Language Learning Strategy Profile of University Foreign Language Majors in Taiwan

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Abstract

This preliminary comparative study profiles foreign language learning strategy use (LLSU) among 360 undergraduate foreign language majors in Taiwan. Four variables, namely gender, academic foreign language major subject, fondness of the target language (TL), and previous experience in a TL country, were employed to analyze their relationships with participants' LLSU. A high frequency of LLSU among these foreign language learners was discovered. The variable of fondness of the TL showed the most significant associations with participants' LLSU. Significant effects and interactions were detected among the four variables and the use of individual strategies and strategy categories. Implications for educational practice in Taiwan and for further research are discussed.

1   Introduction

Learning strategy has received increasing attention since the 1970s from researchers and educators of English as a Second Language (ESL) and English as Foreign Language (EFL) for how languages are learned differently by individual learners (Chang, 1999; Cohen, 1998; Rubin, 1975; Naiman, Froehlich, Stern, & Todesco, 1978; Stern, 1975). Other research has reported the importance of language learning strategy use (LLSU) and identified the range and nature of LLSU employed by good or effective language learners, as identified by tests, examinations, or teacher ratings (Ehrman, Leaver, & Oxford, 2003; Green & Oxford, 1995; O'Malley, Chamot, Stewner-Manzanares, Kuepper, & Russo, 1985).

Many factors have been related to LLSU, such as age (Ehrman & Oxford, 1989, 1990; Lan, & Oxford, 2003; Oxford & Ehrman, 1995), gender (Green & Oxford, 1995; Oxford, 1993), language proficiency (Chamot, Barnhart, El-Dinary, & Robbins, 1999; O'Malley & Chamot, 1990), and motivation (Ehrman & Oxford, 1989, 1990; Wharton, 2000). Studies of LLSU have well covered learners of different age levels including elementary schools, secondary schools, colleges or universities, and adult language learners around the world.

Many studies of the LLSU of EFL learners of different age groups have been conducted in Taiwan including elementary schools (Lan & Oxford, 2003; Lin, 2001), junior high schools (Liao, 2000; Ko, 2002), senior high schools (Peng, 2001; Jong, 2001; Tsao, 2002), and colleges (Chen, 2001; Su, 2005). Variables associated with LLSU, including gender (Lan & Oxford, 2003; Peng, 2001), learning styles (Ko, 2002 Tsao, 2002), motivation (Lan & Oxford, 2003; Liao, 2000; Peng, 2001) and proficiency (Chen, 2001; Lan & Oxford, 2003; Su, 2005), have been discussed in detail.

Limited research has focused on the comparative aspect of LLSU among undergraduate foreign language majors in Taiwan. This preliminary comparative study investigates the LLSU of such

undergraduate majors of English, Japanese, and the European languages of German and French. Findings from the study will benefit foreign language instruction at the research site where the three foreign language departments strive to raise foreign language education standard in central Taiwan. Also examined are three much studied variables of gender, TL major subject, fondness of target language (TL), and less researched variable of prior experience in TL speaking countries, which in previous ESL/EFL studies have shown significant relationships with LLSU (Chang, 2008, 2009, 2010b; Riley & Harsch, 1999; Watanabe, 1990). Results from the discussions on the relationship between the four particular variables and LLS items and categories are expected to provide insights into the LLSU of foreign language learners and to have pedagogic implications for foreign language instruction in Taiwan.

2   Language learning strategies

Learning strategies are procedures that facilitate learning tasks (Chamot, 2005), and also enable learners to become more independent, autonomous and lifelong learners (Allwright, 1990; Little, 1991). The importance of language learning strategies (LLSs) is that they are steps that learners take to manage their learning and achieve desired goals.

Early research into LLSs focused on establishing what good LLSs might be (Rubin, 1975; Stern, 1975). Later work by Naiman, Frohlich, Stern, & Todesco (1978), Rubin (1981), and O'Malley, Chamot, (1985) focused on identifying good LLSs. Rubin (1981) identified strategies that contribute directly and indirectly to L2 learning. Six direct strategies are: (a) clarification/verification, (b) monitoring, (c) memorization, (d) guessing/inductive inference, (e) deductive reasoning, and (f) practice; and two indirect strategies: (a) creating opportunities for practice, and (b) production tricks. Oxford (1990) defines LLSs in general terms as specific methods or techniques used by individual learners to facilitate the comprehension, retention, retrieval and application of information in the second or foreign language.

Besides the various ways of defining LLSs, there are also different ways of categorizing identified LLSs. O'Malley and Chamot (1990) outlined a scheme including cognitive, metacognitive, and social/affective strategies based on research conducted in the 1980s. According to O'Malley and Chamot (1990, pp. 44–45), cognitive strategies work with information in ways that enhance learning; metacognitive strategies are higher order executive skills for planning, monitoring, or evaluating an activity; and social/affective strategies pertain to the interaction with another person or ideational control over affect. Oxford (1990) produced a classification system, the Strategy Inventory for Language Learning (SILL), comprised of:

1. Cognitive strategies: processing information and structuring it, e.g. analyzing, summarizing.
2. Memory strategies: remembering information via making connections between it, e.g. grouping, using keywords.
3. Metacognitive strategies: managing the learning process and dealing with the task, e.g. planning, identifying and selecting resources.
4. Compensation strategies: compensating for knowledge gaps, e.g. guessing, gesturing.
5. Affective strategies: identifying one's affective traits and knowing how to manage them, e.g. reducing anxiety, encouraging one's self.
6. Social strategies: learning from and/or with others, e.g. asking for cooperation, working with peers. (Oxford, 1990, pp.18–21; 2001, pp.167–68)

Oxford's SILL is regarded as the most comprehensive classification of LLSs (Ellis, 1994), and has been used extensively to collect data on large numbers of language learners around the world (see Green & Oxford, 1995; Hsiao & Oxford, 2002; Lan & Oxford, 2003; Park, 1997; Wharton, 2000). This standardized instrument has versions for a variety of languages. It has been extensively used to collect data on large numbers of mostly foreign language learners (see Cohen, Weaver & Li, 1998; Nyikos & Oxford, 1993; Olivares-Cuhat, 2002; Oxford, 1990, 1993; Oxford & Burry-Stock, 1995; Wharton, 2000), and also has been employed in studies that correlate strat-

egy use with variables such as learning styles, gender, proficiency level, and culture (Bedell & Oxford, 1996; Bruen, 2001; Green & Oxford, 1995; Nyikos & Oxford, 1993; Oxford & Burry-Stock, 1995; Wharton, 2000).

2.1 Gender

Politzer (1983) found that female ESL learners applied more social strategies than their male counterparts. Oxford and Nyikos (1989) found that female learners made more frequent use of formal rule-based practice strategies and conversational input elicitation strategies. Female learners made greater use of functional practice strategies, strategies for searching and communicating meaning, and self-management strategies in a study by Ehrman and Oxford (1989). Early studies in Taiwan by Yang (1993) and Sy (1994, 1995) reported gender differences in LLSU. However, a study of 678 university students in Singapore by Wharton (2000) found male learners associated with more strategy use. Research by Lou (1998) and Peng (2001) showed no significant gender differences.

2.2 Academic major subject

Chang's (1991) study of Chinese and Taiwanese students in the USA and Chang's (1999) study of Taiwanese students in England reported more strategy use among ESL learners in humanities and social sciences than learners in science subjects. A study of second language strategy use by 1,006 EAP (English Abroad Program) university students in Hong Kong by Peacock & Ho (2003) reported English major students associated the most with strategy use and computer science majors the least. Mochizuki's (1999) study of 157 Japanese EFL university learners reported academic subject majors were associated with different LLSU. The current study uniquely targets different foreign language department majors within the same foreign language college to profile similarities and differences in their learning strategy use.

2.3 Fondness of target language

Learners who report greater fondness of their TL perform better and such motivation was the largest single influence on strategy use of variables studied by Oxford and Nyikos (1989). Research by Lan and Oxford (2003) of a group of 379 elementary school students in Taiwan also indicated that liking English was the most influential factor regarding LLSU.

2.4 Previous experience in TL speaking countries

Watanabe (1990) studied LLSU among Japanese college and university EFL students, finding that life overseas had a favorable effect. A pilot study by Riley and Harsch (1999) of Japanese EFL and ESL learners' LLSU indicated a significant difference between the two groups. Chang's (1999, 2003, 2008, 2009, 2010a, 2010b) research indicated learners benefit from the experience of studying abroad, which provides them with good opportunities to develop speaking and listening comprehension ability through communication with local people.

3 Research questions and methodology

The present study was conducted to find out the LLSU profile of a group of university foreign language majors in a provincial rural town in central Taiwan where authentic TL inputs are less available. English is a compulsory subject and the main foreign language studied in the school system of Taiwan. Japanese is the second most studied foreign language in Taiwan due to Taiwan's previous colonial link with Japan, 1895–1945, and close trading links. Japan is Taiwan's second largest trading partner after China (Channel NewsAsia, 2010). Other foreign languages are

considered marginal. At the research site and in this study, German and French language students are grouped together as the European languages major.

3.1 Research questions

This study was guided by the following research questions:

Question 1: What is the broad profile of strategy use overall, and for each of the six strategy categories of this group of university foreign language majors?

Question 2: What is the broad profile of strategy use overall and for each strategy category of the three subgroups of foreign language majors?

Question 3: What are the most and least used strategy items overall and for the three subgroups of foreign language majors?

Question 4: Are there significant differences by gender, academic major subject, fondness of TL, and previous experience in TL speaking countries among the strategy categories?

Question 5: Are there significant differences by gender, academic major subject, fondness of TL, and previous experience in TL speaking countries among the strategy items?

3.2 Method

A descriptive quantitative research design was employed to establish associations and profile relationships among and between the four independent variables and the language learning strategies in a 30-item SILL.

3.2.1 Participants

The present study surveyed 360 undergraduate foreign language majors at a university in central Taiwan, 262 (73%) females and 98 (27%) males. Among the participants, 211 (59%) participants were English majors, 72 (20%) were Japanese majors, and 77 (21%) were European languages majors. With regard to fondness of their TL, 221 (61%) indicated that they liked their TL, 135 (38%) thought their TL was OK, 4 (1%) disliked their TL. 65 (18%) participants had prior experience in TL speaking countries, and 295 (82%) had no such experience.

3.2.2 Instrumentation

The research instrumentation of the current study was a two-section English Chinese self-reported questionnaire. The first section included four questions that the participants were required to identify for the current study: (a) gender (b) major subject, (c) fondness of TL (d) previous TL experience. The second section was a list of strategies for language learning. The Strategy Inventory for Language Learning (SILL), by Oxford (1990, ESL/EFL Version 7), was translated into a 30-item University Foreign Language Learners' SILL in Chinese (see Appendix A). The researcher made some adjustments in this questionnaire. The word "English" was replaced with "major language" to designate the TL of the participants. The use of Internet was added to strategy item nine to reflect the now common use of the Internet as part of language learning strategy (Chang, 2010a).

Although such questionnaires are criticized for the accuracy and varying interpretations of or identifications toward the same term, the biggest advantage of the self-report questionnaire is that the researcher can acquire quantitative data in a time-efficient manner (Cohen, Weaver, & Li, 1998; Ellis, 1994). The validity and reliability of the ESL/EFL SILL are relatively high, especially across cultural groups (Chen, 2005). A study by Oxford and Burry-Stock (1995) examining Cronbach's alpha reliability coefficient, a measure for internal consistency, revealed Cronbach's alphas of .94 using Chinese translation with a sample of 590 Taiwanese University EFL learners (Yang,

2005), .92 using Japanese translation with 255 Japanese university and college EFL students (Watanabe, 1990), .91 using Korean translation with 59 Korean university EFL learners (Oh, 1992), .93 using researcher-revised Korean translation with 332 Korean university EFL learners (Park, 1997). The reliability for this study's translated questionnaire was measured at Cronbach's alpha of .94.

Using statistical data from a number of studies to assess content validity, a .99 agreement for SILL items against a taxonomy of over 200 possible language learning strategies was found (Oxford & Burry Stock, 1995). Regarding criterion-related validity, indicating the predictive or coexisting relationships between two variables, SILL reflects a close relationship with language performance, as measured by language achievement, proficiency self-rating, language proficiency tests, grades in language courses, etc. (Oxford & Burry Stock, 1995). Regarding construct validity, concerning how accurate a theoretical construct is, analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), factor analysis and multidimensional scaling have been used in the studies verifying the SILL (Oxford & Burry Stock, 1995).

The University Foreign Language Learners' SILL in Chinese was categorized into six strategy factors: (a) memory strategies, items 1 to 5; (b) cognitive strategies, items 6 to 15; (c) compensation strategies, items 16 to 19; (d) metacognitive strategies, items 20 to 24; (e) affective strategies, items 25 to 27; and (f) social strategies, items 28 to 30. Strategy items had 5-point Likert scale responses: 1 = never, 2 = seldom, 3 = sometimes, 4 = usually and 5 = always.

3.2.3   Data collection procedures

The questionnaires were collected between January 1-14, 2010. All participants received uniform instructions on how to complete the survey. Prior to completing the survey, the participants were assured that participation was voluntary, the study was not a test, the study was not associated with the course or the university, and their responses would not influence their grade. The participants were not required to identify themselves in the survey and confidentiality was absolute.

3.2.4   Data analysis procedures

Descriptive statistics (frequencies, means, percentages, standard deviations) were calculated using the Statistical Package for the Social Sciences (SPSS). Means and standard deviations were calculated for use of each of the 30 strategy items, the six strategy categories, and the overall total. T-tests, Factorial Analysis of Variance (FANOVA) and Multivariate Analysis of Variance (MANOVA) were used to determine effects of the four variables on participants' mean strategy use on the 30 items and on the six a priori strategy category subgroups individually and simultaneously. Post hoc tests were conducted to investigate specific differences. Significance at p < .05 was reported throughout the study.

4   Results and discussion

Oxford's (1990) key to understanding mean scores on SILL-based instruments with response scale range 1 to 5 was used to report the frequency of LLSU in this study. Average scores of 3.5 to 5.0 were defined as high use, 2.5 to 3.4 were medium use, and 1.0 to 2.4 were low use.

4.1   Results for Question 1: What is the broad profile of strategy use overall, and for each of the six strategy categories of this group of university foreign language majors?

Mean overall strategy category use was 3.68 on the 5-point Likert scale indicating "high" use, see Table 1. Mean scores were in the high use range for five categories and in the medium use range for the memory strategies category.

Strategy Category (Descending Order)	Mean	Standard Deviation	Use Range
Compensation	3.90	.80	High
Social	3.85	.80	High
Metacognitive	3.70	.79	High
Cognitive	3.64	.85	High
Affective	3.60	.89	High
Memory	3.44	.85	Medium
Total	3.68	.83	High

Table 1: Means and standard deviations indicating strategy use of the whole sample

The most used category is compensation. This agrees with studies by Chang (1991), Gunning (1997), Mochizuki (1999), Lan and Oxford (2003), Watanabe (1990), Yang (1993), and Yang (2007). The use of social strategies scored second, as also in a study by Yang (2007). Least used was the memory strategy category, consistent with findings by Lan and Oxford (2003), Oh (1992), Yang (1993), and Yang (2007).

4.2   Results for Question 2: What is the broad profile of strategy use overall and for each strategy category of the three subgroups of foreign language majors?

Overall strategy use by the foreign language majors is in the high use range, see Table 2. English majors reported high use in all categories. Japanese majors reported high use in all categories except for medium use in the memory category. European languages majors reported high use in half of the categories and medium use in the other categories. However, the overall average for each group of majors was in the high use range.

Major Subject	Memory (SD)	Cognitive (SD)	Compensation (SD)	Metacognitive (SD)	Affective (SD)	Social (SD)	Average (SD)
English	3.50 (.79)	3.70 (.79)	*3.97* (.78)	3.73 (.78)	3.67 (.85)	3.85 (.79)	3.74 (.80)
European Languages	3.37 (.86)	3.47 (.88)	3.73 (.86)	3.60 (.83)	3.47 (.98)	*3.80* (.86)	3.57 (.88)
Japanese	3.40 (.85)	3.77 (.82)	3.89 (.83)	3.73 (.77)	3.55 (.80)	*4.01* (.74)	3.73 (.80)

Table 2: Strategy use means overall and of the six categories for three different language majors

English majors used compensation strategies the most; whereas Japanese and European languages majors used social strategies the most. The category of memory strategies was the least employed by all groups. These results are suggestive but no significant differences at $p < .05$ were found between any of the means.

4.3   Results for Question 3: What are the most and least used strategy items overall and for the three subgroups of foreign language majors?

The most frequently used strategy item overall was item 22, paying more attention when hearing somebody speaking in (my) TL, of the metacognitive category (see Appendix B for details). Least used overall was item 4, miming to help memorize vocabulary, of memory. Students in Taiwan are usually taught mnemonic techniques of repeatedly writing or repeatedly and silently saying to themselves. In this context, the low use of miming strategy is understandable.

English majors reported using item 18, of compensation, the most, looking for help when don't understand (the TL). European languages majors reported greatest use for item 22, of metacognitive, paying extra attention when hear someone speaking in my TL and item 30, of social, trying to understand the culture of my TL countries or areas. Watching TV, movies, or the Internet in TL, item 9, of cognitive, was the most frequently used by Japanese majors. Items 9 and 10, also of cognitive, I read books and watch programs in the TL I major in for pleasure, were the only items showing significant differences ($p < .05$) between the means of the three major subjects. With respect to item 9, Japanese entertainment media are quite common and accessible in Taiwan and so are English media, which are more available than French or German media. Regarding item 10, Mandarin readers can understand a fair amount of written Japanese with no Japanese language training; and English and Japanese books and magazines are both much more available than French and German ones in Taiwan.

4.4 Results for Question 4: Are there significant differences by gender, academic major subject, fondness of TL, and previous experience in TL speaking countries among the strategy categories?

A four-way MANOVA was conducted. Six significant main effects and one interaction effect were detected, see Table 3 for the average mean and Table 4 for the significant differences effects by the variable of fondness of TL.

Fondness of TL	Memory	Cognitive	Compen-sation	Meta-cognitive	Affective	Social
Yes/Like	M=3.55	M=3.80	M=4.00	M=3.81	M=3.74	M=4.00
OK	M=3.32	M=3.46	M=3.75	M=3.55	M=3.39	M=3.68
No/Dislike	M=2.15	M=2.98	M=3.87	M=2.90	M=2.83	M=3.00

Table 3: Mean average by fondness of TL on the use of six strategy categories

Independent Variable	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig. P < .05
Fondness of TL	Memory	9.941	2	4.970	18.552	.000
	Cognitive	5.774	2	2.887	14.029	.000
	Compensation	1.954	2	.977	3.062	.048
	Metacognitive	8.387	2	4.193	14.469	.000
	Affective	8.274	2	4.137	9.317	.000
	Social	4.648	2	2.324	7.509	.001

Table 4: Significant differences by fondness of TL on the use of six strategy categories

Fondness of TL had significant effects on the participants' use of all six strategy categories. Post hoc tests revealed that, in every category with one exception, those who liked their TL reported significantly more use than those who said TL was OK. Both of these were higher use than those who disliked their TL. The exception occurred in compensation strategies, where the dislike TL group reported significantly more use than the TL OK group.

Similar to some studies (Lee & Oxford, 2008; Lou, 1998; Peng, 2001), gender alone did not affect the participants' strategy category use significantly in this study, There were some significant individual strategy item effects, described in section 3.5 below. One significant interaction effect ($p < .05$) was detected between gender and fondness of English on the use of metacognitive strategies. Major subject and previous experience in TL speaking countries were not found to have any significant main or interaction effects on strategy category use.

4.5   Question 5: Are there significant differences by gender, academic major subject, fondness of TL, and previous experience in TL speaking countries among the strategy items?

A MANOVA was conducted to answer this question. 28 out of 30 strategy items were affected by at least one variable or by interactions among the variables. Two strategy items in the compensation category showed no significant effects: item 17, using gestures to explain when I can't come up with a vocabulary word in a conversation; and item 19, using a similar word to explain when I can't think of the one intended of compensation. Lack of significant differences can be understood by the fact that, most students tended to employ these two strategies (or not employ them) in a similar way.

Significant gender differences occurred with 11 strategy items, see Appendix B. Of these items, 8 indicated more use by males and 3 more use by females. Significant major subject differences occurred for only two strategy items, 9 and 10, both in the cognitive category; see the discussion in section 3.3 above. Significant differences for fondness of TL occurred with 23 strategy items, five of memory, eight of cognitive, one of compensation, five of metacognitive, and two for each of affective and social. Significant differences in the previous experience in TL speaking countries variable occurred for just two strategy items, item 7 of cognitive, I try to speak like a native speaker of the foreign language I major in, and item 30 of social, I try to understand the culture of the country/area where the foreign language I major in. The advantages of visiting a TL speaking country may be trending lower as learners gain increasing access to authentic TL experiences via modern media and the internet.

Nineteen interactions among the independent variables were significant, see Table 4. Among these interactions between gender and fondness of TL affected five strategy items, three of cognitive and two of metacognitive. Three significant interactions occurred in both of (a) gender and major subject, and (b) fondness of TL and previous experiences in TL speaking countries.

Variables	Number Items with Main Effects (see Appendix B)	Variable Combinations	Number of Items with Interaction Effects
Fondness of TL	23	Gender * Fondness of TL	5
		Gender * Major	3
Gender	11	Fondness of TL * Previous Experience	3
		Gender * Major * Fondness of TL	2
Major	2	Major * Previous Experience	2
		Gender * Major * Previous Experience	2
Previous Experience in TL Country	2	Major * Fondness of TL	1
		Gender * Previous Experience	1
Total	38	Total	19

Table 5: Numbers of significant effects on strategy items

5   Conclusions and educational implications

This preliminary study profiles, for practical and research purposes, levels of use of foreign language learning strategies and categories of strategies at the research site. It also profiles similarities and differences in strategy use between and among subgroups of learners divided by major subject, fondness of target language, gender, and previous experience in a target language speaking country.

Fondness of TL was found to be the most influential variable in this study. The overall high levels of strategy use found in the sample may well be attributed to the high percentage of fondness of TL among the participants. Fondness of TL at the research site is generated by frequent well organized social activities and events at the three foreign language departments.

Similar to previous studies of LLSU, the participants in the current study relied a lot on compensation strategies to deal with the challenges they encountered with their TLs (see Mochizuki, 1999; Lan & Oxford, 2003; Chen, 2005; Chang, 2009, 2010a, 2010b), and memory strategy items were the least used by the participants (see Oxford, 1990; Lan & Oxford, 2003; Griffiths, 2003; Chen, 2005).

One encouraging finding was that participants used social strategies quite often, indicating active TL learning. TL learning (TLL) activities are much emphasized at the research site. The three departments are situated on successive floors of the same building. Routine TL activities include English, Japanese and European days and weeks, various TL cultural events and competitions, campus TL video and audio broadcastings, and graduation plays in TLs. All of these activities stimulate TLL in the research site and provide desirable social venues for the participants TLL.

Among the four variables, gender, major subject, fondness of English, and previous TL experience, fondness of TL was found to be the most influential on the participants' use of strategies. It had significant effects on both strategy category use and item use. The variable of gender also played a significant role on the main effects and interaction effects on the participants' use of strategy categories and items. However, while much emphasis on the importance of authentic TL input in the TL speaking countries in general, the variable of previous TL experience had only two main effects and two interaction effects on strategy items in current study. Such finding may result from the abundant authentic TL social events and easy access to authentic TL input and material through satellite programs, audio/video materials, printed materials, and the wireless and broadband internet access in the research site. Consequently, language learning facilities, to a certain degree, compensated the limited native TL speakers, one American, one British, one French, two Germans and two Japanese, presented in the research site. This is a positive finding to foreign language teaching and learning in general.

Limitations of the current study are twofold. First, this is a preliminary quantitative descriptive study. Qualitative in-depth information on foreign language learning at the site will follow as part of the continuing research program. Second, the findings from this study are case sensitive, but may be useful reference points for educators and researchers elsewhere.

Language learning strategies are teachable (Oxford, 1990). Language instructors are encouraged to raise learners' awareness of the strategies that they are currently using and also their awareness of additional strategies within their reach. Educators can be especially encouraged by this study to stimulate learners' fondness of their TL and so motivate greater use of learning strategies and ultimately sustain learning autonomy.

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Appendices

Appendix A

University Foreign Language Learners' SILL in Chinese (translation added) 外語學習策略研究問卷 (The Strategy Inventory for Language Learning, ESL/EFL Version 7.0)

第一部份: 基本資料 Basic Information
填答說明: 各位同學,請在合乎您實際情況的方格內打勾,謝謝!
1.性別 (Gender) :   □ 男 (M)   □ 女(F)
2.主修 (Major Subject):   □ 英美語文 (English)   □ 歐語(法 French/德German)
                          □日語 (Japanese)
3.我喜歡我主修的語言 (I like the foreign language I major in):
                          □ 對 (Y)   □ 還可以(OK)   □ 不對(N)
4.我曾去過我主修語言的國家 (I have been to the country where the foreign language I major in):
                          □ 對(Y)   □ 不對(N)

第二部份: 英語學習策略
選項說明: 5-表示您*完全同意*該敘述; 4-表示您*同意*該敘述; 3-表示您對該敘述*沒意見*;2-表示您*不同意*該敘述; 1-表示您*完全不同意*該敘述

學習策略	5	4	3	2	1
1.我會把新學的東西跟已學過的部分做聯想 I link the newly learned and the already learned.					
2.我會把新學的單字造成句子,以加深記憶 I make sentences with the newly learned words to help memorize (the newly learned).					
3.我會把單字的發音跟這個字的樣子或影像聯想,以加深記憶 I link the pronunciation of the newly learned with the word or imagine to help memorize (the newly learned).					
4.我用肢體語言幫我記憶單字 I use body movement to help memorize vocabulary.					
5.我時常複習功課 I often review what I've learned.					
6. 我會反覆練習說或寫生字 I repeatedly practice or write newly learn words.					
7.我試著像以我主修語言為母語的人一樣說該語言 I try to speak like a native speakers of the foreign language I major in.					
8.我會練習我主修語言的發音 I practice the pronunciation of the foreign language I major in.					
9.我看我主修語言發音的電視節目、電影或網頁/站 I watch TV programs, movies or websites in the foreign language I major in.					
10.我讀我主修語言的書報當作娛樂消遣 I read books in the foreign language I major in for pleasure.					
11.我以不同方式使用我主修語言所知道的單字 I practice in different ways with the vocabulary of the foreign language I major in.					
12.我試著用我主修的語言交談 I try to speak in the foreign language I major in.					
13.我看到單字時,會想一想中文裡有哪一個字有類似的意思Whenever I see a new word, I think of a similar word in Chinese.					
14.我不會逐字翻譯我主修語言的句子 I won't translate word for word.					
15.我試著找出我主修語言的句型 I try to find out the sentence structure of the foreign language I major in.					
16.遇到不熟悉的單字時,我會用猜的 I guess when encountered with words that I am not familiar with.					
17.在進行我主修語言對話時,如果突然有單字想不起來,我會用比手畫腳的方式來表達 When having trouble finding a word (of the foreign language I major in) I use body language to express.					
18.當不懂我主修的語言時會尋求協助 I look for help when I don't understand the foreign language I major in.					
19.當我想不出某個我主修語言單字時,我會利用其他意思類似的字句來表達 I					

use a similar word or sentence when can't think of a word of the foreign language I major in.					
20.我會訂定作息表使自己有足夠的時間研讀我主修的語言 I set a schedule to allow myself enough time to study the foreign language I major in.					
21.我會尋找可以和我講我主修語言的人I look for people to speak the foreign language I major in.					
22.當有人在說我主修的語言時,我會特別注意聽 I pay special attention to when someone speak the foreign language I major in.					
23.我會考量我自己主修語言的學習進展 I think about the learning progress of the foreign language I major in.					
24.我會留意自己主修語言的錯誤並改進 I pay attention to my mistakes of the foreign language I major in and try to improve.					
25.每當我害怕使用我主修的語言時,我會試著放鬆自己I try to relax when I feel afraid of using the foreign language I major in.					
26.即使害怕犯錯,我總是會鼓勵自己說我主修的語言I encourage myself to use the foreign language I major in even when I'm afraid of making mistakes when using it.					
27.每當我在自己主修語言上表現很好時,我會獎勵自己 I give myself a treat when I perform well with the foreign language I major in.					
28.當我用我主修語言會話時,有聽不懂的地方,我會請對方再說一次,或說慢一點 I ask for a repeat or ask the other to speak slowly when I don't understand while speaking the foreign language I major in.					
29.我會跟其他同學練習我主修的語言 I practice the foreign language I major in with classmates.					
30.我會試著去了解我主修語系國家或地區的文化I try to understand the culture of the country/area where the foreign language I major in.					

Appendix B

Independent variable means for each language learning strategy item

Q1 to Q30 designate the respective SILL Items in Appendix A; * indicates significant difference in means at p < .05.

Gender		Q1	Q2	Q3	Q4	Q5*	Q6	Q7*	Q8*	Q9*	Q10
M	Mean	3.87	3.41	3.78	3.08	3.06	3.39	3.88	4.02	4.01	3.42
F	Mean	3.95	3.32	3.81	3.05	3.12	3.49	3.64	3.93	3.94	3.39
Total	Mean	3.93	3.34	3.80	3.06	3.11	3.46	3.70	3.95	3.96	3.39
Gender		Q11	Q12*	Q13	Q14	Q15	Q16	Q17	Q18*	Q19	Q20
M	Mean	3.70	3.83	3.83	3.41	3.67	3.87	3.68	4.07	3.95	3.24
F	Mean	3.66	3.63	3.79	3.30	3.62	3.95	3.74	3.99	3.97	3.25
Total	Mean	3.67	3.69	3.80	3.33	3.64	3.93	3.72	4.01	3.97	3.25
Gender		Q21*	Q22*	Q23	Q24	Q25	Q26*	Q27	Q28*	Q29	Q30*
M	Mean	3.61	4.02	3.74	3.91	3.77	3.69	3.54	4.04	3.55	3.85
F	Mean	3.48	4.07	3.81	3.90	3.66	3.57	3.49	3.98	3.56	4.12
Total	Mean	3.52	4.06	3.79	3.91	3.69	3.60	3.51	4.00	3.56	4.04

Major		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9*	Q10*
English	Mean	4.02	3.44	3.84	3.08	3.10	3.45	3.75	3.99	3.96	3.43
Europe	Mean	3.75	3.29	3.78	2.97	3.06	3.35	3.52	3.84	3.55	2.99
Japanese	Mean	3.83	3.14	3.72	3.08	3.15	3.62	3.76	3.96	4.40	3.72
Total	Mean	3.93	3.34	3.80	3.06	3.11	3.46	3.70	3.95	3.96	3.39
Major		Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
English	Mean	3.71	3.73	3.85	3.44	3.65	4.00	3.77	4.06	4.05	3.36
Europe	Mean	3.55	3.52	3.65	3.17	3.55	3.77	3.55	3.88	3.81	3.13
Japanese	Mean	3.69	3.74	3.83	3.18	3.68	3.88	3.78	4.01	3.90	3.03
Total	Mean	3.67	3.69	3.80	3.33	3.64	3.93	3.72	4.01	3.97	3.25
Major		Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
English	Mean	3.54	4.04	3.81	3.91	3.73	3.70	3.58	4.06	3.49	3.99
Europe	Mean	3.42	3.99	3.71	3.78	3.53	3.38	3.49	3.78	3.64	3.99
Japanese	Mean	3.58	4.18	3.85	4.01	3.71	3.57	3.31	4.06	3.68	4.28
Total	Mean	3.52	4.06	3.79	3.91	3.69	3.60	3.51	4.00	3.56	4.04

Like TL		Q1*	Q2*	Q3*	Q4*	Q5*	Q6*	Q7	Q8*	Q9*	Q10*
Yes	Mean	4.07	3.48	3.89	3.12	3.18	3.58	3.86	4.18	4.13	3.56
OK	Mean	3.73	3.16	3.70	2.98	3.01	3.31	3.44	3.59	3.70	3.15
No	Mean	2.75	1.75	2.25	2.00	2.00	2.00	3.50	3.50	3.25	2.50
Total	Mean	3.93	3.34	3.80	3.06	3.11	3.46	3.70	3.95	3.96	3.39
Like TL		Q11*	Q12*	Q13*	Q14	Q15*	Q16*	Q17	Q18	Q19	Q20*
Yes	Mean	3.76	3.80	3.90	3.43	3.76	4.02	3.80	4.11	4.10	3.30
OK	Mean	3.54	3.51	3.69	3.16	3.46	3.78	3.58	3.86	3.76	3.21
No	Mean	3.00	3.25	2.00	3.75	3.00	3.75	4.25	3.75	3.75	1.50
Total	Mean	3.67	3.69	3.80	3.33	3.64	3.93	3.72	4.01	3.97	3.25
Like TL		Q21*	Q22*	Q23*	Q24*	Q25*	Q26*	Q27	Q28	Q29*	Q30*
Yes	Mean	3.59	4.22	3.91	4.04	3.80	3.83	3.58	4.09	3.71	4.19
Ok	Mean	3.41	3.80	3.63	3.70	3.53	3.26	3.39	3.86	3.33	3.84
No	Mean	3.25	3.50	3.00	3.25	3.00	2.50	3.00	3.50	2.75	2.75
Total	Mean	3.52	4.06	3.79	3.91	3.69	3.60	3.51	4.00	3.56	4.04

Been to TL Country		Q1	Q2	Q3	Q4	Q5	Q6	Q7*	Q8	Q9	Q10
Yes	Mean	4.18	3.51	3.97	3.17	3.14	3.63	4.05	4.22	4.35	3.72
No	Mean	3.87	3.31	3.77	3.03	3.10	3.42	3.63	3.89	3.87	3.32
Total	Mean	3.93	3.34	3.80	3.06	3.11	3.46	3.70	3.95	3.96	3.39
Been to TL Country		Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Yes	Mean	3.86	3.91	3.91	3.48	3.62	4.02	4.03	4.11	4.15	3.28
No	Mean	3.63	3.64	3.78	3.29	3.64	3.91	3.65	3.99	3.93	3.24
Total	Mean	3.67	3.69	3.80	3.33	3.64	3.93	3.72	4.01	3.97	3.25
Been to TL Country		Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30*
Yes	Mean	3.75	4.18	3.78	4.00	3.68	3.83	3.68	4.26	3.71	4.46
No	Mean	3.47	4.03	3.80	3.88	3.69	3.55	3.47	3.94	3.53	3.95
Total	Mean	3.52	4.06	3.79	3.91	3.69	3.60	3.51	4.00	3.56	4.04