SILL*, employed to survey language learning strategies of six kinds with 50 statements, which are adapted slightly in order to help students better understand them. The students are supposed to finish their writing of the response to each of the 50 statements within 30 minutes, which, of course, requires students to work as quickly as they can without being careless.

### RESULTS OF THE STUDY

After collecting the data and analyzing them by means of the well-known SPSS, the author has obtained the following results.

### **Overall Frequency of Strategy Use**

Table 3 summarizes the overall frequency of strategy use and shows that learning strategies with higher average value are memory, cognitive, and metacognitive strategies, followed by compensation strategies. Average value for these strategies is around 3.00, belonging to the range of "somewhat true", with a much lower average value for affective and social strategies.

The author has tested the average value of the variables by means of an analysis of variance (ANOVA), only to find that the main effects of the strategies are statistically significant ( $F_{(5, 530)}$ =52.481, p<.01). Through comparison with the six average values of the variables simultaneously, the author finds that there are no significant differences (p>.05) among memory, cognitive, metacognitive and compensation strategies, or between affective and social strategies.

This result also shows that learning strategies employed most frequently by the Chinese college English learners are memory, cognitive and metacognitive strategies, followed by compensation strategies, with social and affective strategies the least frequently used.

TABLE 3
Overall Frequency of Strategy Use

	1 0	0,		
Strategies	Name of variables	Mean	S.D.	
Direct	Memory strategies	3.18	.54	
	Cognitive strategies	3.15	.67	
strategies	Compensation strategies	3.03	.64	
Indirect	Metacognitive strategies	3.12	.57	
	Affective strategies	2.78	.65	
strategies	Social strategies	2.69	.74	

S.D. = Standard Deviation

# Correlation between Learning Strategies and Gender

The relevant average value and standard deviation of the six variables for both male and female students appear in Table 4 and Table 5. The result of ANOVA shows that the main effects of gender are significant ( $F_{(1, 105)}$ =5.820, p<.05). In addition, significant interactions between strategies and gender are found to be present as well ( $F_{(5, 525)}$ =10.380, p<.05), which indicates that learning strategies employed by Chinese non-English majors are significantly correlated with gender in English learning.

TABLE 4
Correlation between Learning Strategies and Male Students

	8 8		
Gender	Name of variables	Mean	S.D.
	Memory strategies	3.02	.51
	Cognitive strategies	3.16	.65
Male students	Compensation strategies	3.10	.52
(N=62)	Metacognitive strategies	3.24	.62
	Affective strategies	2.52	.66
	Social strategies	2.73	.78

TABLE 5
Correlation between Learning Strategies and Female Students

Gender	Name of variables	Mean	S.D.
	Memory strategies	3.68	.59
	Cognitive strategies	3.12	.67
Female students	Compensation strategies	3.13	.64
(N=45)	Metacognitive strategies	3.02	.68
	Affective strategies	2.91	.65
	Social strategies	2.67	.71

# **Correlation between Learning Strategies and Time Spent in English Learning**

The participants are divided into three groups in accordance with their time spent in English learning: 7 years, 9 years, and 10 years. Among them, two of the participants failed to write down the length of time in English learning, so they are excluded. Table 6 represents a summary of the average value and standard deviation (in brackets) of the six variables for the three groups.

TABLE 6
Correlation between Learning Strategies and Time Spent in English Learning

			Varia	ıbles	
Time	Memory strategies				Affective Social strategies strategies
7 years	3.21 (.60)	3.04 (.59)	3.21 (.63)	2.97 (.58)	2.86 (.68) 2.61 (.78)
9 years	3.17 (.53)	3.20 (.73)	3.09 (.56)	3.07 (.65)	2.71 (.64) 2.72 (.75)
10 years	3.16 (.49)	3.18 (.69)	3.06 (.53)	3.05 (.72)	2.77 (.63) 2.74 (.70)

ANOVA of the average values shows that the three groups are significantly different in the use of both cognitive strategies ( $F_{(3,104)}$ =5.12, p<.01) and metacognitive strategies, but there is no significant difference that has been found present in the use of other strategies (p>.05). When comparing the three groups simultaneously, the author found that the 9-year-group participants and 10-year-group participants used cognitive and metacognitive

strategies far more frequently than the 7-year-goup participants. The difference between the two is found to be at the significant level (p<.05).

# **Correlation between Learning Strategies and Levels of English Proficiency**

English proficiency of the participants falls into three levels: non-passers of CET-4, passers of CET-4, and passers of CET-6. A point worth mentioning here is that seven of the participants are removed out of the samples due to the fact that they have failed to provide the data concerning their English proficiency levels required for the empirical study. Table 7 gives the correlation coefficient between strategy use and levels of English proficiency for the three-level participants.

TABLE 7
Correlation between Learning Strategies and Level of English Proficiency

Levels			Variab	les		
	Memory	Cognitive	Compensation	Metacognitive	Affective	Social
	strategies	strategies	strategies	strategies	strategies	strategies
CET-4	.412**	.384**	.160	.286**	.153	.248*
Non-passers						
CET-4	.453**	.419**	.167	.302**	.168	.265**
Passers						
CET-6	.487**	.425**	.182	.314**	.184	.290**
Passers						

N=100, df=98, \*p<.05, \*\*p<.01

Table 7 shows that all learning strategies are significantly correlated with English proficiency levels (p<.05) except for compensation and affective strategies, suggesting that the more frequently the students use memory, cognitive, metacognitive, and social strategies, the higher level their English proficiency will become. However, the employment of compensation and affective strategies are not significantly correlated with target language proficiency level.

### **DISCUSSION**

# **Overall Frequency of Strategy Use**

The feature of overall frequency of strategy use by tertiary-level EFL learners appears to be closely related to the learners' learning environment, cultural background, and individual personalities. By memory strategies, we mean the methods or techniques that help learners store and regain new information to promote learning. In Chinese culture, memory strategies, or mnemonics, have been traditionally attached great importance to by both instructors and learners in Chinese formal education, and are viewed as one of the most important factors in making good achievements on tests of various kinds. By interviewing some of the participants, the author has found that memory strategies are powerful contributors to English learning: learners are reported benefiting a great deal from them.

As a matter of fact, the frequency of using memory strategies is under debate. Some Western studies (e.g., Reiss, 1985) showed university students were rarely reported using such strategies, whereas others (e.g., Cohen & Aphek, 1981) revealed that memory strategies were indeed widely used, and that these strategies made vocabulary learning easier and more effective over the long term. Chances are, therefore, that nationality, culture, research methods, and many other factors influence the use of memory strategies.

The Chinese non-English majors frequently use cognitive strategies, a fact that may well be related to the purpose of College English Teaching (CET) as well as their motivation in English learning. The purpose of CET is to foster students to possess higher competence in reading, and certain abilities in listening, speaking, writing, and translating, so that they can communicate properly in real situations in English. In order to achieve such a goal, students often employ some of the cognitive strategies in English learning. Through interviews and observations, the author becomes fuller aware that cognitive strategies are essential in learning English, and therefore, are found to be the most popular strategies, a result identical with that of Oxford (1990), and that

of O'Malley and Chamot (1990). In English learning, Chinese learners frequently employ such cognitive strategies as using skimming to determine the main idea or scanning to find specific details of reading materials, translating an English expression into Chinese, taking notes, repeating, reasoning deductively, summarizing, etc., which they think are essential to enhance effective learning and reach acceptable English proficiency. On the other hand, the author notices by interviewing some of the participants that both the degree and type of motivation are of powerful influence on the use of cognitive strategies. Quite a few students were reported learning English to pass a variety of tests, a fact that reflects the students' strong instrumental motivation of fulfilling course requirements and obtaining good grades in a program. Students with motivation of this kind are more likely to use cognitive strategies (Ellis, 1994).

The study shows that the Chinese students very often use metacognitive strategies, a result that may well be related to the participants as adult language learners in the research. Compared with non-adults, the majority of adult learners usually possess some specific goals to achieve and have the competence necessary to monitor and evaluate their L2 learning. Adult students, on the other hand, are often overwhelmed by unfamiliar vocabulary, confusing grammatical rules, seemingly strange social customs, or unfamiliar cultural background, which can only be overcome by the conscious use of metacognitive strategies such as paying attention to and linking with already familiar material. Though metacognitive strategies are extremely important, the study shows that the non-English majors in China use these strategies far less often than cognitive strategies, a feature that is nevertheless identical with other studies of L2 learning (e.g., Chamot et al., 1987; O'Malley et al., 1985).

As is revealed in the study, the Chinese tertiary-level EFL learners don't employ social strategies often. This feature may have something to do with learners' L2 learning environment in China. Chinese EFL learners can rarely learn the language in a natural communication environment or real situations except for formal instructions in the classroom although language is known

to be a form of social behavior, and appropriate social strategies are very important in the process of communication between and among people. The interview with some of the participants also reveals that once they found themselves short of natural communication environment in English learning, they hopelessly ignored such social strategies as asking the speaker to repeat, paraphrase, explain, or give examples, cooperating and empathizing with others. They assume that social strategies themselves don't have direct effect upon their learning process, but provide them with good environment and opportunities for language practice.

The study also shows affective strategies are underused by Chinese English learners, a situation that agrees with other studies abroad (e.g., Chamot et al., 1987). However, the result is rather distressing at the same time if we take into account the power of affective strategies. As was pointed out by Oxford (1990), the affective side of the learner was probably one of the greatest influences on language learning success or failure. Good language learners are often those who know how to control their emotions and attitudes about learning. As a matter of fact, quite a few interviewees in my study reveal that they are, to varying degrees, puzzled by such negative emotional problems as high anxiety, low self-esteem, worry, and even mental disorders, a phenomenon that can only make language learning far less effective or enjoyable for them. Therefore, teachers should exert some influence over the emotional atmosphere of the classroom and help learners, especially those unsuccessful English learners, by encouraging them to use affective strategies to lower their anxiety and restore their self-esteem, which, in turn, help learners to reach their peak performance levels.

## **Learning Strategies and Gender**

The study shows that learning strategies employed by Chinese learners are significantly correlated with gender in English learning, a situation that is quite identical with other studies (Gilligan, 1982; Oxford et al., 1988). On the whole, female students are reported using far more strategies, especially

social strategies, than males on the SILL: females show a more cooperative and social orientation than males do, a characteristic that may be closely related to learners' motivation. Personal interview findings suggest that females usually have higher self-esteem reflections in mental dispositions, beliefs, or attitudes towards the perceived community, which influence the female learners' motivation to keep on trying to learn. On the other hand, female learners' motivation tends to be instrumentally orientated towards L2 proficiency, whereas male students tend to show integrative motivation. Furthermore, instrumental motivation usually has a more significant influence on language proficiency than integrative motivation, a conclusion that might well explain why female learners have greater strategy use than males do.

# **Learning Strategies and Time Spent in English Learning**

The study findings show that the 9-year-group participants and 10-year-group participants use cognitive and metacognitive strategies far more frequently than the 7-year-goup participants do. The difference between the two is found to be at the significant level (p<.05), a situation that is supposed to be related to L2 proficiency of the participants. In other words, L2 proficiency influences the frequency of employment of both cognitive and metacognitive strategies. Chamot et al. (1987) discovered that the use of both cognitive and metacognitive strategies increased as learners progressed to higher levels of L2 learning. Moreover, many cognitive strategies, such as watching English language TV shows, going to movies dubbed in English, taking notes in English and communicating with native English speakers, require higher levels of learners' L2 proficiency. As is pointed out by Ellis (1994), learners with high L2 proficiency make use of metacognitive knowledge to help them assess their needs, evaluate progress, and give direction to their learning.

# Learning Strategies and Levels of English Proficiency

The employment of learning strategies by the participants in the research tends to be significantly correlated with English proficiency levels (p<.05) except for compensation and affective strategies. Many investigations confirm that correlations between strategy use and L2 proficiency are positive and statistically significant (see Green & Oxford, 1995). Such a correlation may be very complicated and many factors can be expected to have a causal effect on such a correlation. It might be that learners use learning strategies to enhance language learning, hence increasing the level of their target language proficiency or vice versa, or that some other factors, such as intelligence, aptitude, motivation, etc., contribute to the use of learning strategies, which enable learners to be successful in L2 learning, and therefore, help them reach higher levels of L2 proficiency. Other studies (see Oxford, 1990) show that more proficient and motivated L2 learners are reported using a wider range of strategies, and more frequently, than learners who are less proficient and motivated. In short, this is by no means a simple issue, requiring further investigation and research.

## **CONCLUSION**

In this paper, we have looked at the effect of learning strategies upon L2 learning through the empirical study, which might help to explain why some L2 learners are more successful than others. The major findings of the study include:

- Learning strategies employed most frequently by the tertiary-level Chinese EFL learners are memory, cognitive and metacognitive strategies, followed by compensation strategies, with social and affective strategies the least frequently used.
- 2) The feature of overall frequency of strategy use appears to be closely

- related to learners' learning environment, cultural background, and individual personalities.
- 3) Significant difference exists between the employment of learning strategies and gender in English learning.
- 4) Strategy use demonstrates a significant relationship, to varying degrees, with the time spent on English learning.
- 5) Learners' strategy use tends to be significantly correlated with their English proficiency.

The findings might provide additional insights into the question, "How is it that some people can learn a foreign language so easily and do well while others, given what seem to be the same opportunities to learn, find it almost impossible?" We hope to have shown the value of exploring crucial learner factors and situational factors as an interactive complex of processes that underlie and explain differences of strategy use between successful and unsuccessful college EFL students in China.

In light of the results of the present study, we would like to argue for a holistic perspective towards not only learner differences in language learning outcomes but also learning strategy training that attempts to teach less successful language learners to use the strategies characterizing their more successful peers. Such an integrative view may shed light on some "tantalizing puzzles" (Chamot, 2001) in the domain of current research on learning strategy training. We suggest, therefore, that the present mode of strategy training in the area of foreign language teaching be expanded to include fostering positive beliefs about language learning, and exploring the role of teacher-learner interaction in facilitating self-directed learning. Just as an ancient proverb says, "Give a man a fish and he eats for a day. Teach him how to fish and he eats for a lifetime", conducting strategy training in the area of foreign language education is to teach students "how to fish" so that they can "eat for a lifetime".

#### THE AUTHOR

Jiongying Li is an associate professor of English Language Education at Foreign Languages Department, Southeast University, China, where he works as Director of Foreign Linguistics and Applied Linguistics Research Institute, and a postgraduate supervisor in Applied Linguistics. His teaching and research interest focus on second language acquisition and intercultural communication.

#### REFERENCES

- Bialystok, E. (1981). The role of conscious strategies in second language proficiency. *Modern Language Journal*, 65, 24-35.
- Chamot, A., O'Malley, J. M., Kupper, L., & Impink-Hernandez, M. V. (1987). A study of learning strategies in foreign language instruction: First year report. Washington DC: InterAmerica Research Associates.
- Chamot, A. (2001). The role of learning strategies in second language acquisition. In M. P. Breen (Ed.), *Learner contributions to language learning: New directions in research* (pp. 25-43). New York: Longman.
- Cohen, A. (1998). Strategies in learning and using a second language. London: Longman.
- Cohen, A., & Aphek, E. (1981). Easifying second language learning. *Studies in Second Language Acquisition*, *3*, 221-236.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University Press.
- Green, J. M., & Oxford, R. (1995). A close look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29(2), 261-297.
- Naiman, N., Fröhlich, M., Stern, H., & Todesco, A. (1978). *The good language learner. Research in education series No.* 7. Toronto: Ontario Institute for Studies in Education.
- O'Malley, J., Chamot, A., Stewner-Manzanaraes, G., Kupper, L., & Russo, R. (1985). Learning strategies used by beginning and intermediate ESL students. *Language learning*, 35, 21-46.

- O'Malley, J., & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. (1990). Language learning strategies: What every teacher should know. Rowley, MA: Newbury House.
- Oxford, R., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal*, 73, 291-230.
- Oxford, R., Nyikos, M., & Crookall, D. (1988). Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21, 321-329.
- Reiss, M. A. (1985). The good language learner: Another look. *Canadian Language Review*, 41, 511-523.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9, 41-51.
- Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics*, 11, 117-131.
- Rubin, J. (1987). Learner strategies: theoretical assumptions, research history and typology. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 15-30). Englewood Cliffs, NY: Prentice-Hall.
- Selinker, L. (1972). Interlanguage. International Review of Applied Linguistics, 10, 209-231.
- Stern, H. (1975). What can we learn from the good language learner? *Canadian Modern Language Review*, 31, 304-318.
- Wen, Q. (2003). *Empirical studies on English language learning strategies*. Xi'an: Shanxi Normal University Press.
- Wen, Q., & Johnson, R. K. (1997). L2 learner variables and English achievement: A study of tertiary-level English majors in China. *Applied Linguistics*, 18(1), 27-48.
- Wenden, A. (1987). How to be a successful learner: insights and prescriptions from L2 learners. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 3-13). Englewood Cliffs, NY: Prentice-Hall.

# APPENDIX Questionnaire for Language Learning Strategies

#### Section A: Background Questionnaire

Directions: Please answer the questions or choose the answers to the questions that

Mama	2 Data
. Name	
8. Age 5. You are:	4. Sex:
a graduate	
a freshman or firs	-
	econd-year university student
a junior or third-y	•
6. How long have you been s	audying English?
What is your level of Engl	-
CET-4 non-passe	r
CET-4 passer	
CET-6 passer	
<ol><li>Why do you learn English</li></ol>	?
interested in Engl	
interested in the c	ulture
required to take a	language course to graduate
need it for my fut	
need it for intercu	ltural communication
pass TOFEL, GR	E, IELTS, CET, or other tests
others (list):	
. Do you enjoy English lear	ning? Yes/No
. What has been your favor	ite experience in English learning?

# Section B: Strategy Inventory for Language Learning (SILL)

Version for Speakers of Other Language Learning English Proposed by R. Oxford, 1990 Adapted by Jiongying Li, 2004

Directions: You will find 50 statements about learning English. Please read each statement and then write the response (1, 2, 3, 4, or 5) that tells how true of you the statement is (1. Never true of me; 2. Usually not true of me; 3. Somewhat true of me; 4. Usually true of me; 5 Always true of me) on the worksheet.

#### **Part One: Memory Strategies**

- 1. I think of relationships between what I already know and new things I learn in English.
- 2. I use new English words in a sentence so that I can remember them.
- 3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
- 4. I remember a new English word by making a mental picture of a situation in which the word might be used.
- 5. I read aloud poems to remember new English words.
- 6. I use flashcards to remember new English words.
- 7. I physically act out new English words.
- 8. I review English lessons often.
- 9. I remember new English words or phrases by remembering their location on the page, on the board, on a street sign, or on the Internet.

#### **Part Two: Cognitive Strategies**

- 10. I say or write new English words several times.
- 11. I try to talk like native English speakers.
- 12. I practice the sounds of English.
- 13. I use the English words I know in different ways.
- 14. I start conversations in English in English classroom.
- 15. I watch English language TV shows spoken in English or go to movies spoken in English.
- 16. I read novels, short stories, or other reading materials for pleasure in English.
- 17. I keep diaries, and write notes, messages, letters, or reports in English.
- 18. I first skim an English passage to get the main idea, then go back and read carefully.
- 19. I look for words in Chinese that are similar to new words in English.
- 20. I try to find patterns in English.
- 21. I find the meaning of an English word by dividing it into parts that I understand.
- 22. I try not to translate word-for-word.
- 23. I make summaries of information that I hear or read in English.

#### **Part Three: Compensation Strategies**

- 24. To understand unfamiliar English words, I make guesses.
- 25. When I can't think of a word during a conversation in English, I use gestures.
- 26. I make up new words if I do not know the right ones in English.
- 27. I read English without looking up every new word in the dictionary.

- 28. I try to guess what the other person will say next in English.
- 29. If I can't think of an English word, I use a word or phrase that means the same thing.

#### **Part Four: Metacognitive Strategies**

- 30. I try to find as many ways as I can to use my English.
- 31. I notice my English mistakes and use that information to help me do better.
- 32. I pay attention when someone is speaking English.
- 33. I try to find out how to be a better learner of English.
- 34. I plan my schedule so I will have enough time to study English.
- 35. I look for people I can talk to in English.
- 36. I look for opportunities to read as much as possible in English.
- 37. I have clear goals for improving my English skills.
- 38. I think about my progress in learning English.

#### **Part Five: Affective Strategies**

- 39. I try to relax whenever I feel afraid of using English.
- 40. I encourage myself to speak English even when I am afraid of making a mistake.
- 41. I give myself a reward or treat when I do well in English.
- 42. I notice if I am tense or nervous when I am studying or using English.
- 43. I write down my feelings in English in my diary.
- 44. I talk to someone else about how I feel when I am learning English.

#### Part Six: Social Strategies

- 45. If I do not understand something in English, I ask the other person to slow down or say it again.
- 46. I ask English speakers to correct me when I talk.
- 47. I practice English with other students.
- 48. I ask for help from English speakers.
- 49. I ask questions in English in English class.
- 50. I try to learn about the culture of English speakers.