

Language Learning Strategy Use of Chinese ESL Students in an Intensive English Learning Context

Cai Hou
Ohio University

This study is intended to investigate the language learning strategy (LLS) use of 45 Chinese ESL students enrolled in the Ohio Intensive English Program (OPIE) and to identify the changes of their strategy use patterns by looking into the effects of some individual factors, such as proficiency and gender, in addition to the effects of certain characteristics of the program itself. The patterns of strategy use identified in this study may help instructors get better understanding of Chinese ESL students' LLS preferences. The changes in their strategy choices found in this study also offer some insights into ESL pedagogical practices that can successfully be employed in EFL learning contexts.

In the field of second language acquisition (SLA), considerable research on language learning strategies (LLS) has been conducted in different learning contexts. Most of these studies have focused on identifying the strategies used by successful language learners (e.g., Griffiths, 2003; Rubin, 1975; Stern, 1975; Takeuchi, 2003) and investigated the relationship between learner LLS use and a variety of factors, including language proficiency and gender (e.g., Green & Oxford, 1995; Oxford & Ehrman, 1995; Park, 1997; Shmais, 2003; Wharton, 2000). With the increasing development of globalization and economic development in China, more and more Chinese students choose to study abroad, with many of them lacking sufficient English proficiency to be successful in their academic studies. There have been some studies that focus on Chinese learners' strategy use (e.g., Gao, 2006; Goh & Foong, 1997); however, little attention has been paid to the LLS use of Chinese learners of English as a second language (ESL), enrolled in pre-academic intensive English language programs. Thus, the present study seeks to investigate ESL Chinese learners' LLS use and identify specific patterns and changes of their LLS use by taking into consideration the effects of their English language proficiency and gender, in addition to considering certain characteristics of the program in which they were enrolled, namely the Ohio Intensive English Program (OPIE) at Ohio University.

Literature Review

Definitions and categories

Language learning strategies have been defined in various ways. Rubin (1987) defined learning strategies as “strategies which contribute to the development of the language system which learners construct and affect learning directly” (p. 23). Oxford (1990) expanded the definition by elaborating that learning strategies include “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). O’Malley and Chamot (1990), based on a cognitive information processing view of human thought and action, described learning strategies as “special ways of processing information that enhance comprehension, learning, or retention of the information” (p. 1). In this study, I adopted Oxford’s (1990) definition of learning strategies since it is more closely related to the purposes of the study to identify the patterns and changes of strategy use amongst ESL Chinese learners who are trying to improve their English proficiency in order to become better integrated into the English-speaking environment and begin their academic studies in different degree-granting programs.

LLS can be categorized in various ways. Oxford (1990) proposed six groups of strategies—namely, memory, cognitive, compensation, metacognitive, affective, and social strategies. Oxford’s (1990) full LLS taxonomy is as follows:

- A. Direct Strategies
 - 1. Memory Strategies (CARE)
 - a. Creating mental linkages
 - b. Applying images and sounds
 - c. Reviewing well
 - d. Employing action
 - 2. Cognitive Strategies (PRAC)
 - a. Practicing
 - b. Receiving and sending messages
 - c. Analyzing and reasoning
 - d. Creating structure for input and output
 - 3. Compensation Strategies (GO)
 - a. Guessing intelligently
 - b. Overcoming limitations in speaking and writing
- B. Indirect Strategies
 - 1. Metacognitive Strategies (CAPE)
 - a. Centering your learning
 - b. Arranging and planning your learning
 - c. Evaluating your learning
 - 2. Affective Strategies (LET)
 - a. Lowering your anxiety
 - b. Encouraging yourself
 - c. Taking your emotional temperature
 - 3. Social Strategies (ACE)
 - a. Asking questions
 - b. Cooperating with others
 - c. Empathizing with others

(Oxford, 1990, p. 17)

This taxonomy does not go unchallenged but it offers several unquestionable advantages that deserve to be pointed out. First, it classifies and details commonly used LLS

in a systematic way. Second, the taxonomy has been found to be quite consistent with learners' strategy use (e.g., Hsiao & Oxford, 2002). Finally, it links individual strategies and groups of strategies with each of the four language skills: listening, reading, speaking and writing (Oxford & Burry-Stock, 1995). However, Oxford (1990) has rightly pointed out that particular strategies in the taxonomy could be viewed as related to more than one strategy category and, indeed, several empirical studies have been found moderate intercorrelations among items in the six strategy categories (e.g., Oxford & Ehrman, 1995). Thus, Hsiao and Oxford (2002) suggested that future research should consider other possible approaches to strategy categorization.

Factors influencing LLS use

LLS and language proficiency

While many studies suggest that LLS play an important role in L2 learning, the use of strategies varies according to many individual factors. According to Oxford (1989), some of the factors include proficiency level, gender, motivation, personality, learning style, specialization, ethnicity, and aptitude. Among these factors, learners' proficiency level has been the focus of many studies (e.g., Green & Oxford, 1995; Griffiths, 2003; Hong-Nam & Leavell, 2006; O'Malley, et. al., 1985; Oxford and Nyikos, 1989; Park, 1997; Shmais, 2003; Wharton, 2000). Many of these studies indicate that higher proficiency learners tend to use strategies more often and more effectively (Green & Oxford, 1995; Griffiths, 2003; O'Malley, et. al., 1985; Oxford & Nyikos, 1989; Wharton, 2000). In a study involving 175 Chinese students at Nanyang Technological University in Singapore, Goh and Foong (1997) found that high proficiency Chinese learners used certain learning strategies more frequently than intermediate and low proficiency students. Griffiths (2003) also reported a positive relationship between proficiency level and self-reported frequency of LLS use. However, some studies suggest that intermediate learners tend to use more strategies than either advanced or beginning learners. Hong-Nam and Leavell (2006), for example, investigated LLS use of 55 ESL students with different cultural and linguistic backgrounds and found that students at the intermediate level reported more learning strategies use than beginning and advanced levels. Thus, based on previous research findings, it appears that level of language proficiency is one of the most important variables affecting learners' LLS use that needs to be examined more carefully in both ESL and EFL context.

LLS and gender

Gender differences have also been examined as a factor that affects learners' strategy use in many studies and most of these studies favor females in strategy use over males. Politzer (1983) studied the learning strategies of 90 university students in the United States and found that female students used social strategies significantly more often than male students. Green and Oxford (1995) found that females used four of the six groups of strategies (memory, metacognitive, affective, and social strategies) significantly more frequently than males. They also identified fourteen individual strategies that were used significantly more often by females, which made them conclude that, overall, females used strategies more often than males, although males might surpass females on certain individual strategies. In their study of ESL Chinese students, Goh and Foong (1997) found that female

students reported using all six groups of strategies more frequently than their male counterparts. Hong-Nam and Leavell's (2006) study showed that females tended to use affective and social strategies more often than males. As we can see, in spite of some variation in the patterns of strategy use, females seem to use strategies more often and have a wider range of strategy choices than males. However, not all studies would agree with this conclusion. In Griffiths's (2003) study, for example, no significant LLS use difference was found in relation to gender, which suggests that further studies are needed to look into the effects of gender on strategy use among language learners with differing characteristics.

LLS and study abroad context

Many studies have indicated that studying abroad can influence LLS use, for instance, by causing learners to want to become more integrated into their new language settings. Empirical research has also shown a connection between studying abroad and a wider range of learning strategies. For example, Watanabe (1990) found that Japanese students who had spent three months or more in English-speaking countries generally used more communication strategies than those who had no study abroad experience. Tamada (1996) also found a significant increase in the use of both metacognitive and communication strategies by Japanese learners of English in an intensive university preparation course in Great Britain, in addition to their wider range of cognitive, social, and compensation strategy use. Gao (2006) examined the changes in the LLS use of Chinese learners after they had moved from mainland China to Great Britain and the learners' accounts indicated that they had changed their use of learning strategies in the areas of vocabulary and grammar learning, listening, speaking, reading and writing skills.

In light of the reviewed literature on LLS use above, the purpose of this study is to investigate the LLS use of Chinese students enrolled in a pre-academic intensive English language program in the United States and to identify the patterns and changes of their strategy use by taking into account the effects of their language proficiency and gender as well as certain characteristics of the program itself. The following research questions were addressed in the study:

1. What are the overall patterns of LLS use among ESL Chinese learners enrolled in OPIE?
2. Are there any differences in the LLS use of ESL Chinese learners related to their proficiency level and gender?
3. Are there any changes in the participants' self-perceived LLS use while studying in an intensive ESL learning context?

The Study

Methodology

Participants

Forty five Chinese students participated in the study. They came from mainland China and were enrolled in OPIE at Ohio University. At the time of the experiment, they had been studying in OPIE for two months. Based on an English proficiency test (TOEFL), the

participants were assigned to three proficiency levels: beginning ($n = 7$), intermediate ($n = 21$), and advanced ($n = 17$) learners. There were 22 male and 23 female participants, and their average age was 19 (ranging from 18 to 22).

OPIE is an intensive English program, offered by Ohio University, for international students who are admitted to different university programs but still have some language difficulties that prevent them from immediately beginning their academic studies. OPIE offers full-time intensive English study and the students are placed in classes of different proficiency levels based on their TOEFL scores. The OPIE students engage in some form of classroom English language instruction for 2 to 5 hours on daily basis. All OPIE students are supposed to take the TOEFL test at the end of each quarter and their new TOEFL scores determine whether they need to continue taking OPIE courses or they may begin their academic studies.

Instruments

The Strategy Inventory for Language Learning (SILL version 7.0 for ESL/EFL learners) (see Appendix A) was the main instrument used in this study. The SILL is a self-reported questionnaire and is used to assess the frequency of LLS use (Oxford, 1990). The SILL has been employed as a key instrument in numerous other studies (e.g., Goh & Foong, 1997; Green & Oxford, 1995; Griffiths, 2003; Hong-Nam & Leavell, 2006; Oxford & Ehrman, 1995; Park, 1997; Shmais, 2003; Takeuchi, 2003; Wharton, 2000) and it is claimed to be “the only language learning strategy instrument that has been extensively checked for reliability and validated in multiple ways” (Oxford & Burry-Stock, 1995, p. 4).

The questionnaire uses five Likert-type responses for each strategy item, ranging from 1 (‘never or almost never true of me’) to 5 (‘always true of me’) and the students are asked to respond to each item based on an honest self-assessment of their LLS use. The following reporting scale was used to indicate the frequency of use of strategies in learning English: (1) ‘High Use’ (3.5–5.0), (2) ‘Medium Use’ (2.5–3.4), and (3) ‘Low Use’ (1.0–2.4) (Oxford, 1990). Based on Oxford’s (1990) categorization, individual strategy items in the SILL were grouped into six groups: memory, cognitive, compensation, metacognitive, affective and social. The scale score for each group is the total scale score of the individual items in that group. However, some researchers have raised concerns about the limitations of the SILL. For instance, Tseng, Dörnyei, and Schmitt (2006) argued that “there is no linear relationship between the individual item scores and the total scale scores; for example, one can be a good memory strategy user in general while scoring low on some of the items in the memory scale” (p. 83). Therefore, “the scales in the SILL are not cumulative and computing mean scale scores is not justifiable psychometrically” (p. 83). In this regard, in this study, I will focus on individual items in the SILL and associate individual strategies with language skills such as listening, reading, speaking and writing, and vocabulary learning.

The SILL was also accompanied by an individual background questionnaire which was designed to elicit information on students’ gender, age, proficiency self-ratings, course level of OPIE enrollment, and years of English language learning in China.

Informal interviews were conducted after the questionnaire data were analyzed. The interviews involved both yes-no and open-end questions and, based on the results of the SILL

questionnaire, it focused on more detailed information related to the participants' individual strategy use in both ESL and EFL learning contexts, their perception of changes in their strategy use, and the reasons for these changes. To be able to elicit these details across the three proficiency levels involved in the study, the interviews were conducted in Chinese.

Procedure

At the end of the quarter, the SILL questionnaire was distributed to the Chinese students enrolled in OPIE courses. The students were told that there were no right or wrong answers to the questions and that their answers will be used for research purposes only. The survey was conducted after class or during class breaks, and took about 20 minutes for the participants to fill out the questionnaire forms. After having quantified the SILL data, I interviewed six participants individually, recruiting two participants from each proficiency level to elicit some detailed information on their strategy use in both ESL and EFL learning contexts, the changes in strategy use after studying for one quarter in OPIE, and the reasons behind changing and/or adopting certain strategies. The interviews were conducted after class and each interview took about 20 minutes per participant.

Data analysis

Both quantitative and qualitative methods were used to analyze the data. Descriptive statistics (means, standard deviation, and frequencies) were used to calculate overall strategy use. To determine any variation in the means of reported individual strategy use by proficiency level and gender, a two-way analysis of variance (ANOVA) was performed, using proficiency level and gender as independent variables and the mean of each strategy use as dependent variable. The Scheffé post-hoc test was used to find where significant differences occurred as related to proficiency level and gender. The significance level was set at $p < .05$.

Results

Overall strategy use

According to Oxford (1990), a mean of all participants in the range of 3.5 - 5.0 on a SILL item is defined as high use of that strategy, 2.5 - 3.4 as medium use, and 1.0 - 2.4 as low use. Overall means and standard deviations were calculated in terms of proficiency level and gender (see Table 1).

Table 1

Means, Proportion And SD Of Frequency Of Strategy Use According To Proficiency Level And Gender

Proficiency level	N	%	M	SD
Beginning (AE40)	7	15.56	3.09	.69
Intermediate (AE45)	21	46.67	3.29	.47
Advanced (AE50)	17	37.78	3.56	.54

Gender	N	%	M	SD
Males	22	48.89	3.32	.63
Females	23	51.11	3.40	.47

The ANOVA results showed no significant difference for overall strategy use by proficiency level ($p = .245$) and gender ($p = .077$). However, it is interesting to note that the mean scores of overall strategy use for each group showed a linear increase in frequency across the three proficiency levels (at a chance level, though), with advanced students reportedly using learning strategies most frequently ($M = 3.56$) and beginning level students least frequently ($M = 3.09$). The mean scores also indicated that female students reported using learning strategies a little more frequently ($M = 3.40$) than male students ($M = 3.32$), yet again at a chance level.

The individual mean scores showed that 17 out of 50 items fell within the high use range and the other 33 items in the range of medium use. Appendix B shows reported strategy use by individual item mean scores on the SILL for the entire sample and the results are presented in descending order—from most to least frequently used strategies.

Individual strategy use by proficiency

The ANOVA results indicated that three out of fifty SILL items (item 3, item 4, and item 23) varied significantly different ($p < .05$) by proficiency. The Post-hoc Scheffé test showed a significant difference in the use of item 3 ('I connect the sound of a new English word and an image or picture of the word to help me remember the word') and item 23 ('I make summaries of information that I hear or read in English') between the advanced learners and both the beginning and intermediate participants. There was no significant difference between beginning and intermediate level, though (item 3, $p = .780$; item 23, $p = .496$). For item 4 ('I remember a new English word by making a mental picture of a situation in which the word might be used'), a significant difference was found between the intermediate and advanced students. Two of the three items (item 3 and item 23) demonstrated positive variation—that is, the higher the proficiency level, the more frequently the strategy was used, and one item (item 4) indicated mixed variation across proficiency

levels, with beginning and advanced students reportedly using the strategy more frequently than students at the intermediate level.

The mean scores indicated that students at the advanced level reported high frequency use of 33 items (66%), while students in the intermediate and beginning levels reported high frequency use of 16 (32%) and 11 (22%) items respectively (see Figure 1). It was also noticed that no individual strategy was reportedly used at a low frequency by advanced learners, while eight (16%) and three (6%) strategies were reported as being used with low frequency by students at the beginning and intermediate levels respectively (Table 2).

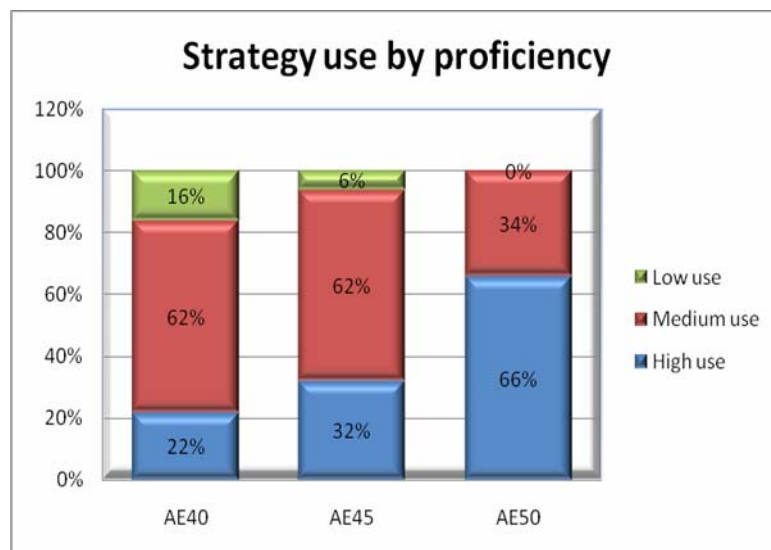


Figure 1: Individual strategy use by proficiency

Table 2

Individual Strategies Used With Low Frequency By Beginning And Intermediate Learners

Beginning Learners		
Item #	Strategy	Mean frequency of use
3.	I connect the sound of a new English word and an image or picture of the word to help me remember the word.	2.29
5.	I use rhymes to remember new English words.	2.43
6.	I use flashcards to remember new English words.	2.29
8.	I review English lessons often.	2.43
9.	I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	2.00
16.	I read for pleasure in English.	1.86
23.	I make summaries of information that I hear or read in English.	2.14
43.	I write down my feelings in a language learning dairy.	1.43
Intermediate level		
4.	I remember a new English word by making a mental picture of a situation in which the word might be used.	2.38
6.	I use flashcards to remember new English words.	2.48
7.	I physically act out new English words.	2.48

It was also noticed that among the 33 items used with high frequency by the advanced learners, eight items were also used highly frequently by students across all levels. In addition to the core of eight strategies and the strategies also used highly frequently by students in the intermediate or beginning levels, advanced students reported using another 15 strategies with a high frequency (see Table 3).

Table 3

Individual Strategies Used With A High Frequency Exclusively By Advanced Learners

Advanced Learners		
Item #	Strategy	Mean frequency of use
1.	I think of relationships between what I already know and new things I learn in English.	3.88
2.	I use new English words in a sentence so I can remember them.	3.59
3.	I connect the sound of a new English word and an image or picture of the word to help me remember the word.	3.71
4.	I remember a new English word by making a mental picture of a situation in which the word might be used.	3.59
13.	I use the English words I know in different ways.	3.65
15.	I watch English language TV shows spoken in English or go to movies spoken in English.	3.88
17.	I write notes, messages, letters, or reports in English.	3.59
21.	I find the meaning of an English word by dividing it into parts that I understand.	3.53
23.	I make summaries of information that I hear or read in English.	3.71
27.	I read English without looking up every new word.	3.59
28.	I try to guess what the other person will say next in English.	3.53
30.	I try to find as many ways as I can to use my English.	3.71
31.	I notice my English mistakes and use that information to help me do better.	3.53
36.	I look for opportunities to read as much as possible in English.	3.71
47.	I practice English with other students.	3.53

Individual strategy use by gender

The ANOVA results showed that there was a significant difference in the use of two individual strategies between males and females. The two items—item 16 ('I read for pleasure in English.') and item 37 ('I have clear goals for improving my English skills.') were used significantly more often by female students and the frequency of use of the two items fell within the medium range.

Eight items were identified as being used exclusively by female students, while five items were exclusively used by male students (see Table 4). The ANOVA results also showed that there was an interactive effect for six individual items between the variables of

proficiency and gender. However, since there was only one female in the group of beginning students, the mean scores for each strategy for that group is not representative.

Table 4

High Frequency Individual Strategies By Gender

Females		
Item #	Strategy	Mean frequency of use
1.	I think of relationships between what I already know and new things I learn in English.	3.52
2.	I use new English words in a sentence so I can remember them.	3.57
31.	I notice my English mistakes and use that information to help me do better.	3.52
33.	I try to find out how to be a better learner of English.	3.87
34.	I plan my schedule so I will have enough time to study English.	3.57
39.	I try to relax whenever I feel afraid of using English.	3.70
46.	I ask English speakers to correct me when I talk.	3.65
48.	I ask for help from English speakers.	3.96
Males		
10.	I say or write new English words several times.	3.55
13.	I use the English words I know in different ways.	3.64
15.	I watch English language TV shows spoken in English or go to movies spoken in English.	3.64
22.	I try not to translate word-for-word.	3.64
27.	I read English without looking up every new word.	3.59

Changes in strategy use

Four of the six students interviewed reported that their strategy use had changed since they came to the United States and started studying in OPIE. I compared different informants' data to generate meaningful categories in terms of language skills. The most noticeable change was related to English speaking skills. They claimed that they have become more comfortable and confident when speaking English and that they have engaged more frequently in communicating with native speakers (NSs) of English. While in China, they would seldom speak with English NSs because they thought it was too embarrassing to make too many grammatical and pronunciation errors or create cultural misunderstandings. However, they shared that, during their studies in OPIE, they have had plenty of

opportunities to interact with NSs and some of them even had conversation partners over the quarter. They shared that they have tried to encourage themselves to speak English even when they were afraid of making mistakes and often used gestures to assist themselves in expressing their ideas. If they could not follow a conversation in English, they reported they have adopted the strategy of asking the NS to slow down or to repeat the sentence. They have also been trying to imitate NSs' pronunciation.

There was another great change in regard to reading and listening. The interviewed participants said that they rarely read or listened to English materials outside classroom activities in China unless they had an assignment. The reading and listening materials available to them were not authentic and were usually exam-oriented, so they felt they were forced to read and listen to them in order to pass exams and felt it was boring to read and listen to such materials. In addition, while reading and listening, they tended to concentrate on individual words instead of main ideas. When encountering an unfamiliar word, they always looked it up in a dictionary. After studying in OPIE for some time, however, they started reading English materials that were interesting to them, such as funny stories or newspapers; they often watched English movies and TV shows, listened to English songs and sometimes even read the news on-line. When encountering a new word, they tried to guess its meaning based on the context surrounding it, instead of trying to look up every word in a dictionary.

They also claimed that their way of learning vocabulary had changed to some extent. While studying in China, they always memorized the new words from the word list in the textbook or memorized words or sentences from vocabulary textbooks oriented for exam preparation. Now although they had to memorize new words too, the words were always the ones that they encountered in some context, while reading and listening. Thus, they knew the exact context in which the word could be used and they could make sentences using the new word appropriately.

The strategies related to writing, according to their accounts, had also changed a little. For instance, they kept a weekly journal in which they wrote down their feelings. They wrote essays based on the topics that were related to them or interesting to them instead of the topics chosen by the teacher for the purposes of exam preparation. They no longer memorized essay models as they sometimes did in China in order to get a higher score on the essay writing section in a test.

It was interesting to find that they held opposing opinions about their strategy change in terms of grammar learning. Some students said that they have become more conscious about grammar and started to concentrate on grammar learning, while others said that they shifted their attention from grammar to other language skills such as speaking, reading, and vocabulary learning. As for the reasons why they had changed certain strategies, most of the students agreed that the changes were partly due to the English-speaking environment and partly due to the OPIE instruction. Living in an English-speaking country, they have more opportunities to speak and listen to English everyday as well as to access authentic English materials. While studying in OPIE, they could get more guidance from their instructors as to how to use certain strategies to help develop their language skills and become better integrated into the English-speaking environment.

Discussion

Overall strategy use

The frequency of overall strategy use fell within the medium range and the frequency of each strategy was within or above the medium range, which indicates that students across all levels are aware of strategy use and tend to use a variety of strategies in their learning process. Seventeen items were identified as highly frequently used by the entire sample and it should be noted that 9 (items 25, 50, 40, 45, 14, 11, 32, 48, and 49) out of the 17 items were related to social interaction and communication, which indicated that the students tended to use more strategies to assist them in their social interactions. Five of the items were related to language skills—for instance, item 24 and 29 are about vocabulary learning, item 12—about pronunciation, item 15—about listening, and item 36—about reading. The frequent use of these strategies could be due to the nature of English language instruction OPIE provides to the participants, which puts strong emphasis on using certain strategies in interesting and motivating activities or tasks.

Most previous studies about LLS use have shown a positive linear relationship between strategy use and language proficiency, with advanced learners reportedly using strategies more frequently than less advanced learners. In this study, the mean scores also indicated the same pattern; however, unlike previous studies, no significant difference was found in overall strategy use between advanced students and less advanced students. This could be due to the close ranges of proficiency levels used in the present study. Similarly, differences between findings across research of this kind may also be due to the fact that the construct of proficiency may not be measured the same way across different programs.

Most previous research has also shown that females tend to use strategies more frequently than males. But in this study, no significant difference was found in overall strategy use between male and female students. This finding is consistent with Hong-Nam and Leavell's (2006) study, in which the difference in frequency of overall strategy use was not significant across genders. Although the mean scores for individual strategies showed that male students used several strategies more frequently than female students, the mean score of overall strategy use for both groups showed that females used strategies a little more frequently than males, yet at a chance level.

Individual strategy use by proficiency

The analysis showed that three individual strategies varied significantly by proficiency level, favoring advanced students. In Griffiths's (2003) study, mean scores were used to identify the strategies used exclusively by advanced learners with a high frequency. Nineteen such strategies were identified in this study. The mean scores showed that 15 strategies were used highly frequently only by advanced learners. These strategies were grouped into five categories: (1) interaction with others (items 28, 47); (2) vocabulary learning (items 2, 3, 4, 13, 21); (3) the management of learning (items 1, 17, 23, 30, 31); (4) listening (item 15, 23); and (5) reading (items 23, 27, 36). As Griffiths (2003) has pointed out, many researchers have noted the difficulties of establishing mutual exclusivity (O'Malley et al., 1985; Oxford, 1990), thus, some strategies could be listed in more than one

group. It is easily noticeable that advanced learners tended to use a variety of strategies, and they paid more attention to vocabulary learning, reading, and management of learning. It should also be pointed out that advanced learners often sought to find efficient ways to remember words, associating a word with sounds, images or pictures as well as the contexts in which the word was often used. This showed that vocabulary learning was viewed as important in improving language proficiency by advanced students. Advanced students also seemed to be more responsible for their learning, and they tended to seek ways to plan and manage their learning in every aspect. In contrast, less proficient students paid less attention to vocabulary learning, which could be seen from the list of strategies used by beginning and intermediate students.

Individual strategy use by gender

The results showed that a significant difference in frequency of individual strategy use between male and female students was found in two items only: item 16 and item 37. These two items relate to the strategy of learning management, suggesting that females tended to have a higher management involvement in their own learning than males. It was also noticed that the female students tended to seek interaction with NSs of English more frequently and paid greater attention to the management of their feelings than the male participants. The males, on the other hand, seemed to put more emphasis on vocabulary learning, watched English programs or movies more often than the females and regarded this as a useful strategy to improve their listening skills.

Changes in strategy use

Based on the interview data, the accounts of strategy use of most of the informants were consistent with the results from the questionnaire data. Most of the informants reported more interaction with English NSs. There are, at least, two reasons for this change. First, living in an English-speaking country, they had plenty of opportunities to interact with NSs of English and speak English every day. Another reason is linked to the type of instruction they received in OPIE. According to the interviewees, the OPIE instructors created an active learning environment for them in class and constantly encouraged them to speak English without being afraid of making errors. For example, a lot of the in-class activities involved pair or group work that offered learners opportunities to interact frequently with each other. OPIE instructors also encouraged their students to speak English and to practice their communicative skills outside the classroom. They often gave their students assignments that encouraged them to communicate with English NSs by interviewing them on some hot issues. Students were also given an opportunity to choose English conversation partners and meet with them regularly, which helped them further develop their communicative skills.

Based on the informants' accounts, their use of strategies related to vocabulary learning have also changed. They no longer memorized word lists; instead, they paid more attention to the context in which words were used. In OPIE, as an on-going assignment, they were keeping vocabulary journals in which they were supposed to write down the unfamiliar words they had encountered, their meaning and an example sentence with the word. In addition, most learners had become more used to guessing words' meanings from context rather than referring to dictionary every time they encountered an unfamiliar word. Some

OPIE instructors had also introduced their students to guessing techniques, such as using some linguistic knowledge (e.g., word suffixes, discourse markers, etc.) to infer the meaning of derived words.

Most informants have also changed their learning strategies in relation to reading and listening. The easier access to many authentic materials that are, at the same time, more interesting greatly motivated them to read and listen to English either for information or for entertainment. Additionally, they felt that the idiomatic expressions they have learned from these authentic materials have helped them communicate more efficiently with English NSs.

In terms of strategies related to the participants' writing skills, keeping speech journals helped students practice writing in a meaningful to them way. Some learners reported to have shifted their attention from grammar to other language skills, while others reported they still paid more attention to grammar than language skills. This is probably related to learners' language proficiency—i.e. the more proficient learners usually have better knowledge of grammar that allows them to shift their focus from grammar to the development of their language skills, while low proficiency learners struggle with both grammar and language skills and they try to distribute their attention to each area accordingly.

Limitations

The study has several limitations that need to be pointed out. First, the SILL is a questionnaire which is based on the participants' self-rated use of learning strategies and the results may be affected by some individual factors, such as the inability to remember specific strategy use accurately and the lack of awareness of strategy use by students. For example, some strategies that were rated as "never used" may be employed unconsciously. Additionally, the SILL does not describe in detail the LLS a student uses in responses to any specific language task and thus the results may not reflect the impact of task on strategy choice. Further research may consider combining the SILL and task-based learning strategy assessment. Second, the detailed interview involved only six participants, so the description of the overall strategy use pattern may not be accurately captured. Third, the TOEFL test used in OPIE is paper-based and the assessment of speaking and writing skills is not included in the score; thus, the participants' overall English proficiency may not have been accurately evaluated. Further research should include components of students' oral proficiency and writing skills in the language proficiency assessment. Next, the sample size of the groups was small, particularly the beginners' group, which may have strongly affected the results of the analysis; thus, further research should consider much larger groups as related to the independent variables. It should also be noted that the results of the lower proficiency groups may have been strongly affected by their ability to understand the language of the survey—i.e., the participants may not have been proficient enough to comprehend the survey statements in English. Finally, two months may be a too short period of time to find any substantial differences in the patterns of LLS use; thus, further research is needed to investigate the changes in strategy use over a longer period of time.

Conclusion

Using both quantitative and qualitative methods, this study examined the LLS use ESL Chinese students, enrolled in a pre-academic intensive English program at an American university. The findings indicated that students across all levels of proficiency tended to use more strategies related to interaction and communication since their coming to the U.S. Advanced students seemed to use a wider range of strategies and use certain strategies more frequently, such as vocabulary learning and the management of learning than intermediate and beginner learners. Compared with male learners, the female participants in this study tended to use more strategies regarding the management of learning. Overall, the participants showed awareness of some strategy changes since they started studying in OPIE and they have adopted certain strategies in order to be more integrated into their new English-speaking environment.

The findings of the study offer some insights into ESL instructional practices. For example, based on the findings about the strategy use favored by Chinese learners at different levels of proficiency, instructors can make some specific teaching adjustments according the proficiency level of the students they are teaching. As the study showed, beginning, intermediate, and advanced learners have quite different strategy use preferences and they change their strategy use in different ways. Thus, specific teaching techniques and tasks should be employed at different levels of proficiency to introduce those students to LLS they may not even be aware of. Finally, the changes in strategy use among Chinese students after a two-month study in an intensive English language program abroad may provide valuable insights for Chinese teachers of English in China. For instance, some teaching techniques used by OPIE instructors were described as effective by the students. They also pointed out that these techniques helped them develop certain strategies that facilitated their learning, which suggests that certain strategies may be transferable across different learning contexts and, whenever possible, they should be adopted by EFL instructors.

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Appendix A

Strategy Inventory for Language Learning (SILL)

This form of the strategy inventory for language learning (SILL) is for students of English as a second or foreign language. You will find statements about learning English. Please read each statement and write the response (1, 2, 3, 4, or 5) that tells HOW TRUE THE STATEMENT IS.

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

Answer in terms of how well the statement describes you. Do not answer how you think you should be, or what other people do. **There are no right or wrong answers** to these statements. This questionnaire usually takes about 20-30 minutes to complete. If you have any questions, let the teacher know immediately.

Part A

No.	Statements	Never	Usual-ly not	Some-what	Usual-ly yes	Alway-s
1.	I think of relationships between what I already know and new things I learn in English.	1	2	3	4	5
2.	I use new English words in a sentence so I can remember them.	1	2	3	4	5
3.	I connect the sound of a new English word and an image or picture of the word to help me remember the word.	1	2	3	4	5
4.	I remember a new English word by making a mental picture of a situation in which the word might be used.	1	2	3	4	5
5.	I use rhymes to remember new English words.	1	2	3	4	5
6.	I use flashcards to remember new English words.	1	2	3	4	5
7.	I physically act out new English words.	1	2	3	4	5
8.	I review English lessons often.	1	2	3	4	5

9.	I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	1	2	3	4	5
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Part B

No.	Statements	Never	Usually Not	Some what	Usually Yes	Always
10.	I say or write new English words several times	1	2	3	4	5
11.	I try to talk like native English speakers.	1	2	3	4	5
12.	I practice the sounds of English.	1	2	3	4	5
13.	I use the English words I know in different ways.	1	2	3	4	5
14.	I start conversations in English.	1	2	3	4	5
15.	I watch English language TV shows spoken in English or go to movies spoken in English.	1	2	3	4	5
16.	I read for pleasure in English.	1	2	3	4	5
17.	I write notes, messages, letters, or reports in English	1	2	3	4	5
18.	I first skim an English passage (read over the passage quickly) then go back and read carefully.	1	2	3	4	5
19.	I look for words in my own language that are similar to new words in English.	1	2	3	4	5
20.	I try to find patterns in English.	1	2	3	4	5
21.	I find the meaning of an English word by dividing it into parts that I understand.	1	2	3	4	5
22.	I try not to translate word-for-word.	1	2	3	4	5
23.	I make summaries of information that I hear or read in English.	1	2	3	4	5

Part C

No.	Statements	Never	Usually Not	Some what	Usually Yes	Always
24.	To understand unfamiliar English words, I make guesses.	1	2	3	4	5
25.	When I can't think of a word during a conversation in English, I use gestures.	1	2	3	4	5
26.	I make up new words if I do not know the right ones in English.	1	2	3	4	5
27.	I read English without looking up every new word.	1	2	3	4	5
28.	I try to guess what the other person will say next in English.	1	2	3	4	5
29.	If I can't think of an English word, I use a word or phrase that means the same thing.	1	2	3	4	5

Part D

No.	Statements	Never	Usually Not	Somew hat	Usually Yes	Always
30.	I try to find as many ways as I can to use my English.	1	2	3	4	5
31.	I notice my English mistakes and use that information to help me do better.	1	2	3	4	5
32.	I pay attention when someone is speaking English.	1	2	3	4	5
33.	I try to find out how to be a better learner of English.	1	2	3	4	5
34.	I plan my schedule so I will have enough time to study English.	1	2	3	4	5
35.	I look for people I can talk to in English.	1	2	3	4	5
36.	I look for opportunities to read as much as possible in English.	1	2	3	4	5
37.	I have clear goals for improving my English skills.	1	2	3	4	5

38.	I think about my progress in learning English.	1	2	3	4	5
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Part E

No.	Statements	Never	Usually Not	Somew hat	Usually Yes	Always
39.	I try to relax whenever I feel afraid of using English.	1	2	3	4	5
40.	I encourage myself to speak English even when I am afraid of making a mistake.	1	2	3	4	5
41.	I give myself a reward or treat when I do well in English.	1	2	3	4	5
42.	I notice if I am tense or nervous when I am studying or using English.	1	2	3	4	5
43.	I write down my feelings in a language learning dairy.	1	2	3	4	5
44.	I talk to someone else about how I feel when I am learning English.	1	2	3	4	5

Part F

No.	Statements	Never	Usually Not	Somew hat	Usually Yes	Always
45.	If I do not understand something in English, I ask the other person to slow down or say it again.	1	2	3	4	5
46.	I ask English speakers to correct me when I talk.	1	2	3	4	5
47.	I practice English with other students.	1	2	3	4	5
48.	I ask for help from English speakers.	1	2	3	4	5
49.	I ask questions in English.	1	2	3	4	5
50.	I try to learn about the culture of English speakers.	1	2	3	4	5

Appendix B

Preference of language learning strategies of ESL Chinese learners

Strategy No.	Strategy statement	Rank	Mean
25	When I can't think of a word during a conversation in English, I use gestures	1	4.00
50	I try to learn about the culture of English speakers	2	3.89
40	I encourage myself to speak English even when I am afraid of making a mistake	3	3.82
45	If I do not understand something in English, I ask the other person to slow down or say it again.	4	3.78
29	If I can't think of an English word, I use a word or phrase that means the same thing.	5	3.76
14	I start conversations in English.	6	3.73
24	To understand unfamiliar English words, I make guesses.	7	3.73
11	I try to talk like native English speakers.	8	3.71
32	I pay attention when someone is speaking English.	9	3.71
38	I think about my progress in learning English.	10	3.69
48	I ask for help from English speakers.	11	3.69
49	I ask questions in English.	12	3.69
33	I try to find out how to be a better learner of English.	13	3.67
12	I practice the sounds of English.	14	3.64
39	I try to relax whenever I feel afraid of using English.	15	3.53
15	I watch English language TV shows spoken in English or go to movies spoken in English.	16	3.51
36	I look for opportunities to read as much as possible in English.	17	3.51
1	I think of relationships between what I already know	18	3.49

	and new things I learn in English.		
10	I say or write new English words several times.	19	3.47
18	I first skim an English passage (read over the passage quickly) then go back and read carefully.	20	3.44
13	I use the English words I know in different ways.	21	3.42
31	I notice my English mistakes and use that information to help me do better.	22	3.42
34	I plan my schedule so I will have enough time to study English.	23	3.42
27	I read English without looking up every new word.	24	3.40
30	I try to find as many ways as I can to use my English.	25	3.40
46	I ask English speakers to correct me when I talk.	26	3.40
20	I try to find patterns in English.	27	3.36
22	I try not to translate word-for-word.	28	3.36
47	I practice English with other students.	29	3.36
2	I use new English words in a sentence, so I can remember them.	30	3.33
42	I notice if I am tense or nervous when I am studying or using English.	31	3.33
28	I try to guess what the other person will say next in English.	32	3.31
35	I look for people I can talk to in English.	33	3.31
21	I find the meaning of an English word by dividing it into parts that I understand.	34	3.29
17	I write notes, messages, letters, or reports in English	35	3.24
37	I have clear goals for improving my English skills.	36	3.24
19	I look for words in my own language that are similar to new words in English.	37	3.20
41	I give myself a reward or treat when I do well in English.	38	3.18
9	I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	39	3.07
3	I connect the sound of a new English word and an image or picture of the word	40	3.02

	to help me remember the word.		
23	I make summaries of information that I hear or read in English.	41	3.02
5	I use rhymes to remember new English words.	42	3.00
26	I make up new words if I do not know the right ones in English.	43	3.00
44	I talk to someone else about how I feel when I am learning English.	44	2.98
4	I remember a new English word by making a mental picture of a situation in which the word might be used.	45	2.93
8	I review English lessons often.	46	2.91
16	I read for pleasure in English.	47	2.89
7	I physically act out new English words.	48	2.69
6	I use flashcards to remember new English words.	49	2.67
43	I write down my feelings in a language learning dairy.	50	2.58

Cai Hou was born on August 21, 1982. She is a Chinese graduate student majoring in Applied Linguistics. She studied at Ohio University from June 2007 to June 2008 and now she is studying Linguistics at Beijing Language and Culture University in China. All correspondence should be sent to ch324107@ohio.edu.