

A Study of Adult Language Learning Strategies Used by Full-time and Part-time  
Graduate English Majors in China

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**Dedication**

For my husband Brian Meyer

## **Abstract**

The purpose of this study was to investigate language learning strategy use of full-time and part-time graduate English learners and its relationship with major factors affecting the learner's strategy use. As more and more people with different learning purposes become involved in all levels of foreign language learning in China, there is a need to study how they learn foreign language to better understand the learning process and, eventually, improve the effect and efficiency of foreign language learning. This quantitative research incorporated previous foreign language and second language research findings in language learning strategy.

The study followed a four-step process. The first phase involved a comprehensive literature review and comparative analysis of theoretical frameworks. This phase of research also helped to identify the key terms and concepts critical to the current study and formulate the research question and additional in-depth survey questions.

The second phase of the study used survey and open-ended questions to identify the full-time and part-time graduate learner's language learning strategy use and learner's feedback on the research construct. The third phase of the study was quantitative analysis. Through SPSS (Statistical Package for the Social Sciences) statistic software employment the collected data was processed with different statistic measurements for the corresponding research question.

The final phase is the analysis and discussion from which the main conclusions are drawn. They are: (1) part-time students reported more language learning strategy uses than full-time students. This finding has some relation to the learner's part-time academic status. (2) Both full-time and part-time students used more metacognitive strategies than other language learning strategies. The finding is congruent with the theory and research findings of adult learning characteristics. (3) The frequency orders of full-time and part-time students were almost identical. (4) In addition to the strongest relationship between marital status, academic status, metacognitive and social strategies, all of the other studied factors had statistically significant correlations with the general language learning strategies at different strength levels.

**Table of Contents**

Acknowledgements .....	i
Dedication.....	iii
Abstract.....	iv
Table of contents.....	vi
List of Tables.....	xi
Acronyms and Abbreviations.....	xii
Chapter 1 Introduction.....	1
The background of the Study .....	3
The Role and Effectiveness of the LLS.....	5
Improve Language Learning Achievement.....	5
Improve Learner’s Autonomy.....	5
The LLS Is Teachable.....	6
Expand Teacher’s Role.....	7
The Need of the Study.....	8
The Needs of Mainland English Learners.....	8
The Needs of Adult Learners.....	8
The Needs of Graduate Level Learners.....	9
The Needs of Part-Time Adult Graduate Learners.....	10
The Needs of Graduate Education.....	10
The Research Problem.....	11
The Purpose of the Study.....	12

	vii
The Research Questions.....	12
The Methodology.....	13
The Chinese Graduate Education System.....	14
The Full-Time Program.....	14
The Part-Time Program.....	15
The Difference between Full-Time Graduates and Part-Time Graduates.....	16
The Research Design and Measures.....	18
The Significance of the Study.....	18
The Qualifications of the Researcher.....	19
Overview.....	20
Definition of Terms.....	21
Summary.....	22
Chapter 2 Literature Review.....	23
The Brief View on the Development of LLS.....	23
The Establishment of LLS Studies.....	24
The Establishment of Major Theoretical Frameworks.....	26
The Establishment of Diverse Studies of LLS.....	29
Key Issues in Language Learning Strategy Studies.....	31
Learning Strategy Language Learning Strategy and Learner Strategy.....	31
The Definition of Language Learning Strategy.....	32
The Identification of LLS.....	36
The Classification of LLS.....	36

	viii
Features of LLS.....	47
Variables of Affecting the Choice of LLS.....	49
LLS Studies on Adult Chinese Learners of the Last Five Years.....	51
Theoretical Framework of This Research.....	52
Summary.....	53
Chapter 3 Research Method.....	55
Research Questions and Hypotheses.....	55
Research Design.....	57
Context for the Research.....	57
Context: population.....	57
Procedure.....	58
Participant Selection.....	59
The Research Instrument.....	62
Data Analysis.....	64
Ethics.....	65
Threats to the Internal Validity and Solutions.....	65
Confidentiality.....	66
Generalizability.....	66
Limitations to the Generalizability of the Findings and Solution.....	67
Summary.....	68
Chapter 4 The Findings.....	69
How to Understand Survey Strategy Items and Scores of the SILL.....	72

How to Understand Sums and Average Sums of the SILL.....	73
Findings for the Research Questions.....	76
Summary.....	89
Chapter 5 A Discussion of the Findings.....	90
The Analysis of Difference and Similarity of LLS Use of Two Groups.....	90
Overall Strategy Use of Both Groups Fell in the Medium Range.....	90
Part-Time Students Reported More LLS Uses than Full-Time Students.....	93
Both Part-Time and Full-Time Students Used Metacognitive Strategy More Often Than Other Strategies.....	96
The Similar Order of Strategy Frequency of the Two Groups.....	97
The Analysis of Factors Affecting the Choices of LLS.....	99
All the Given Factors Are Significantly Related to Overall LLS Use.....	99
The Correlation between Given Factors and Sub-category Strategies are Complex.....	100
Marital Status and Academic Status Displayed the Strong Relation with Social and Metacognitive Strategies.....	101
Comments on the Learning Strategies of SILL from Research Participants.....	102
Limitations of the Research.....	105
Summary.....	106
Chapter 6 Conclusion Implications and Recommendations for Practice and Future Research.....	107
Conclusion.....	107

	x
Recommendations for Teaching.....	109
Recommendations for Administration.....	109
Recommendations for Future Research.....	110
Reflections of the Researcher.....	111
Data Collection Process.....	111
Why Research on the Difference between Full-time and Part-time Students.....	112
The Lessons Learned.....	112
References.....	114
Appendix A.....	128
Appendix B.....	132
Appendix C.....	134

**List of Tables**

Table 1 Demographic of Part-time and Full-time Graduates.....	17
Table 2 Definitions of Language Learning Strategies.....	33
Table 3 Rubin’s Strategy Classification System.....	39
Table 4 O’Malley & Chamot’s Strategy Classification System.....	41
Table 5 Oxford’s Strategy Classification System.....	44
Table 6 The Population Description of Full-time Students.....	61
Table 7 The Population Description of Part-time Students.....	62
Table 8 Profile of Entire Participants.....	71
Table 9 Score Distributions of Each Sub-Category Strategy of SILL.....	73
Table 10 The Range Rubrics of Average Sum of the SILL.....	74
Table 11 Full-time and Part-time LLS Use Descriptions.....	76
Table 12 Independent Samples t-test of Mean LLS Average Total Score of Part-time and Full-time Groups.....	79
Table 13 Independent Samples t-test of Mean LLS Average Sub-score of Part-time and Full-time Groups.....	80
Table 14 Overall LLS Uses by Different Variables.....	83
Table 15 Sub-category LLS Uses by Different Variables.....	85
Table 16 Oder of Strategy Frequency of Part-time and Full-time Students.....	98

**Acronyms and Abbreviations**

LLS	Language Learning Strategy
FLT	Foreign Language Teaching
SPSS	Package for the social Sciences
EFL	English as a Foreign Language
ESL	English as a Second Language
SDL	Self-Directed Learning
SILL	Strategy Inventory for Language Learning

## Chapter 1

### Introduction

Just as businesses and media have experienced globalization and relocalization, so has the English language. The past few decades have seen a growth in the role of English around the world as the lingua franca for economic and scientific exchange. According to information gathered by Crystal (1997), 85% of international organizations in the world make official use of English, at least 85% of the world's film market is in English, and some 90% of published articles in some academic fields, such as linguistics, are written in English (Warschauer, 2000).

With the fast-paced changes brought about by globalization and technological development, a new stage of global capitalism, or informationalism, has come into being (Warschauer, 2000). People's lives are increasingly affected by international networks, operating via financial markets, transnational corporations, and the Internet. As this new stage of global capitalism expands and develops, non-native speakers will need to use the language daily for presentation of complex ideas, international collaboration and negotiation, and location and critical interpretation of rapidly changing information. Therefore Warschauer (2000) predicted "... globalization will result in the further spread of English as an international language and a shift of authority to nonnative speakers and dialects".

Since the opening of China to the West, particularly in light of China's entry into the WTO and the 2008 Olympic Games, the urge to learn English has become a fever in China (Wang & Farmer, 2008). On the social level the Chinese government strongly advocates the "knowledge society" in the process of social and economic transformation.

To have significant numbers of competent users of English in a whole range of professions, businesses, workplaces and enterprises have been seen by the authorities as a key element in China's opening wider to the outside world and the drive to modernization (Cortazzi & Jin, 1996). On a personal level "proficiency in English can lead to a host of economic, social and educational opportunities (Hu, 2005)". Young people are motivated to advance their English because it is a key to higher education at home and abroad, lucrative employment in a public or private sector, professional advancement and social prestige (Hu, 2005; Cortazzi & Jin, 1996). In 2013 the investigation on job candidates with overseas education revealed that HR was looking for the potential employees' foreign language and culture expertise (Xu). TOFEL<sup>1</sup> or IELTS<sup>2</sup> test, the top English proficiency test is not only a must for overseas education but also a passport to competitive jobs such as the pilot training program in the Southern China Airline prefers applicants scoring 6.0 and above in IELTS test (The Pilot Recruitment, 2012). To learn a foreign language, mostly English, is also compulsory in Chinese schools from elementary school to college.

Not long ago China pledged to deepen comprehensive reforms in the country as the Chinese economy has reached a stage where reforms must be urgently accelerated (Yang, 2003). The accelerated economic transformation will create more and higher job positions and thus impose pressure on the quantity and quality of adult English language education to prepare potential employees. In fact foreign language education problems were raised in the meeting of the first session of the 12<sup>th</sup> Chinese National People's

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<sup>1</sup> The Test of English as a Foreign Language

<sup>2</sup> International English Language Testing System

Congress (CNPC). English proficiency will be a basic job requirement and it is true in many sectors. Job candidate's advanced English expertise is his or her competitive advantage in the job market. There is and will be an impressive commitment to English learning, especially advanced English learning. Recently we see more online commercials like this "Do you want to earn 8,000 yuan? Take this English test first". Language training centers even assert that students who do well in TOEFL and GRE are assured of continued employment and high salaries (Wang & Farmer, 2008). In 1996 Cortazzi and Jin had announced that there were more teachers and learners of English as a foreign language in China than in any other country.

Subsequently Chinese teachers have become mindful of innovative approaches in teaching, especially among adult advanced English learners, to meet the needs of the job market and also with social communication (Wang & Farmer, 2008). To inform teachers how learners learn English becomes one of the focuses in the research of foreign language teaching (FLT). Learner's language learning strategy (LLS) starts to engage more and more attention from teachers and researchers, partly owing to the unique characteristics of the human being's learning process.

### **The Background of the Study**

Language learning, involving many interrelated factors, is a complex process during which learning strategies serve an important assisting role. A good example although anecdotal is the mnemonic learning strategy which has been used to help ancient storytellers remember lines (Alhaisoni, 2012). However not until the late 1970's did the study of learning strategy begin to capture the attention of language educators

and researchers (Taylor, 1975). Since then the investigation of language learning strategy has experienced both ups and downs (Chamot, 2005). The decade of the 1970s was an exceedingly fruitful era, during which second language research came into its own. Many language theories and creative teaching methods were developed; the significance of cognitive and effective factors in foreign language (FL) and second language (L2) learning started to become recognized (Brown, 2007). Among all, the shift of teaching focus from teacher and content to learner was so significant that it became the driving force of the LLS research which made its debut in the late 1970s. During the following decades, the research on LLS has been sporadic. The peak between the 1980s and early 1990s brought substantial research, followed by a winding down period with limited research reports published and then came the reinvigorated research interest in the 21st century (Chamot, 2005).

Inspired by the individual differences in language learning the investigation of LLS started with good language learners in anticipation of discovering effective learning strategies which would help the less effective learners (Rubin, 1975; Naiman, et al. 1975; Stern, 1975; Taylor, 1975). With researchers gaining better understanding of the characteristics, nature and functions of the learner's LLS, the empirical belief was confirmed that LLS does play a vital role in assisting learners mastering the forms and functions required for reception and production in the second language and thus affect achievement (Bialystok, 1979).

## **The Role and Effectiveness of the LLS**

Students differ as language learners in part because of the difference in ability, motivation, or effort. But a major difference lies in their knowledge about the skill in using how-to-learn techniques, that is, learning strategies (Motivating Learners, 2003-2007). This observation was supported by the classroom research revealing the importance of learning strategies in effective language learning. Oxford (1986) recapitulated major roles of LLS played in language learning as follows.

### **Improve Language Learning Achievement**

Many studies on successful language learners support that choosing appropriate LLS to the task, material, and learners' objective, need and proficiency level leads to outstanding performance. Two learning behaviors are especially critical to the success of language learning. First, learners need to make conscious and tailored use of LLS (Rubin, 1975; Naiman, et al. 1975; Stern, 1975; Wenden, 1985; Bialystok, 1979; Oxford et al., 1993; O'Malley & Chamot, 1990). Second, they should make an effective use of metacognitive strategies because research on advanced learners has shown that learners can profit from learning how to use metacognitive strategies to plan, monitor and evaluate themselves throughout their learning efforts (Chamot, 2004; Oxford, 1994; Oxford, et al., 1990; Oxford 1986).

### **Improve Learner's Autonomy**

Since learning a language creates a higher demand on self-direction (Oxford & Nyikos, 1989), almost all language teachers agree that one of the ultimate goals of education is to produce autonomous learners so they will not only become more efficient

at learning and using their L2/FL but also more capable of self-directing their endeavors (Wenden, 1987; Oxford, et al., 1990). Exploiting appropriate LLS enables learners to take responsibility for their learning and thus enhancing their independence, autonomy and self-direction. These factors are critical because learners need to keep on learning even when they are no longer in the formal classroom setting (Oxford, 1986; Oxford & Nyikos, 1989; Wenden 1985; Naiman, Frohlich & Todesco, 1975). According to the constructive theory, independent and autonomous learners are more active in learning. They tend to actively assimilate new information into their own mental structure and thus create increasingly rich and complex structures for the advancement of language proficiency (Bates, 1972; Bransford, Barclay & Franks, 1972). Eventually they will develop the capacity of carrying out autonomous learning. However Oxford (1990a) also cautioned that due to the “spoon-fed” tradition and test-oriented teaching, developing self-directed learning is a change of attitude and a gradually increasing phenomenon, as learners gaining greater confidence, involvement and proficiency.

### **The LLS Is Teachable**

Although the effect of LLS interventions is not consistent, many classroom research studies still prove, to a certain extent, that teachers can train students to use better learning strategies (O’Malley, et. al., 1985; Thompson & Rubin, 1993). Because of the positive role of the consciousness of LLS use and metacognitive strategy use many researchers advocate introducing LLS explicitly in a formal educational setting to improve the learning effectiveness (O’Malley & Chamot, 1990; Oxford, 1990b; Dansereau, 1978; O’Malley, et. al., 1985; Xiao, 2006). The training for academic

purpose in vocabulary, listening and speaking were shown to be especially effective in boosting initial learning (O'Malley, 1987; O'Malley, et. al. 1985). Many researchers agree with Chamot's claim "less successful language learners can be taught new strategies, thus helping them become better language learners" (2005, p. 112).

### **Expand Teacher's Role**

In addition to informing teachers how learners learn, the effective use of LLS will eventually shift the learning responsibility to learners but it doesn't mean to lessen the teacher's importance in bestowing knowledge. Instead, besides traditional teaching tasks, imparting knowledge, providing language input and creating language output opportunities, teachers should also help learners to identify their LLS, assess their LLS use, raise their awareness of LLS use, provide guidance for choosing appropriate LLS, tailoring LLS for their use in learning, and integrate LLS training with regular classroom teaching (Oxford, 1990a; 1990b). The teacher's focus has been expanded beyond teaching contents and methods.

Yet research shows that learners and their LLS are subject to the influence of many factors such as age, nationality, learning environment, proficiency level, learning goals, academic majors and so on (Oxford & Crookall 1989; Oxford & Nyikos, 1989; Oxford, Nyikos & Ehrman, 1988). This study is to investigate the LLS used by adult English language majors at the graduate level in a Chinese university. The unique social and educational environment will be illustrated in the following discussion of the needs and significances of the research.

## **The Need of the Study**

### **The Needs of Mainland English Learners**

From Oxford's (1996) summary of LLS research all over the world it is apparent that there have not been many investigations done on Chinese learners. Among the published research on Chinese learners, many of them have been done in Taiwan, Hong Kong, Singapore or even western countries. The findings may not be very helpful to mainland Chinese learners because of its unique language learning environment. First, historically, there was less western influence in mainland China, in fact almost none during the Cold War. Mainland people don't value foreign language as important as people in Hong Kong, Taiwan and Singapore although learning English is getting more attention since China's entry into the World Trade Organization. Second, in the society there is less opportunity exposing people to foreign language input, let alone output. Foreign language learning is primarily for taking examinations. The learning purpose for real communication is not as strong as in the above social environments. Third, at school English is taught more as knowledge than skill. Student's English proficiency is evaluated by comprehension ability rather than by all-around language ability. However, according to research the above situations affect learner's attitude and goals which are decisive to their choice of the LLS (Oxford, 1996).

### **The Needs of Adult Learners**

LLS research shows that adults learn a foreign language or a second language differently from children. Adults seemed to use somewhat more sophisticated LLS than did younger learners (Ehrman & Oxford, 1989; Oxford, 1986; Stern, 1983; Ellis, 1994).

Adult learning theory (Knowles, 1968; Lieb, 1991; Brookfield, 1995) supports the above findings and proclaims some unique features in adult learning such as adults are innately self-directed learners. They have also accumulated a foundation of life experiences and knowledge that may include work-related activities, family responsibilities, and previous education. They need to connect learning to this knowledge and experience base.

Therefore adult learning is goal-oriented, relevancy-oriented and practical. Their LLS should be examined separately from children's.

However the distinction between children and adult Chinese learners has not received sufficient attention. Some research clustered secondary school students, college students and returning-to-school adult learners. This investigation not only focuses on adults but also studies the part-time and full-time students. The findings will present a detailed picture of how adults learn English at the advanced level.

### **The Needs of Graduate Level Learners**

Proficiency level is a well-studied factor influencing the choices of LLS but in China most studies centered on primary or intermediate level learners, with little on advanced language learners (Yan, 2009). However graduate Chinese student's enrollment has increased substantially since the 1998's higher education expansion. Taking the TESOL graduate program in my research university for an example, the graduate population has increased from two students each year in 1996 to 18 students in each of the most recent 5 years. Other universities and majors have experienced a similar or greater expansion. In proportion to graduate student's population the advisor's population has increased only twice in the above TESOL program. Evidently teacher's

attention on learners has reduced and already affected the quality of the program. The situation calls for research to improve the quality of graduate programs.

### **The Needs of Part-Time Adult Graduate Learners**

The need of “a knowledge society” and boosting the Chinese economy creates a demand for advanced education. More adults are going back to school in pursuit of career advancement or personal interest (Liu, 2010). This group of part-time learners cannot be taught like traditional students. They have busy personal and work schedules. They are very goal oriented. Most importantly they want to take control of their learning, through active involvement in teaching content, method and goals. As a result a teaching approach, andragogy, was introduced in 1975 by Malcolm Knowles asserting that the instructor should partner with adult learners, building on students’ prior experience and promoting student self-direction. Unfortunately Chinese universities have not done much to adjust the teaching to meet these students’ needs. Therefore the quality of the education is not appreciated by society. The drop-out number for this group is much higher than for traditional students. Recently some schools have begun to experience difficulty in recruitment. Academically few research interests are directed toward adult part-time graduates. The published studies are few in China. To improve the program there is a practical, urgent need to understand this group of learners.

### **The Needs of Graduate Education**

The 1998’s higher education expansion has brought more college graduates to the job market and thus created intense competition in the job market. To enhance their competitive ability many undergraduates choose to go to graduate school right after

graduation. Consequently the increase of graduate employees at the workplace creates pressure on former non-graduate employees. In 2009 the graduate applicants began to increase. 87% of part-time applicants said it has something to do with their job security or promotion because they had felt pressure from their graduate peers (Ye, 2011).

### **The Research Problem**

Since the 1998's higher education reform sanctioning the program expansion in Chinese universities, the traditional full-time graduate education has experienced undue upsurge both in student population and discipline taxonomy. The number of graduates in 2004 has tripled since 1999 and has kept increasing each year since (Cheng & Jin, 2006). Still due to the limited national educational resources and enormous applicant population, the program growth could not meet their demand. Since then with the authority of the Ministry of Education (MoE) universities started to build the part-time graduate programs which are much easier to get into but charge more. Unlike full-time graduates who get funding from the government, part-time students have to pay the full amount of tuition but don't need to meet the rigid program entrance requirements. A more detailed introduction of both programs will be included in the following methodology.

However, in the process of graduate program expansion problems have arisen. The drop-out rate of the part-time students is much higher than that of students within the full-time programs. The quality of both graduate programs is compromised as He (2010) states that since the expansion of the graduate program over a decade ago the quality of graduate education has suffered. That corresponds with Cheng and Jin's (2006) investigation that 57.8% of advisors think the quality of graduate education has

deteriorated (Xu, 2005). The university I have investigated has suffered the quality deterioration in the full-time program and has experienced difficulty recruiting part-time students.

### **The Purpose of the Study**

The purpose of this study is to better understand how both full-time and part-time graduate English majors learn English through the investigation of their language learning strategy uses in both full-time and part-time master's programs respectively and examine if there are significant differences between the LLS uses. The studies on graduate level students are few, and studies on part-time graduates are even fewer. Studies on factors affecting the LLS are even fewer in China (Yan, 2009). The current study also examines the relationship between the LLS use and major factors affecting the LLS use. The findings from this study will contribute to the body of knowledge about adult English learning at the advanced level and inform both part-time and full-time graduate English programs in the Chinese education environment.

### **The Research Questions**

This study used quantitative methods to investigate the use of language learning strategy by full-time and part time graduate English majors in a Chinese university. What are the differences between their language learning strategy uses? The major possible factors affecting the choice of language learning strategies are also studied given the different demographics of the full-time and part-time graduates. The study addresses the following questions

1. What are the frequency and scope of LLS used by the two groups respectively?

2. Is there significant difference in the extent of LLS use between the two groups (different academic status)?
3. Does the reported use of LLS significantly relate to the major factors: academic status (full-time vs. part-time), gender, age, previous work experience, current working hours, major, and marital status (family responsibility)?

### **The Methodology**

Due to the complexity of the human language learning process, the development of language learning strategy study has drawn upon a wide range of research from cognitive psychology, linguistic theory, learning theory, information processing theory and sociocultural theory. The qualitative research was a popular methodology used to discover the LLS used by certain group of learners at the beginning (Stern, 1992; Wenden & Rubin, 1987; Gamage, 2003a). Quantitative research methods were adopted widely for further understanding of the nature and the function of LLS after the taxonomy systems appeared especially after Oxford had built her quantitative research instrument, Strategy Inventory for Language Learning (SILL) designed to investigate the strategies used in language learning (Oxford, 1994; Cohen, 1996a).

In this study I used the SILL to conduct a quantitative investigation on the LLS use among full-time and part-time graduates respectively at Tianjin Foreign Studies University (TJFSU) in China. One hundred fifty six full-time graduates took the survey and 102 survey answers are effective. Forty eight part-time graduates were willing to participate and their responses are all effective except three.

Package for the Social Sciences (SPSS) statistic software was employed in

analyzing the data. This research is in the quantitative tradition, but uses different statistic designs for each question. A descriptive design was used for the first research questions, measuring central tendency (the mean, median and mode) and variability (standard deviation and range). For the second question, the independent T-test was employed to evaluate the difference in LLS use between the two groups. To test the third question a correlation measurement was used to evaluate the relationship between strategy use and pertinent factors. The findings show the most frequently used LLS, the range of LLS and the extent factors affecting the choice of the LLS use. The research results provide insights into teaching methods, contents, program design and administration of the graduate education.

## **The Chinese Graduate Education System**

### **The Full-Time Program**

Graduate education in China is controlled by the Ministry of Education (MoE), composed of both full-time and part-time programs at the master's level. The traditional full-time graduate program is strictly regulated and heavily subsidized by the government. The length of study for a Master's degree program is normally 2 to 3 years. Applicants for Master's Degrees must be undergraduate graduates. They need to choose their desired academic program and the school before taking the entrance examinations, which include the preliminary examinations and re-examinations. The preliminary exams are administrated by the MoE throughout the country once a year, including the compulsory exam subjects, politics and English. For non-humanities programs mathematics will be added. On top of compulsory exams, which are set by the MoE, one

or two major subjects are also tested. These subject tests are designed by institutions providing relevant master's programs. Applicants having passed the preliminary examinations are invited to take re-examinations, set by each institution. This examination can be in different formats, such as written exam and interview. *Things you need to know about graduate education in China* (2011). The candidates having passed both tests will be admitted as full-time graduates enjoying tuition and living expense subsidy, similar to the scholarship in the western educational system. However the competition is quite intense. Not many applicants can get into the program even though many universities have already increased the capacity of their graduate programs.

### **The Part-Time Graduate Program**

Considering the limited educational resources, many Chinese universities are authorized to build part-time graduate programs to meet the increasing demand. The applicants still have to take tests but these are less rigorous and given by each university. It is much easier to get into the program. However unlike the full-time graduates, part-time applicants have to pass a couple of challenging tests required by the MoE for graduation. They also have to pay full-tuition. Like the full-time graduates they are supposed to follow a planned curriculum as a cohort to complete the program courses in a couple of years.

Both full-time and part-time programs are content-based, even if universities adapt class schedules to part-time students by offering classes on weekends. Considering the limited resources and the financial pressure, many universities employ the curriculum, teaching materials and methodologies designed for the traditional full-time program to

the part-time program. The part-time program is mainly for generating revenue.

### **Difference between Full-Time Graduates and Part-Time Graduates**

To understand the two student groups better it is necessary to give a more detailed explanation about the rigorous preliminary entrance examinations for the full-time students. The compulsory subjects of the examination, Politics and English, are required courses in Chinese undergraduate programs. Most of full-time graduates come directly from the four-year undergraduate program in which English and Politics have been taught throughout the program. They have fresh knowledge and information relating to the two subjects. In addition almost all of Chinese undergraduates are supported by their parents and thus have more time to prepare for the tests than the adults holding a full-time job. Furthermore undergraduate programs encourage their students to go to graduate programs and try to offer assistance to help them prepare for the tests. But going-back-to-school adults don't have those advantages. The examinations seem harder for those holding a full-time job position because the preparation for Politics and English tests are time consuming and they don't usually receive as much assistance as undergraduate students do. They have a better chance to get enrolled into the part-time program because each individual university tests include only a couple of major subjects and are less rigorous. In this case the part-time cohort tends to share a certain demographic characteristics different from the full-time counterpart. The following table is a brief demographic illustration of the two groups.

Table1. Demographics of Part-time and Full-time Graduates

Progr am	Age	Marital Status	English Proficiency	Study Time	Work experience	Class Time	Class Content	Goal
Part- time	older	Could be married	Low or high	limited	Full-time work mostly	Evening or weekend	Similar	Promo tion, chg. job
Full- time	younger	Most not married	High (uniformed proficiency)	adequate	None or part-time	Regular school hour(8-5)	Similar	Find a job

Source: original

The table reveals the groups' demographic differences. The course time for full-time students is during the week between 8 a.m. – 5 p.m. The courses for part-time graduates are offered mostly on the weekend. Full-time students with a part-time job have to adjust their work schedule but for part-time students schools usually adjust class schedules according to their work and life agenda. The part-time students are generally older, some of them married, bearing family responsibility. They have more work experiences. Their English proficiency varies, from as good as or even higher than, to much lower than the average full-time students', however they tend to be mostly lower than the others'. As full-time employees, their learning goal is more of professional advancement, getting a better-paid, secured position rather than finding a job. The busy work schedule leaves them available for school only on weekends. The richer life and work experience and more family and economic responsibility set a great difference from the full-time graduate students. These differences will eventually lead to different learning needs and approaches. According to researchers (Oxford & Crookall, 1989;

Oxford, & Nyikos, 1989) those differences are the factors affecting learner's LLS use in second language or foreign language learning and has led to different ways of learning.

### **The Research Design and Measures**

The research is in the quantitative tradition, but uses different designs for each question. A descriptive design was used for the first research questions, using mean, standard deviation and frequency for measures. For the second question, a T-test was needed to identify any significant difference between the LLS used by the two groups. The correlation test was applied to discern the relation between the factors and LLS use to answer the last question. SPSS has been used for data processing and analysis.

### **The Significance of the Study**

In China many people still believe it is good to get their education done before 30 years old or before getting married. That's why in the full-time graduate program students are mostly in their early twenties. However this attitude is changing in the transformation to the knowledge economy. Under the impact of globalization more people will go back to school for further education. This study intends to shed light on how to help this group of learners and eventually to promote life-long learning in the Chinese society.

This study also seeks to contribute to the body of literature on adult English learning through the investigation on mainland Chinese graduates both full-time and part-time. Its major contribution is to understand if there is a significant difference between traditional graduates and part-time graduates in the Chinese educational system and what factors contribute to the difference. The findings will inform the research in

andragogy.

### **The Qualifications of the Researcher**

This paper is built on my previous literature studies of the development of LLS theory while completing my doctoral coursework. It has been presented at the OLPD of University of Minnesota student Research Conference as *Theoretical Perspectives on Adult Language Learning Strategy* in 2010. The data collection part was done in the end of 2012 and the spring of 2013 at Tianjin Foreign Studies University in China. As I have been teaching English language to English majors at that university since 1998 and am very familiar with the management personnel and teaching practice it is easy to collect data and understand it.

The motivation of the study comes from my observation of the difference in learning effectiveness among the homogenous cohort students. All the students are recruited through the national college entrance examination (Gaokao) and have taken the same course together as a cohort for four years. In the end, the difference of their English proficiency is deep. What has puzzled me most is that I have witnessed that some students work very hard but the result is not satisfactory, or even not as good as the ones who do not work much at all. Besides as an English learner who has studied both in China and American I have a deep feeling about how my learning strategies have varied at different stages and in different environments. I have also done a qualitative study on non-cognitive awareness on LLS for my master degree at St. Cloud State in 2004. The study has provided an in-depth understanding about how the strategies such as planning, organizing, evaluating, self-encouraging work differently for adult learners. It helps me

realize the difference between adult and younger learners. The deep inspiration is my experience as a doctoral student in the US. I have seen many adult graduate students pursuing their advanced education while working in flexible graduate programs. I am one of them and fully aware that my learning strategies are quite different from the ones I used to employ as a full-time graduate student.

### **Overview**

In the following chapter, a review of the literature will include a brief chronological view on the development of LLS research. The theoretical formation of LLS theory will be presented in three stages. Major research findings pertaining to the LLS, key concepts and leading researchers with their contributions will be introduced. Then basic concepts and difficult issues relating to LLS studied will be illustrated.

In Chapter Three a detailed introduction will be presented on the research methodology. It will explain the process of data collection including how the subjects were approached, where they took the survey, why using this research instrument, problems in collecting data and ethical threats and how to avoid them.

Chapter Four covers the findings from the SPSS analysis, answering the three research questions. The statistic effectiveness and method were discussed to address the problem in the data because there are not 30 participants in part-time program.

Chapter Five analyzes the findings of the study. The themes emerging from the study are discussed with previous study results to either prove or question the existing claims.

The conclusion part is at the end of this study. I will stress the salient findings of

this study for the teaching practice and theory establishment of the LLS study. I will also address the limitation of the study, the problems in carrying out the survey study among mainland students and further research endeavors.

### **Definition of Terms**

To ensure a shared understanding about the terms in this study I will provide the meaning of those terms used frequently in LLS research. Since there are more than one definition for some of the terms the following definitions were chosen according to my research context.

**Language Learning Strategy (LLS).** The definitions of LLS vary with an author's understanding of LLS and his focus of the learning process. Among all the definitions Oxford's was considered more inclusive and well-quoted. She considered LLS as learning strategies with specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (1990a). I choose Oxford's mostly because it suits my study participants, adult learners who are more willing to take control of their study through LLS use. She has made a few modifications to the definitions during the years. I will provide a detailed discussion in the next chapter.

**English as a Foreign Language (EFL).** EFL is usually learned in environments where the language of the community and the school is not English (Gunderson, 2009).

**English as a second language (ESL).** ESL is based on the premise that English is the language of the community and the school and that students have access to English models (Gunderson, 2009).

**Self-Directed Learning (SDL).** SDL describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.” (Knowles, 1972).

### **Summary**

This chapter has presented the background of the study and then explained the needs, purpose and significance of the research. The research problem and three specific research questions preceding the methodology were introduced. To ensure a better understanding of Chinese part-time and full-time graduates’ situation, the methodology section includes the introduction to the Chinese graduate education system in addition to the research design and measurement. The overview offers an outline of the content of this dissertation. Following it the terms were briefly illustrated to guarantee shared understanding of key concepts in the paper.

## **Chapter 2**

### **Literature Review**

Because language learning strategy research is still at its infancy some fundamental concepts need further clarification. In this chapter, first, to depict a holistic view of the LLS field I will briefly illustrate the three historical stages in the development of LLS study and then discuss the critical issues pertaining to LLS research in respect to the construction of the theoretical base of this investigation. Finally, I will briefly introduce the LLS studies on adult Chinese language learners of the last five years and bring forth a theoretical framework for this research.

#### **The Brief View on the Development of LLS**

Focusing on different aspects of the area, the language learning strategy research is chronologically divided into three stages, namely 1970's, 1980's and 1990's (Nambiar, 2009). In the first decade most research contributed to the discovery of the strategies, especially effective learner's strategies (Robin, 1975; Stern, 1975; Taylor, 1975 & Naiman et al., 1975). In the second decade research mainly centered on the identification of all learners LLS, the classification of learning strategies and the study of variables affecting LLS use. (Oxford & Crookall, 1989; Ehrman & Oxford, 1988; Oxford & Nyikos 1989; O'Malley et al., 1985; Wenden & Rubin 1987). During the last decade the study interest became diverse and wider. Varieties of research interests and data analyzing methods arose. In addition to continuous efforts on the previous focuses researchers started to incorporate research findings from other fields into LLS study. For example, Nyikos and Oxford (1993) conducted their LLS study using information

processing theory and a social psychology paradigm. In this period there were also studies reported on the effect of strategy training of second or foreign language learning (Cohen et al. 1995; Cohen, 1996b; Cook, 1991; Oxford, 1990b, Larson-Freeman, 1991; Nunan, 1996, 1997). In the following explanation I will illustrate each stage's distinguished contributions to the establishment of LLS study.

### **The Establishment of LLS Studies**

The study of language learning strategy was initiated by Rubin (1975), Stern (1975) and Taylor (1975). The research was concentrated on identifying the strategies of successful language learners so that these could be made available to less successful learners. Almost all of the research subjects were adult learners (Nambiar, 2009). A series of learning strategies used by good language learners has been uncovered. A well-quoted initial research was done by Rubin in 1975. She published a groundbreaking paper identify the following strategies used by good language learners:

- Willing and accurate guesser, comfortable with uncertainty.
- Making an effort to communicate and to learn through communication
- Finding strategies for overcoming inhibitions in target language interaction
- Practicing the language whenever possible
- Monitoring their speech and that of others
- Attending to patterns in the language (i.e., grammar); constantly analyzing, categorizing, synthesizing.
- Paying attention to meaning

Other findings did not vary significantly from the above, only with some new

strategies added to it such as Naiman et al. (1978) which identified the most frequently used strategies by good language learners using a wide range of resources from native speakers, listening to radio, T.V., records, movies, commercials, etc., reading anything: magazines, newspapers, professional articles, comics, etc., making up bilingual vocabulary charts and memorizing them, and having for language pen-pals. Stern's (1975) study also listed some additional learner strategies which enhanced our insights into the cognitive process.

The important thing to realize about this list is that good language learners do not necessarily use the same language strategies. Even if they use the same strategies, they may not use them for the same purposes or in the same way. One learner focuses on form only while reading and writing; another does so while listening and speaking. While the first learner focuses on form in a global way, the second learner is far more analytical and pays attention to minute details associated with the forms and rules. Not a single set of strategies will be appropriate for all learners or for all tasks. Students need to learn how to apply strategies according to what actually works for them. *Section II: Language learning strategy (2010)*. So Rubin (1975) cautioned that considerable variations between learners needed to be taken into account. The conditions and effectiveness of the strategy use was a part of the study of LLS in the following decade.

Although the above list offers some valuable insights into the cognitive process that seems to be going on in good language learners (Rubin, 1975) the studies in the 1970's were focused mostly on the learner's behavior but not their cognitive process. The studies were not theoretically grounded. At that time the research in cognitive

psychology, the most related field was at its experimental stage. Its impact on LLS study was slight. In addition, the effectiveness of the strategy lists was questioned later by Politzer and McGroarty (1985). They challenged the universal validity of good strategies and suggested that behaviors may be culturally specific and thus recommended caution in defining a behavior as absolutely helpful. The research of this period mainly contributed to understanding how strategies enhance and support language learning. Most of the studies highlighted the importance of language learning strategies in language learning.

### **The Establishment of Major Theoretical Frameworks**

In this decade the influence of cognitive psychology became stronger in the language learning strategy study. McLaughlin (1978) proposed that learning strategy could be placed within an information-processing model. Students can obtain the knowledge of a language by thinking through the rules until they become automatic. The following two cognitive paradigms strongly influenced the LLS development. The two-stage framework of short-term and long-term memory (Shuell 1986; Weinstein & Mayer 1986) and the four encoding mental processes, namely selection, acquisition, construction and integration (Weinstein & Mayer 1986).

The first one is the two-stage framework of short-term and long-term memory. Due to the influence of information processing theory the framework suggested that information stored in the memory separately: short-term memory which is active working memory holding modest amounts of information for only a brief time; long-term memory which is interconnected networks holding the sustained storage of

information (Shuell 1986; Weinstein & Mayer 1986; O'Malley & Chamot, 1990).

Weinstein and Mayer (1986) also believed the positive role of information processing theory in helping understanding LLS and hence suggested a four stage encoding process framework involving selection, acquisition, construction, and integration. The cognitive studies assisted researchers to identify the roles of cognition in language learning. But the study efforts varied considerably in their attention to cognitive and behavior learning process (O'Malley & Chamot, 1990). For example, Rubin (1987) focused on the learning process and classified LLS into direct and indirect strategies affecting learning. Bialystok heeded the cognitive process and identified the LLS into: "inferencing, monitoring, formal practicing and functional practicing according to the role of cognition in second language acquisition" (O'Malley & Chamot, 1990, p. 10). O'Malley and Chamot (1990) focusing on both cognitive and metacognitive functions and environment influence built their work within the framework of Anderson's cognitive theory (1983) and classified the LLS into cognitive, metacognitive and affective/social strategies. Captivating the merits of the previous research, Oxford (1990a) enclosed both linguistic and none linguistic factors; cognitive and learning process and classified the LLS into direct and indirect categories with six subcategories: memory, cognitive, compensation, metacognitive, affective and social.

Researchers continue to conduct exploratory studies to investigate learner's LLS but expanding to all kinds of language learners. They also started to investigate the factors affecting LLS and the relationships between these factors and LLS use. Research interests were widened and raised to the apex in this period.

Brown and Palinscar's (1982) psychological classification of general learning strategies as metacognitive and cognitive was borrowed by second language researchers. The work of Wenden (1982, 1986) added an important dimension to the understanding of LLS. She raised the attention to the importance of metacognitive knowledge in second language learning and identified five areas of metacognitive knowledge functioning in language learning. Chamot and O'Malley (1987) made a further endeavor providing the first clear contrast between cognitive and metacognitive strategies. According to them metacognitive strategies included the regulatory processes by which learners plan, monitor and evaluate their learning. Their paramount contribution was the classification of LLS into cognitive, metacognitive and social/affective strategies. Another contribution of theirs was to take consideration of social or affective influence in language learning. Most importantly, they based the LLS study on the cognitive theoretical framework.

To further consolidate the theoretical foundation many researchers began to tackle some detailed issues such as clearly identify the definition of language learning strategy, study its nature and features, create classification systems and develop identification methods.

Over a dozen definitions and classification systems were published, among which Oxford's (1990a) classification system has been well-quoted. She also presented a system of LLS grouping strategies into two categories – direct and indirect strategies. This comprehensive classification system led to the foundation for the Strategy Inventory for Language Learning (SILL). The inventory has significantly promoted the quantitative studies of LLS and has been employed by researchers all over the world. It is estimated

that the SILL has been involved with more than 10,000 language learners, and has been translated into more than 20 languages (Oxford, 2001). SILL has resulted in the growth of studies on the investigation of LLS use all over the world (Oxford, 1996).

This is a very important decade for LLS. Many detailed theoretical issues were discussed. For example, the classification and identification of LLS were well-studied. Varieties of LLS definitions and classification methods were established. Although the research still focused on identifying learning strategies, the newly established classification systems help identify and classify LLS into categories rather than just a simple list as was done in the last decades. Moreover some of the work done in learning strategy has a theoretical base in cognitive theory such as O'Malley's (1985), Wenden's (1983) and Bialystok's (1981).

At the same time there were also some issues arising. "there has been no consensus on the definition and classification of strategies and there continued to be persistent confusion over its nature, the distinction between learning strategies and other types of strategies applied more to language use, such as communication and production strategies" (O'Malley & Chamot, 1990, p114). Chamot lamented "Studies of second language learners have classified learning strategies in various ways, ... make it difficult in many cases to compare strategies reported in one study with those reported in another" (1987, p.71). The process of establishing a theoretical foundation at this point was far from complete.

### **The Establishment of Diverse Studies of LLS**

In the 1990s, the third period, because some LLS theoretical concepts had been

formulated such as the characteristics of good language learners, the relation of language learning strategy and successful language learning, identification and classification of LLS, the research was expanded to include more factors affecting LLS use. In addition to the continuous investigation of LLS on all types of learners some researchers began a new effort. They started the investigation on a specific learning task such as reading or speaking. Many focused their interests on variables affecting the choice of LLS among various groups of learners. Consequently, more variables have been discovered. So far research has discovered a series of factors affecting the choice of LLS: language being learned, duration; degree of awareness; age, gender, affective variables such as attitudes, motivation level/intensity, language learning goals, motivational orientation, personality characteristics, and general personality type, learning style, aptitude, career orientation, national origin, language teaching method and task requirements (Oxford & Crookall, 1989). The study of affective variables has not yet reached a consensus but raised the awareness of possible factors affecting the learning process and has also provided valuable insight to teaching as well.

After the third stage, research on LLS almost ground to a halt for a few years. But then, the research interest started to become more invigorated. Unlike before, where most of the researchers were from western countries, now more foreign language teachers and educators in Korea, China, Japan and Middle East countries joined the investigation. This new trend will not only enrich the theory of LLS but will also offer practical help to the vast foreign language learning population.

### **Key Issues in Language Learning Strategy Studies**

Through decades of research some LLS terms and concepts have been formulated, some not yet consolidated or clarified. There are still some conceptual issues which need further addressing. Oxford and Cohen (1992) note seven key problems in language learning strategy concepts and classification systems relating to empirical research in the area of second- and foreign language development. In the following part I will focus only on the key issues concerning basic concepts which are deemed critical to this research.

#### **Learning strategy, language learning strategy and learner strategy**

In foreign language and second language research there are three terms to refer to general strategies that learners use to learn and acquire a language. Research on learning strategy started with the outside field of foreign language and second language learning. According to Oxford, “Learning strategies are behaviors, techniques, or actions used by students, often consciously, to enhance their learning (1990a)”. In LLS study many researchers use learning strategy and LLS interchangeably to refer to the strategies used for learning a foreign language or second language. However, there is no consensus on the definition of LLS. Its definition varies according to researchers but most of them agree (1) LLS is used to gain skills in learning a foreign language or second language. (2) LLS can often significantly help learners attain great proficiency by making the learning process easier, more efficient, and more self-directed (Wenden & Rubin, 1987; Oxford, 1990a; O’Malley & Chamot, 1990). However the distinction between learning strategy or LLS and learner strategy in LLS research is often more complicated. There is no agreement reached even among the well-published researchers. Oxford (1990b), Cohen

(1990) and O'Malley and Chamot (1990) prefer to use learning strategy or LLS while Ellis (1986), Wenden (1991), Macaro (2006), Wenden and Rubin (1987) favor learner strategy. Some researchers like Tarone (1980) and Ellis (1986) use both of them but refer to distinct purposes. Learner Strategies are used by the learner to either learn the language or use the language (Macaro, 2006). Tarone (1980) further classified them into: learning strategies, production strategies and communication strategies. The last two groups of strategies are separated from learning strategies because their goal is language use rather than learning and hence they do not directly contribute to language learning (Tarone, 1980; Oxford & Cohen, 1992).

In fact many researchers have realized that separating strategies for production and communication is a false dichotomy because communication and production strategies both allow learners to participate in communication and will potentially enhance learning (Oxford & Cohen, 1992; Littlewood, 1979; Tarone, 1983). Even Tarone (1980) has acknowledged that it is virtually impossible to distinguish learning strategies from communication strategies. For the above reasons in this paper LLS includes both strategies for learning and using the target language. Then how has LLS been defined by different key researchers?

### **The Definition of Language Learning Strategy**

How to define learning strategies is crucial in underpinning the framework of researchers' study. Definition is fundamental for laying the foundation for the areas of research. O'Malley and Chamot posited that for the purpose of conducting research, specific strategy terms and operational definitions to describe strategic processing should

be used (1990 ). The term LLS has been defined by many key figures in foreign and second language education. As LLS research becomes more diversified and also more revealing in its findings, a holistic picture of learners and learning process has been captured over time (Chamot, 2005). In the meanwhile there are more alterations in the definitions of LLS from the focus on the product or the result of LLS use to a greater emphasis on the learning process. The in-depth nature and characteristics of LLS and learners can be noted from the chronicle modifications in the following table.

Table 2 Definitions of Language Learning Strategies

Authors	Year	Definitions	Focus
Rubin	(1978)	Techniques or devices which a learner may use	Learning
Wenden& Rubin	(1987)	to acquire knowledge.  Any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information and affect learning directly.	product  Learning process
Bialystok	1978	Language learning strategies are optional means for exploiting available information to improve competence in a second language	Learning product
Tarone	1980	Learning strategies are concerned with the learners' attempts to master new linguistic and socio-linguistic information about the target language – to incorporate these into one's	Learning product

		interlanguage competence'	
Stern	1983	Conscious, optional methods for exploiting available information to increase proficiency.	Learning product & LLS characteristics
Rod Ellis	1986	Action for learning declarative and procedure knowledge, internalizing second language (L2) rules and strategies or procedures employed to process L2 data for acquisition and use	Learning product & process & characteristics of language
O'Malley & Chamot	1985	Operations or steps used by a learner that will facilitate the acquisition, storage, retrieval or use of information	Learning product & process
Cohen	1990	Thoughts and actions, consciously selected by learners, to assist them in learning and using language in general, and in the completion of specific language tasks.	Learning product, LLS characteristics
	1998	May result in action taken to enhance the learning or use of L2 or FL, through the storage, retention, recall and application of information about the language	Specific LLS & process

Oxford	1990a	Learning strategies are specific actions often	Learning
		intentionally used by the learner to make	product,
	1992	learning easier, faster, more enjoyable, more	process, LLS
	1993	self-directed, more effective, and more	characteristics
		transferable to new situations. They can	& learner
		facilitate the internalization, storage, retrieval,	
		or use of the new language. Strategies are tools	
		for the self-directed involvement necessary for	
		developing communicative competence.	

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Source: Original

The above definitions show that no researchers define language learning strategies in exactly the same way. However all of these definitions provide insights into understanding the process of learning a language.

We can notice the definition of LLS has been gradually expanded from the initial focus on the learning result such as acquiring language knowledge and competency, to learning process and then to the LLS nature, conscious or unconscious in use. Even the same researchers such as Oxford or Cohen, have amended the definition more than once. Oxford's (1993) update definition concerns learner's self-directed learning ability and the joy of learning. She eventually stressed that the L2 learner is not just a cognitive and metacognitive machine but rather a whole person. In my opinion Oxford's definition embraces more reasonable characteristics and functions of LLS in terms of higher and

better language learning goals. Oxford's modified definition covers a wider range from learning process, cognitive mental process to the social and the affective influences.

### **The Identification of LLS**

LLS are for the most part unobservable, though some may be associated with observable behavior. Generally in any learning context the only way to uncover learners LLS use in the learning process is to ask them (Chamot, 2004). Chamot believed "most learners will, if required, be able to call the strategies to conscious awareness" (Chamot, 2005, p. 112). A verbal report method is used to identify LLS because observation does not capture mental process (Cohen 1998; O'Malley & Chamot, 1990; Rubin, 1975; Chamot, 2004; Wenden 1991). The method used to identify LLS has evolved from a simple list of strategies to much more sophisticated investigations including observations, retrospective, stimulated recall and think-aloud interviews, note taking, diaries and survey (Chamot, 2004; Oxford & Crookall, 1989). Most studies involve more than one method. However, each one has its advantage and limitation. The most frequently used and efficient method for identifying LLS is through a questionnaire survey. The questionnaires developed by Oxford with the Strategy Inventory for Language Learning (SILL) has been used by the greatest numbers of descriptive studies (Chamot, 2004).

### **The Classification of LLS**

Language Learning Strategies have been classified by many scholars (Wenden and Rubin 1987; O'Malley et al. 1985; Oxford 1990a; Stern 1992; Ellis 1994). Some categorizations of LLS can be overlapping because researchers use different criteria of

classification such as according to the learning process, the nature of language knowledge, or the mental function. Current classification typologies have been summarized as follow:

(1) systems related to successful language learners (Rubin, 1975); (2) systems based on psychological functions (O'Malley & Chamot, 1990); (3) linguistically based system dealing with guessing, language monitoring, formal and functional practice (Bialystok, 1981) or with communication strategies like paraphrasing or borrowing (Tarone, 1983); (4) systems related to separate language skills (Cohen, 1990); (5) systems based on different styles or types of learners (Sutter, 1989).

(Oxford, 1994, p.3.)

From Oxford's summarization, the first classification does not include a wide range of LLS used by all learners. The application of findings for research and teaching is limited. The second one has been influenced by the cognitive psychology focusing on mental cognitive process which is an important part of language learning but is not comprehensive. According to social learning theory, the human being learns from the interaction of people and environment (Bandura & Walters, 1963). There are more than just cognitive factors affecting learning. The third classification mainly is based on the learning process but failed to consider other non-linguistic factors such as metacognitive, social and affective. The last two are limited to specific language skills or learners. Learning strategies is such a broad word that it can refer to the general approaches or specific techniques used to learn a language. Maybe it is one of the reasons why the taxonomy is so varied.

For the research on general language learning strategies Oxford created a classification system which is considered comparatively comprehensive. According to Cohen it is “whole-person characteristics” classification (Cohen, 1992, p. 15). Oxford (1985, 1990a) considered the learner as a multifaceted human being, not just a cognitive-metacognitive information-processor. The system included a wide range of features developed mostly from Rubin’s system; strategies directly or indirectly contribute to language learning process, and O’Malley and Chamot’s scheme dividing into three categories; metacognitive, cognitive and social/affective categories in relating to learner’s metal cognitive process. Oxford gave much stress to the social and affective factors. Considering the characteristics of language learning “memory” was given a special attention in the classification as well. Chamot (2004) complimented the taxonomy “... superior in accounting for the variety of strategies reported by language learners” (p. 17). To have a clear view of the development of Oxford’s taxonomy system I will demonstrate Rubin’s, O’Malley & Chamot’s classification together with Oxford’s in the following tables.

Table 3 Rubin's Strategy Classification System (1987)

<b><i>Direct strategies: Learning Strategies.</i></b>	
<b><i>Cognitive Learning Strategies:</i></b> Clarification, guessing, deductive reasoning, practicing, memorization and monitoring. They help analysis transformation, or synthesis learning materials.	<b><i>Metacognitive Strategies:</i></b> planning, prioritizing, goal-setting and self-management. They involve overseeing, regulating or self-directing learning.
<b><i>Indirect strategies: Communication and Social Strategies.</i></b>	
<b><i>Communication Strategies:</i></b> getting meaning across, clarifying what the speaker intended They help to participate conversation especially in difficult situation,	<b><i>Social Strategies:</i></b> <i>seeking practice opportunities</i> They help to get opportunities to be exposed to and practice their knowledge.

Source: Rubin 1987

Rubin (1987), who pioneered much of the work in the field of strategies, made the distinction between strategies contributing directly to learning and those indirectly to learning. She stressed the behavior on learning process and studied which learning strategies facilitate which steps of learning process. According to her system, there are three types of strategies used by learners that contribute directly or indirectly to language learning. These are: Learning strategies, communication strategies and social strategies.

Learning strategies are direct strategies and they are divided into two main types: cognitive learning strategies and metacognitive learning strategies, contributing directly

to the development of the language system created by the language learner. Cognitive strategies are steps or measures taken in learning or problem-solving that involves direct analysis, transformation, or synthesis of learning materials. Six major cognitive learning strategies contributing directly to language learning are identified as: clarification, verification, guessing, inductive/inferencing, deductive reasoning, practice, memorization and monitoring. Metacognitive strategies are used to supervise, control or self-direct language learning. They involve different procedures as planning, prioritizing, setting goals, and self-management.

Communicative and social strategies are indirect strategies since they are not directly related to language learning. Communication strategies are exploited by speakers getting meaning across or clarifying what they intended when they are in troubled communicative situation. A usual communication strategy is to make use of one's linguistic or communicative knowledge to remain in the conversation. Social Strategies are activities that provide opportunities for learners to practice their knowledge. Even though these strategies offer exposure to the target language, they contribute to learning indirectly since they do not lead directly to the obtaining, storing, retrieving, and using of language (Rubin, 1987).

However Rubin's "communication strategies" category met challenges. Some researchers draw a clear line between learning strategy and communication strategies on the grounds that communication is the output and learning belongs to input modality (Brown, 1994). But most of the researchers admit that there is no easy way to distinguish the two (Ellis, 1994 & Tarone 1980, 1981). Besides the taxonomy system is based on the

perceptual model which lacks ability to give an in-depth look into the learning process and learners.

Table 4 O'Malley & Chamot's Strategy Classification System (1985)

<b>Metacognitive Strategies</b>	<b>Cognitive Strategies</b>	<b>Social/Affective Strategies</b>
selective attention, planning, monitoring, and evaluating. They are higher order executive skills, applying to a variety of learning tasks (receptive/productive).	rehearsal, inferencing, deducing, summarizing and elaboration. They help to operate and manipulate directly on incoming information to enhance learning	cooperation, questioning and self-talk. They help interaction with another person or ideational control over affect.

Source: O'Malley & Chamot 1985

O'Malley and Chamot have differentiated strategies into three categories depending on the level or type of processing involved: metacognitive, cognitive and social/affective since they grounded the study of learning strategies within the information-processing model of learning developed by Anderson (1983). Metacognitive strategies have an executive function and involve consciously directing one's efforts into the learning task. These strategies may entail planning learning, monitoring or observing the process of learning, correcting mistakes and evaluating the success of a particular strategy. In O'Malley and Chamot's framework of learning strategies, metacognitive strategies include advance organizers, directed attention, selective attention, self-management, advance preparation, self-monitoring, delayed production and self-evaluation.

“Cognitive strategies are more limited to specific learning tasks and they involve more direct manipulation of the learning material itself” (Brown, 2007,p.134).They “operate directly on incoming information, manipulating it in ways that enhance learning” (O’Malley & Chamot, 1990 P.44). They have an operative or cognitive-processing function, directly linked to the performance of particular learning tasks. Cognitive strategies include repetition, resourcing, grouping, note-taking, deduction/induction, substitution, elaboration, summarization, translation, transfer and inference.

Social/affective strategies concern the ways in which learners interact with other learners and native speakers or take control of one’s own feelings on language learning. The main social/affective strategies are cooperation and question for clarification.

Griffiths (2004) commented that their metacognitive and cognitive categories correspond approximately with Rubin’s direct strategies. The social/affective category was an important step in the direction of acknowledging the importance of interactional strategies in language learning. Elli (1994) also extolled O’Malley and Chamot’s three-way distinction useful and generally accepted because it is more consistent with a learner’s actual use of strategies. It implies that second language acquisition is an active and dynamic mental process. For teachers, the classification is found to be useful for describing how to integrate strategies into instruction (O’Malley & Chamot, 1990). However there is a flaw in the classification scheme. Even O’Malley and Chamot admitted that the distinction between metacognitive and cognitive strategies is obscure without precise boundaries. Possibly what is metacognitive to one researcher is cognitive

to another. For example “Directed attention” to decide in advance to attend in general to a learning task and ignore irrelevant distractors is classified into a metacognitive strategy and presumed to occur prior to the beginning of a task. But actually it is ongoing when students direct their attention to the task.

Oxford (1990a) took this process a step further and gave emphasis to cognitive and metacognitive strategies like most researchers but also deemed affective and social strategies important categories. She classified the LLS into six groups as in the following table.

Table 5 Oxford's Strategy Classification System (1990a)

<b><i>Direct strategies: Memory, Cognitive and Compensation Strategies.</i></b>		
<i>Memory Strategies</i>	<i>Cognitive Strategies</i>	<i>Compensation Strategies</i>
<p>creating mental linkage, retrieving, applying images and sounds, employing action</p> <p>They help students store and retrieve new information</p>	<p>practicing, receiving and sending messages, analyzing and reasoning and creating structure for input and output,</p> <p>They involve more direct manipulation of the learning material itself.</p>	<p>They help learners to understand or produce messages in the target language despite limitations of knowledge. Guessing intelligently and overcoming limitations in speaking and writing.</p>
<b><i>Indirect strategies: Metacognitive, Affective and Social Strategies.</i></b>		
<i>Metacognitive Strategies</i>	<i>Affective Strategies</i>	<i>Social Strategies</i>
<p>centring your attention, arranging and planning your learning and evaluating your learning.</p> <p>They involve planning, thinking about the learning process as it is taking place, and monitoring, and evaluating one's progress.</p>	<p>lowering your anxiety, encouraging yourself and taking your emotional temperature.</p> <p>They help students to regulate emotions, motivations and attitudes.</p>	<p>asking questions, cooperating with others and empathizing with others.</p> <p>They help to learn through interaction with others.</p>

Source: Oxford 1990a

Oxford (1990a) divided language learning strategies into two main categories, direct and indirect strategies which are also subdivided into six classes. Direct strategies are divided into memory, cognitive and compensation strategies. “All direct strategies require mental processing of the language, but the three groups of direct strategies do this processing differently and for different purposes” (Oxford, 1990a, p. 37). Memory or mnemonics strategies entail the mental processes for storing and retrieving new information. These strategies consist of four sets that include: A. Creating mental linkages, B. Applying images and sounds, C. Reviewing well, and D. Employing action. Cognitive strategies entail conscious ways of handling the target language and fall into four sets which include: A. Practicing, B. Receiving and sending messages, C. Analyzing and reasoning, and D. Creating structure for input and output. Cognitive strategies are essential and most popular in learning a new language. They “enable learners to understand and produce new language by many different means” (Oxford, 1990a, p. 37). However compensation strategies allow learners to use the language either in speaking or writing despite the limitation in knowledge. “Compensation strategies are intended to make up for an inadequate repertoire of grammar and, especially of vocabulary (Oxford, 1990, p. 47). These strategies are divided into two sets: A. Guessing intelligently and B. Overcoming limitations in speaking and writing. According to Oxford (1990a), compensation strategies are employed by learners when facing a temporary breakdown in speaking or writing. They help learners to keep on using the language, thus obtaining

more practice and achieve native fluency. Skilled users sometimes communicate better than learners who know many more new words and structures (Oxford, 1990a).

Indirect strategies, responsible for general management of learning, include metacognitive, affective and social strategies. Indirect strategies provide indirect support for language learning by employing different strategies such as focusing, arranging, evaluating, seeking opportunities, and lowering anxiety. Metacognitive strategies, essential for successful language learning, enable learners to control their own cognition. They are strategies which entail overviewing and linking with material already known, paying attention, delaying speech production, organizing, setting goals and objectives, planning for a language task, looking for practice opportunities, self-monitoring and self-evaluating. Affective strategies assist students to manage their emotions, motivation, and attitudes associated with learning. They can be achieved through lowering anxiety, encouraging oneself, and taking their emotional temperature (Oxford, 1990a).

Social strategies facilitate language learning through interactions with others. Language is a form of social behavior and learning it involves other people, and it is extremely important that learners employ appropriate social strategies in this process (Oxford, 1990a). These strategies are divided into three sets, namely as asking questions, cooperating, and empathizing with others. The indirect strategies work in tandem with the direct strategies in virtually all language learning situations and are applicable to all four language skills: listening, reading, speaking and writing.

In Oxford's classification system, totally sixty two specific strategies have been illustrated which include every strategy that is referred to in previous studies conducted

in language learning strategies. In fact, this effort provided a basis for an instrument, The Strategy Inventory for Language Learning, designed to obtain information concerning strategy use of language learners in learning a new language.

From the above illustration we can see Oxford based her taxonomy on Rubin's classification, classifying the strategies according to their influence on the learning process, direct or indirect but she added more detailed classifications within this framework. She has also incorporated O'Malley and Chamot's (1990) taxonomy scheme but enriched its content of cognitive and metacognitive categories and expanded the affective/social subset.

Even though Oxford's classification system is defined plainly and most inclusive, she cautions that the present understanding of learning strategies is still in its primary stages, and "it is only a proposal to be tested through practical classroom use and through research" (1990a, p. 16). Many researchers agree with Oxford (1994) that the existence of distinct strategy typologies indicates a major problem, lack of a coherent, well accepted system (Ellis, 1994; O'Malley & Chamot, 1990). The different sets of strategies are serious blocks to reliable research (Ellis, 1994). It is impossible for the studies to reach any general conclusion. There is still a long way to go to settle the theoretical issues like that. A part of this study contributes to the field through testing Oxford's taxonomy on advanced English learners in the Chinese learning environment.

### **Features of LLS**

In the studies of LLS identified from different learners, Researchers have noticed

the unique features of those strategies. Oxford (1990a) summed them up in her teacher-oriented book.

1. Contribute to the main goal, communicative competence
2. Allow learners to become more self-directed
3. Expand the role of teachers
4. Are problem-oriented
5. Are Specific actions taken by the learner
6. Involve many aspects of the learner, not just the cognitive
7. Support learning both directly and indirectly
8. Are not always observable
9. Are often conscious
10. Are teachable
11. Are flexible, and are
12. Influenced by a variety of factors

Some features are agreed upon by many researchers; some features are still under debate such as the term “conscious”. Whether learners use the LLS consciously or not has not reached any agreement among researchers. Surely as research methodology improves we will acquire a better understanding of its features. The current feature list will be subject to amendment. Among all the features the well-studied one is “influenced by a variety of factors” because of its immediate influence to learners and learning effectiveness. The findings are rich and complicated as illustrated in the following explanation.

## **Variables Affecting the Choice of LLS**

Although a myriad of research has been done on the factors affecting the LLS use, there is not much consensus reached to date. Some factors have been understood better than others. For example, studies on relationship between gender and LLS use have come to a mixed conclusion. Although much research appears to have discovered the distinct gender differences (Ehrman & Oxford, 1989; Oxford & Nyikos 1989), there are findings which fail to prove the differences as well (Ehrman & Oxford 1990; Bedell, 1993). Nonetheless most research reviews draw the conclusion that females generally use more LLS than males (Oxford & Crookall, 1989; Griffiths, 2004; Nambiar, 2009). The studies on duration, or proficiency level shows the similar result but with more variations within the LLS use. The more advanced language learners reported using more, better strategies which were more positive and effective (Chamot et al. 1987; Nyikos, 1987). Learners constantly adjusted their strategies as their proficiency level advanced. There is sometimes a change with certain strategies used more by advanced learners such as communication-oriented strategies (Oxford & Nyikos 1989). There is a developmental trend in strategy use. Although studies on certain factors result in mixed conclusions, many have proved the relationship of these factors and LLS use.

Other studies prove the positive relationship between a factor and LLS use but discover other possible factors affecting the relationship at the same time. In the studies on the degree of difficulty of the learned language affecting learners' strategy use, because learning Russian is more difficult for English speakers than is learning Spanish, there are more reports of language strategy uses among Russian learners. But there might

be other factors which affect the choice of LLS such as learning goals, teaching methods, learner's characters, namely better learners selecting a challenging language to learn (Politzer, 1983; Chamot et al, 1987). The research on age and LLS shows similar results. Adults seemed to use more strategies than did the young learners (Ehrman & Oxford 1989; Oxford 1986) however there might be other factors which affect the results such as adult learning motivation and goal, teaching methods, learning experience, environment, and cognitive maturity. Other studied factors such as national origin or ethnicity and teaching methodology revealed similar results. However, it is not safe to study one factor and draw a definitive conclusion.

The relationship between motivation, attitude, goals, career orientation and LLS use has been affirmed to be positive by studies. Those factors strongly influence language learning and therefore powerfully affect the choice of strategy (Oxford, 1989). But with different goals and motivations learners' LLS varied greatly (Ehrman & Oxford, 1989; Oxford, 1986). Thus Oxford and Crookall (1989) appealed for more studies on them. There are fewer studies on learning style, aptitude, personality, and therefore the result is less consistent.

The studies have proved that more factors come into play in many cases and LLS varies extensively with factors. The relationship is more complicated than positive or negative in addition to some factors which are subject to change or hard to measure like style and aptitude. Hence there is more work to do in this aspect. The existing theories are always contingent and open to revision in the light of further evidence or more complex theories

### **LLS Studies on Adult Chinese Learners of the Last Five Years**

After 2004 there has been a rejuvenated interest in LLS study judging by the studies reported. Unlike before most research done in second language learning environment by native speakers, we are encouraged to notice more studies being done in the foreign language learning environments where most learners reside. Additionally, research is also being done on Chinese learners by the local foreign language educators alone or together with native researchers (Wong & Nunan, 2011; Jiang & Smith, 2009, Wu, 2008; Lai, 2009; Chen, 2009; Kyungsim, 2006; Murray, 2010; Yang, 2007; Gao, 2006). This new research trend provides more insight into this group of learners because they learn foreign languages in a totally different context. Many affective factors are different from the second language learning, such as ethnicity, culture, learning experience, goal, and motivation. Therefore their learning strategies can be different from second language learners.

The increasing demand on foreign language proficiency in China creates a large learning population. Not only foreign researchers but also more native Chinese researchers are involved in finding ways on how to improve foreign language learning. To get an up-to-date picture of the research on Chinese learners I will introduce the major results of the past five years.

The Brief outline of the findings is as follows

1. More effective learners are active and display a greater degree of autonomy which is the result of effective use of LLS (Wong & Nunan, 2011).

2. Rote learning mentioned frequently as an important part of memorization but the use of it is more complex. It can be more dynamic than has been previously been described particularly in relation to repetition, understanding and review. Language education policy and associated pedagogical factors do seem to have been influential in bringing about over all changes in LLS use (Jiang & Smith, 2009).
3. There is no significant difference in the use of memory strategies between the low proficiency learners and high proficiency ones. Both groups use compensation strategies more often than other strategies. An important pedagogical implication is cognitive strategy use which showed a strong relation to English proficiency (Wu; 2008).
4. Using a socio-cultural theoretical framework, Gao (2006) discovered there was a greater change in strategy use when the learning environment changed and has stressed the importance of offering new learning support in a different learning context.

However the picture is far from being complete. Among recent research most of them have been done with a focus on the traditional college students, but not on graduate students let alone part-time graduates, and not much attention is being paid to the age differences with many using volunteers only as subjects. Therefore this study has made an inquiry about how advanced adult learners learn in the different learning context.

### **Theoretical Framework of This Research**

Because the subjects of this study are adult graduate English learners who have clear career goals, high motivation, positive attitudes, and most important of all, strong self-direction, Oxford's (1993) definition concerning a whole learner, especially the self-directed learning ability and the joy of learning fits the subjects of this research well.

Besides adult learners are also able to recall the strategies to their conscious awareness (Oxford & Ehrman, 1995) and therefore more likely to give a better account of their LLS use while proactively taking control of their study. Consequently I adopted Oxford's taxonomy system and hence used her research questionnaire, Strategy Inventory for Language Learning to carry out my quantitative research. The research instrument will be introduced in the following section.

The study of variables affecting the LLS use will focus on academic status (full-time vs. part-time), gender, previous work experience, current work hours, marital status, age and academic majors since those constitute the salient differences of the two groups of participants in this study. Among the variables only academic major and gender have been studied in the West but not among mainland graduate English majors.

### **Summary**

In this chapter a wide range of theoretical development and key issues concerning this study were reviewed. In light of its potential to enhance language learning the study of LLS has been carried out for about four decades and the interest in it among contemporary educators and researchers has been spread beyond the descriptive study of LLS use. Intervention research has brought rich findings and provided a better picture of the complex human learning process. All the effort helps understand the nature of LLS better and to some extent addresses the key issues which are critical in comparing the research findings to reach general conclusions. (Ellis, 1994; O'Malley & Chamot, 1990; Oxford, & Crookall, 1989). Due to the complex nature of human learning process, there are some terms and concepts about LLS still remaining in discrepancy. According to the

characteristics of adult learners I also justify the theoretical frameworks used in this paper.

In the next chapter I will introduce research questions and research designs in detail.

## Chapter 3

### Research Methods

This study used quantitative methods to gain general perspectives on how Chinese graduate English majors study English. The implementation of the research methods and research design will be discussed in this chapter. Through quantitative interpretation, the major possible variables affecting the choice of LLS are also studied in view of the different demographics of the full-time and part-time graduates. This study attempts to provide an in-depth understanding about the LLS uses by Chinese graduates from both the part-time and the full-time English programs. The study addresses the following questions.

#### Research Questions and Hypotheses

1. What are the frequencies and the scope or ranges of LLS used by the full-time and part-time students respectively?
2. Is there any significant difference in the extent of LLS use between the two groups (different academic status)?

H01: There is no significant difference in mean LLS average total score of part-time students and full-time graduate students.

Ha1: There is significant difference in mean LLS average total score of part-time students and full-time graduate students.

H02: There is no significant difference in mean LLS average sub-scores of part-time students and full-time graduate students.

Ha 2: There is significant difference in mean LLS average sub-scores of part-time students and full-time graduate students.

3. Does the reported use of LLS significantly relate to the major factors of the groups: gender, age, previous work experience, current working hours, major, and marital status (family responsibility)?

H03: There is no significant relationship between the mean LLSs total score and gender, age, previous work experience, current work hours, major and marital status.

Ha3: There is significant relationship between the mean LLSs total score and gender, age, previous work experience, current work hours, major and marital status.

H04: There is no significant relationship between the mean LLSs sub-scores and gender, age, previous work experience, current working hours, major and marital status.

Ha4: There is no significant relationship between the mean LLSs sub-scores and gender, age, previous work experience, current working hours, major and marital status.

The two assumptions from the previous studies shaped the three research questions. First, the learners tend to use different learning strategies at different learning contexts with different learning goals (Oxford, 1994; Cohen, 1998). Second, due to the differences some variables affecting the choice of LLS play more important roles than others (Oxford, 1993; Ehrman & Oxford, 1989; Oxford, & Ehrman, 1993; Nyikos, 1990; Oxford, & Nyikos, 1989). The three questions intend to address LLS uses at three different levels: The first question depicts the picture of how graduates from the two programs use the learning strategies to provide a basic understanding about their language learning. The second question inquires if there is any significant difference in the LLS use between the

two groups to further disclose how each group studies the foreign language. The third question deals with a more intricate issue, that is, to what extent the major variables in this research affect the choice of LLS to provide a better understanding of the learner's behavior.

## **The Research Design**

### **Context for the Research**

I chose a language university in China for my research. Because I am still an employee of the university I went back to the university to resume teaching in February 2012. At the same time I started making arrangement of collecting data for my dissertation research. Owing to my status as a teacher I was able to contact the graduate school management and follow their rules to carry out my research. After getting the consent from the graduate school, I started to collect data in the spring of 2013 between April and May.

### **Context: population**

The research was carried out at a North China foreign studies university, one of the eight foreign education universities in China. The full-time graduate English majors are further divided into career oriented sub-majors, translation, simultaneous interpretation, American and British literature, American social and cultural studies, Teaching English as Foreign Language, linguistics and international business. In all the sub-majors the core courses are taught in English and the courses focusing on enhancing English proficiency are also offered such as advanced English speaking and research English writing. The part-time program, however, is not divided into sub-majors. All the students as a cohort

were offered the same courses, focusing on strengthen English language and culture related knowledge. Both graduate students must have a bachelor degree in English or equivalence knowledge of English. They have mastered the advanced English proficiency before entering the program. There is no need to translate the research instrument, SILL, into Chinese.

### **Procedure**

There is no IRB system in Chinese universities but I need to get the permission from the graduate school and individual course instructors if I ask them to administer the questionnaire. At the beginning of the data collection process, I attempted to develop rapport with the graduate school management through a couple of meetings explaining my research purpose, design, the potential risks and benefits to them. I offered to provide a lecture on strategy learning and research or share pertinent knowledge with any graduate interested in it. I also mentioned my research would raise the awareness on this kind of study among graduates because so far they have not been offered any related courses. The director of the graduate school gave her consent and introduced me to one of the office workers to whom I explained research and gave him the questionnaire sheets. He then scheduled a meeting of class monitors to explain the research. The monitors were asked to distribute and collect the questionnaire in their class. All the participants were from the full-time program. They are volunteers and fully aware of the option to stop doing it at any time they want and that won't affect their academic status.

## **Participant Selection**

Owing to the small population of the research, all the full-time English graduates and the part-time counterparts at the foreign language studies university in China were asked to participate. Since the researcher was not their teacher, an office worker in the graduate school helped scheduled a meeting to explain the research to class monitors of the full-time program and asked them to distribute questionnaires to their classmates. The sample participants in the study were asked to fill in the questionnaire, SILL, at their convenience. They were given a couple of weeks to complete it. The time of data collection was during the spring semester of 2013. A total of 156 full-time students filled in the questionnaire among which 102 responses were valid. Most of the participants were first year students because it was close to the graduation time of the two and half year full-time program. All the graduate students are offered dormitory on campus if they want to stay and most of them live in the school dormitory so it is easy to approach. The second year students had almost completed all the courses then, busying with job hunting and thesis writing, and therefore not many interested in the research. The third year students, who had completed their oral defense, were unable to be approached at that time. None of them participated.

The part-time students were even harder to approach than I had thought. Although I received support from the graduate school and the teachers teaching the participants, the class participation was not good. Most of the time only a little over half of the class showed up in the classroom which made data collection more difficult. As I mentioned before the enrollment in the program is shrinking significantly from over 100 to 56 now.

The director of the program revealed a couple of reasons other than the one I mentioned previously in this institution: they were terribly understaffed, because the full-time program grows very vigorously. The other reason is strong competition because more and more colleges and universities are allowed to build the part-time graduate program in China. With the permission of the graduate school and the instructor of the class, I went to the classroom on three separate occasions when the first year and the second year students had class together on Saturdays and Sundays, explained my research and asked them to filled out the questionnaire. Among the part-time participants less than half of them were in their second year study. Only 14 out of 29 students were present and able to fill out the questionnaire the first time. Later I found that the class instructor's interest and support made a difference in participant's attitude toward my research. Building a close rapport with the instructors I was able to get more responses the second time and third time. Totally I received 48 responses for my survey.

Table 6. The Population Description of Full-Time Students

(Percentage of the participants' Gender, marriage status, academic fields, previous and current work experience)

Demographic factors	Percentage	Number
Male	24.5%	25
Female	75.5%	77
Married	0.98%	1
Not married	99%	101
Average Age		23.5yrs
Had work	19.8%	21
Have work	22.6%	24
Literature	26.4%	27
Ame. Society & Culture	9.8%	10
Business	15.7%	16
Information Science	4.9%	5
TESOL	11.8%	12
Translation	31.3%	32
Total	100%	102

Source: original

Among the full-time participants there are 3 people (2.9%) did not filled in the gender. Two (1.9%) did not fill in the marriage status. The participant's age range was from 21-29 years old. One student (0.9%) did not fill in the age. Sixteen of them are 23.5 years old or above, taking 15%. The average age is 23.5 years old. Like most of the graduate students in China, not-married students are the majority, of which 99% are in the full-time program. For language major programs male candidates are considerably much fewer than females. This is also true in the graduate programs of Tianjin Foreign Studies University. Male graduate students count for only 24.5%. The translation program, which was established in the early 1980s, with its fully-developed system and prominent faculty, has attracted most of the candidates, of which there are 32 students who are currently enrolled.

Table 7 The Population Description of Part-Time Students

(Percentage of the participants' gender, age, marriage status, previous and current work experience)

Demographic Factors	Percentage	Number
Male	17.8%	8
Female	82.2%	37
Married	80%	36
Not married	20%	9
Average Age		29.9 yrs
Had work	97.8%	44
Have work	93.3%	42
Total	100%	45

Source: original

The age range is very high from 23-39 years old in this group. The average age is 29.89. Due to the wide age difference 36 of them are married. Most of them are working 40 hours per week. There are just three people not working. Like the full-time group the male students took even smaller percentage, just 17.8 %. Since they all have one major, English language and culture. I did not include their major in the above table. All the courses are English language related. Upon their request a course may be offered if there is teaching faculty available. During the data collection, one student came late so she did not complete the questionnaire. Otherwise all the 13 students finished the questionnaire and expressed their interest in seeing the result of this research at the first data collection. Since the group number did not meet the size requirement of the quantitative research I returned twice to collect the remainder of the data and were able to get support from the class instructors. Therefore almost all the responses were valid.

## **The Research Instrument**

The instrument is Oxford's (1990a) Strategy Inventory for Language Learning (SILL) Version 7.0 (ESL/EFL). The SILL is a Likert-scaled measurement presenting a set of strategies for language learning across skills such as "I plan my schedule so I will have enough time to study English," and "I use English words I know in different ways". The five point scale ranges from 1 "never or almost never" to 5 "always or almost always". With this student's response to each strategy item reveals the frequency of their strategy use. With 1 representing they rarely use a certain strategy; 5 meaning they always use a certain strategy.

The SILL contains six factor-analytically created strategy categories: memory strategies primarily help learners store and retrieve new information. Cognitive strategies are for processing and practicing language information. Compensatory strategies enable learners to make up for the missing knowledge in the process of comprehending and producing the target language. Metacognitive strategies are used by learners to plan, organize and evaluate their own learning. Affective strategies are steps learners take to gain control over their emotions, attitudes and motivations related to language learning. And social strategies measure how learners work with others in the learning process such as asking questions, cooperating with others, and becoming aware of others' thoughts and feelings.

Among six LLS categories, memory, cognitive, compensation are direct language learning strategy and metacognitive, affective and social strategies belong to indirect language learning strategy. The questionnaire includes 50 strategy items: Items 1 to 9 are

memory strategies. Items 10 to 23 are cognitive strategies. Items 24 to 29 are compensation strategies. Items 30 to 38 are metacognitive strategies, Items 39 to 44 are affective strategies. Items 45 to 50 are social strategies. A SILL package includes a short set of directions to the student with a sample item, the 50-item instrument (see index), a scoring worksheet on which students record their answers and calculate their averages for each strategy subscale and their overall average, a summary profile that shows their results and provides examples for self-interpretation, and a strategy graph that allows each learner to graph results from the SILL (Wu, 2008).

SILL has been used in China and other East Asian countries many times to all kinds of learners. This version is especially created for the speakers of other languages learning English and suitable for my research. The validity and reliability of SILL have already been checked in much research even among Chinese learners. In addition, because the participants are advanced English learners there is no need to translate the questionnaire. The coefficient alpha reliability is used on continuous data, such as the Likert-type scale in the SILL. A Coefficient alpha is .96 for a 1200 university sample and .95 for a 483 military sample. Content validity is .95 (Oxford, 1990b). Coefficient alpha for this research is .85. The internal consistency is good but not excellent as other studies done in western contexts because of the unique Chinese students learning characteristics and environments.

### **Data Analysis**

The research is in the quantitative tradition, but uses different statistical analysis for each research question and hypothesis. Descriptive design was apt for answering the first

research question through measuring central tendency (the mean, median and mode) and variability (standard deviation and range). For the second question, the independent T-test was needed to evaluate the difference in LLS use between the two groups. To test the third question a co-relation co-efficiency design was be used to evaluate the relationship between strategy uses and each pertinent factor.

### **Ethics**

There is no formal IRB system in Chinese university to protect participants and assist researchers. Owing to my academic status as a Ph.D. candidate of the University of Minnesota, I formally informed both the management of the graduate school of TJFSU and my subjects of this research the risks and benefits of the study in accordance with University of Minnesota Institutional Review Board guidelines. The participants were informed of my intention to publish findings of the study. The data are going to be destroyed two years after publication of the finding.

### **Threats to the Internal Validity and Solutions**

Traditionally Chinese students are taught to be obedient and follow what the teacher asks them to do. In order to obtain the real data, I made it very clear both orally and in writing that their participation is voluntary and is not required. The benefit to the students is that I offer online discussion or personal meetings for anyone interested in this kind of study and also promise to acknowledge them as a cohort in my dissertation. Because the school prohibits any material gift I did not offer a prize to any individual as I had planned but students kept “the magic pen” they used for answering the questionnaire.

**Confidentiality**

To ensure that I was getting truthful responses, I took measures to protect the students identity. Examples of these steps are to make it very clear that the research is purely for my personal academic study and the data would be properly stored and timely destroyed after use only for this research. I also did not ask participants to write their names in the self-report part of the instrument regarding their background information. In the end I clearly told them that there was no way to identify the answer from each individual student.

**Generalizability**

Among these full-time participants, 102 out of 156 questionnaires are valid because around 40 Japanese major graduates filled out the questionnaires but their English proficiency is quite different from the rest of research subjects, English majors and therefore I decided not to include them. Another four questionnaires are invalid due to the completely identical answers. The number of valid answers is much more than 30 which meet the requirement of quantitative research (Utts & Heckard, 2006). Most of the part-time students have participated in the survey. The valid responses are more than 30 so it also satisfies the requirements of statistical analysis.

The participants of this research are either in their first or second year study and their demographic characteristics have been displayed in Table 1 (p.17), Table 6 (p. 58) and Table 7 (p. 59). The target subjects, full-time or part-time graduates in China share the characteristics with the students in this research, as they are recruited through the same channel, either the national entrance examination or individual university

examinations according to the national educational regulations in terms of age, work experience and English proficiency.

Although individual institutes are allowed certain freedom to manage their graduate program, such as choosing their textbooks, they all must follow the national educational regulations for course design, teaching goals and administration rules. Therefore the findings from this research can be applied to other graduate programs in similar kinds of universities and colleges.

### **Limitations to the Generalizability of the Findings and Solution**

The goal of this research or any research is to inform the teaching and learning practice. For example this research found that there is need to increase the flexibility of the graduate program. But for practical implication it is beyond the individual teacher's ability to overcome the institutional barrier such as in the Chinese education system where students are arranged in cohorts for the same curriculum each semester. All teaching goals and contents are fixed. Graduate programs are content-based and hard to allow students the freedom to choose courses according to their needs and learning pace. But Chinese education is facing challenges and moves towards market-orientation. Universities and teachers are allowed more freedom. The barriers should be able to become removed in the future.

Another limitation is to raise the awareness of the instructors about the role of LLS. Most of the teaching in China is teacher-controlled. Student's proactive role is not heeded. To change the situation needs the collaborations of researchers, instructors and administrators. The research on LLS itself is a way of raising awareness among them in

addition to the findings. I am very happy to have a few graduate students scheduled a meeting with me talking about the potential on LLS research after my data collection.

### **Summary**

This chapter explained the methodology of this quantitative research, the participants, the programs of the TJFSU and the process of the data collection. The data analysis, ethics and generalization issues are also discussed briefly. The next chapter presents the findings based on the quantitative analysis of the participants' answers to the questionnaire, SILL together with their background information.

## Chapter 4

### The Findings

The findings of language learning strategy (LLS) use are a quantitative interpretation of the result of the survey, Strategy Inventory for Language Learning (SILL). The research subjects in both part-time and full-time programs are currently working for their master degree from different sub-majors in Tianjin Foreign Studies University (TJFSU) in China. For detailed information about the students please see Chapter Three. This research answered three questions which related to the extent and types of language learning strategies used by full-time and part-time graduates of English majors and main factors affecting the choice of language learning strategies. The report of the quantitative results consisting of independent samples t-test and correlation analysis based on the following questions and hypothesis.

1. What are the frequencies and the scope or range of LLS used by the two groups respectively?
2. Is there any significant difference in the extent of LLS use between the two groups (different academic status)?

H0 1: There is no significant difference in mean LLS average total score (average sum) of part-time students and full-time graduate students.

Ha 1: There is significant difference in mean LLS average total score of part-time students and full-time graduate students

H0 2: There is no significant difference in mean LLS average total sub-scores of part-time students and full-time graduate students.

Ha 2: There is significant difference in mean LLS average total sub-scores of part-time students and full-time graduate students.

3. Does the reported use of LLS significantly relate to the major factors of the groups: gender, age, marital status (family responsibility), years of previous work experience, current working hours, sub-majors and academic status (part-time or full-time)?

H0 3: There is no significant relationship between the mean LLS total score (sum) and gender, age, marital status, years of previous work experience, current working hours, sub-majors and academic status (part-time or full-time).

Ha 3: There is significant relationship between the mean LLS total score and gender, age, marital status, years of previous work experience, current working hours, sub-majors and academic status (part-time or full-time).

H0 4: There is no significant relationship between the mean LLS total sub-scores (sums) and gender, age, marital status, years of previous work experience, current working hours, sub-majors and academic status (part-time or full-time).

Ha 4: There is significant relationship between the mean LLS total sub-scores and gender, age, marital status, years of previous work experience, current working hours, major and academic status (part-time or full-time).

To respond to the above questions and hypotheses, I employed different statistic measurements using SPSS software (1.7 version). For the first question I examined descriptive statistics such as minimum, maximum, mean and range to determine the overall patterns of language learning strategy use of the two groups; to test hypotheses in the second question, an independent sample t-test was used to assess the difference in

language learning strategy use between full-time and part time graduate students. The third question was answered through the correlation analysis. In the following account I introduce the findings with the help of the statistical analysis result. Also the factors under study of this research were displayed in the table 8.

Table 8 Profile of Entire Survey Participants

Group	Sub-group	Number	Percent (%)
Academic status	Full-time	102	69.4
	Part-time	45	30.6
Gender	Male	33	22.4
	Female	114	77.6
Working now or not	Yes	68	46.3
	No	79	53.7
Age	20-25 years	102	69.4
	26-30 years	27	18.4
	31-35 years	17	11.6
	36-40 years	1	.7
Had work experience or not	Yes	69	46.9
	No	78	53.1
Married or not	Married/single	38	25.9
	Not Married	109	74.1

Source: original

1. What are the frequencies and the scope or range of LLS used by the two groups (part-time and full-time) respectively?

### **How to Understand Survey Strategy Items and Scores of the SILL?**

To be more accurate of the calculation I did not use only average sum score of LLS in calculation like other research. Instead I used the average sum and the sum score of LLS for correlation and t-test analysis. For example when I calculated the score for memory strategies (a sub-category strategy of LLS) which contained nine strategies and each was measured in the Likert score from 1-5. If every item scored 5 points then the sum of this category is  $5 \times 9$ . I therefore used the sum 45 for the calculation instead of 5 (the average sum) because the average sum for most of the research included only the last one or two digital numbers after the decimal point which reduced the accuracy of the calculation. Using the total sum is more precise. But in order to explain according to the score range, I also used the average sum statistics to make a comparison for the T-test results. To obtain a complete view of the distribution of strategy scores of the survey, I displayed both sum and average sum scores of the overall LLS and its sub-categories in the following table given each strategy was scored the highest point of 5.

Table 9 Score Distributions of Each Sub-Category Strategy of SILL

Parts of SILL (Language Learning Strategies score1-5)	Strategy groups	Strategy Number	Sum score	sub-Average sub-score	Sum
Part A. Remembering More Effectively	Memory	9	45	5	
Part B. Using All Your Mental Process	Cognitive	14	70	5	
Part C. Compensating For Missing Knowledge	Compensatory	6	30	5	
Part D. Organizing And Evaluating Your Learning	Metacognitive	9	45	5	
Part E. Managing Your Emotions	Affective	6	30	5	
Part F. Learning With Others	Social	6	30	5	
Total	Overall LLS	50	250	5	

Source: original

### How to Understand Sums and Average Sums of the SILL?

As we can see the "SUM" reflects the original sum of overall LLS or each sub-category strategies use. But the "AVERAGE SUM" can make the comparison easily because of the same baseline (5 points) and therefore be able to tell how often a learner

uses strategies for learning English, namely the frequency of LLS use. Each sub-part of the SILL represents a group of learning strategies. For instance, nine items in Part A “Remembering More Effectively” represent memory strategies which expresses how learners store and retrieve information; the remainder of the parts were presented as in the above Table 9 "strategy groups" column. Both sums and average sums disclosed which group of strategies a learner uses the most. But only average sum could reflect the range of an individual strategy use as showed in the following table 10. For instance if a learner's average sum of overall LLS is 2.48 which falls within medium to low use range, then we can claim his LLS use ranges from “sometimes used” to “generally not used”.

**Table 10 The Range Rubrics of Average Sum of the SILL**

Average total	Meaning of LLS use	Range
4.5 - 5.0	Always or almost always used	High
3.5 - 4.4	Usually used	High
2.5 - 3.4	Sometimes used	Medium
1.5 - 2.4	Generally not used	Low
1.0 - 1.4	Never or almost never used	Low

Source: Oxford 1990

The average sums (total) tell us how much and how often learners use language learning strategies. With these numbers we can compare learner’s strategy use to get a picture of how they manage the learning process. If a certain part of the score is very low that means learners barely use this type of strategy. In practice they could, to some extent, inform teachers about learners' learning problems and therefore teachers might come up

with some solutions in relate to strategy development such as raising learner's awareness towards a seldom used type of strategy use or developing corresponding strategy training activities. I will focus on this in the discussion section with respect to the result of this study.

## Findings for Research Questions

**Table 11 Full-time and Part-time LLS Use Descriptions**

Language Learning Strategies	Group	Num ber	Minimum	Maxi mum	Mean sum	Average Mean sum
Part A. Remembering More Effectively	Full-time	102	15	41	26.176	2.91
	Part-time	45	13	42	27.222	3.02
Part B.Using All Your Mental Process	Full-time	102	22.0	63.0	44.353	3.17
	Part-time	45	31	65	48.553	3.47
Part C. Compensating For Missing Knowledge	Full-time	102	7	27	18.265	3.04
	Part-time	45	12	28	20.822	3.47
Part D. Organizing And Evaluating Your Learning	Full-time	102	14	42	28.745	3.19
	Part-time	45	19	44	33.178	3.69
	Full-time	102	10	27	16.735	2.79
Part E. Managing Your Emotions	Part-time	45	7	27	18.067	3.01
Part F. Learning With Others	Full-time	102	7	27	17.294	2.88
	Part-time	45	10	30	20.556	3.43
Overall (Total)	Full-time	102	87	221	152.137	3.04
	Part-time	45	106	225	167.022	3.34

Source: original

From comparison of mean sums and average mean sums of overall LLS of both groups we can see that the part-time group score is higher than their counterpart (167.022 vs. 152.137 and 3.34 vs. 3.04). That means part-time students reported more overall language learning strategies use so their language learning strategy use frequency was higher than the other group. Comparing each sub-category average mean sums of language learning strategies the results were very consistent. Hence the part-time group used more sub-category strategies than the full-time group as well.

The overall average mean sum of the part-time group is 3.34 which falls in the medium use range (2.5-3.4). That means this group of learners "Sometimes Use" the language learning strategies listed on the survey; the full-time group's average mean sum was 3.04 which is also within the medium use range.

As for the sub-category strategy use, results are more complex. Contrast to the preconception about Asians as constant memory-strategy user, "Part D. Organizing and Evaluating Your Learning" metacognitive strategies were used most frequently (average mean sum =3.69, high use range, meaning "usually used") of the part-time group. The rest of the sub-categories in order of frequency of use for the part-time students were as follows:

2. Using All Your Mental Process (average mean sum=3.47, high to medium use range),
3. Compensating for Missing Knowledge (average mean sum=3.47, high to medium use range),
4. Learning With Others (average mean sum =3.43, high to medium use range),
5. Remembering More Effectively (average mean sum =3.02, medium use range) and

6. Managing Your Emotions (average mean sum=3.01, medium use range).

As for the full-time the group "Organizing and Evaluating Your Learning" strategy or metacognitive strategies also topped the list of other sub-categories (average sum mean =3.19) but the mean is much lower and fell in the medium use range. The rest in order of frequency of use were as follows:

2. Using All Your Mental Process (average mean sum=3.17, medium use range),
3. Compensating For Missing Knowledge (average mean sum=3.04, medium use range),
4. Remembering More Effectively (average mean sum =2.91, medium use range),
5. Learning With Others (average mean sum =2.88, medium use range) and
6. Managing Your Emotions (average mean sum=2.79, medium use range).

The order of the frequency of LLS use are almost identical except that the memory strategy was ahead of the social and affective strategy on the full-time students' list which means this group was more active in using memory strategy but much less active using social and affective strategies compared with their counterparts. The difference in social strategy uses between the full-time student and the part-time student was big (2.88 vs. 3.43). However the difference between memory strategy use was not very much (2.91 vs. 3.02). The comparison could inform us the frequency and range differences but are the differences significant between the two groups? Only an independent sample t-test is able to answer this question.

2. Is there any significant difference in the extent of LLS use between the two groups (different academic status)?

H0 1: There is no significant difference in mean LLS average total score (average sum)of

part-time students and full-time graduate students.

Ha 1: There is significant difference in mean LLS average total score of part-time students and full-time graduate students

For statistical accuracy, I used the original sum for the independent t-test analysis instead of average sum for the total and subtotal score calculation. I designed a two-tail test as there was no way to decide in advance the direction of result.

Table 12 Independent Samples t-test of Mean LLS Average Total Score of Part-time and Full-time Groups

LLS	Group	N	Mean	Std. Deviation	t	p
Total	Full-time	102	152.137	28.6163		
Original LLS Score	Part-time	45	162.022	24.7611	-3.199	0.002

$P < 0.05$

Because  $P = 0.002$  which is much smaller than 0.05, the difference between full-time and part-time students in language learning strategy (total score) use is statistically significant. Therefore we can completely reject the null hypothesis and accept the alternative hypothesis. There is significant difference in mean LLS average total score of part-time students and full-time graduate students. The result indicates that the difference between part-time students and full-time students in overall language learning strategy use is statistically significant.

H02: There is no significant difference in mean LLS average total sub-scores of part-time

students and full-time graduate students.

Ha 2: There is significant difference in mean LLS average total sub-scores of part-time students and full-time graduate students.

Table 13 Independent Samples t-test of Mean LLS Average Sub-score of Part-time and Full-time Groups

Language Learning Strategies	Group	N	Mean	Std. Deviation	t	p
Remembering More Effectively	Full-time	102	26.176	5.0998	-1.041	.301
	Part-time	45	27.222	5.8266		
Using All Your Mental Process	Full-time	102	44.353	8.6947	-2.891	0.005
	Part-time	45	48.533	7.7916		
Compensating For Missing Knowledge	Full-time	102	18.265	4.2796	-3.519	0.001
	Part-time	45	20.822	3.9617		
Organizing And Evaluating Your Learning	Full-time	102	28.745	6.5698	-3.976	0.000
	Part-time	45	33.178	6.0726		
Managing Your Emotions	Full-time	102	16.735	4.2657	-1.75	0.083
	Part-time	45	18.067	4.2394		
Learning With Others	Full-time	102	17.294	4.8228	-3.808	0.000
	Part-time	45	20.556	4.7700		

P<0.05

Because P<0.05 in "Using All Your Mental Process", "Compensating For Missing

Knowledge", "Organizing And Evaluating Your Learning" and "Learning With Others" the difference between the full-time and part-time students in the four subcategory strategy use: cognitive, compensatory, metacognitive and social strategies are statistically significant. We can partly accept the alternative hypothesis. There is a significant difference in mean LLS total sub-scores of the above four sub-categories of part-time students and full-time graduate students. But we cannot totally reject the null hypothesis. Since P value is greater than 0.05 in "Remembering More Effectively" and "Managing Your Emotions" the difference between the full-time and part-time students in these two subcategory strategy use, namely memory and affective strategies, are not statistically significant. The finding indicates that the differences between part-time students and full-time students in cognitive, compensatory, metacognitive and social strategy uses are statistically significant but the difference in memory and affective strategy uses are not statistically significant.

3. Does the reported use of LLS significantly relate to the major factors of the groups: gender, age, marital status (or family responsibility), years of previous work experience, current working hours, and academic status (part-time or full-time)?

H03: There is no significant relationship between the mean LLSs total score and gender, age, marital status, years of previous work experience, current working hours, and academic status (part-time or full-time).

Ha3: There is significant relationship between the mean LLSs total score and gender, age, marital status, years of previous work experience, current working hours, and academic status ( part-time or full-time)

Because the number of students for each sub-major is quite varied, some majors, such as information science, recruit only 4- 6 students a year; other majors, such as translation, enrolls over 30 new students per year. In addition full-time students are not divided by sub-majors because they are primarily catered to their interest and needs. Also the availability of current courses decides what the graduate school can offer for the sake of cost efficiency. I would not include the sub-major factor in my analysis as I had planned since the number of subjects did not meet the requirement of the statistical analysis. Besides all the graduates are English majors. English learning still is their top priority and this study measures their English learning skills. So this factor, sub-major, affecting the choice of LLS but is not very crucial. I also use the total mean (sum) instead of the average total mean (average sum) in this part to produce more accurate statistical results.

Table 14 Overall LLS Uses by Different Variables

<b>Group</b>	<b>Pearson Correlation Sig.</b>	<b>Total LLS score(original)</b>
Gender	Pearson Correlation	.198*
	Sig. (2-tailed)	.016
Age	Pearson Correlation	.171*
	Sig. (2-tailed)	.038
Marital status	Pearson Correlation	-.264**
	Sig. (2-tailed)	.001
Years of work experience	Pearson Correlation	.209*
	Sig. (2-tailed)	.011
Current working hours	Pearson Correlation	.201*
	Sig. (2-tailed)	.015
Full-time or part- time	Pearson Correlation	.244**
	Sig. (2-tailed)	.003

\* P < 0.05 ; \*\* p < 0.01

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 14 shows that all the p values were smaller than 0.05. So we reject the null hypothesis and accept the alternative hypothesis and claim the correlations of gender, age,

marital status, years of previous work experience, current work hours, and academic status (part-time or full-time) with the mean LLS total score (sum) being statistically significant. The result demonstrates that all the above factors were significantly related to the reported use of overall LLS at  $p < 0.05$  level except the factors of academic status (full-time or part-time) and marital status at  $p < 0.01$  level. Statistically the correlations were significant but the strength of relation in the Pearson Correlation was not strong. The strongest factor was marital status (-.264) and followed in order of strength by academic status (.244), years of work experience ( .209 ), current work hours (.201), gender (.198) and age (.171). Most of them were in positive relation except marital status. So students with more years of work experience, more current work hours, older, female and part-time students reported more language learning strategy use. But marital status displayed the negative relation which means unmarried students used more overall LLSs than their counterparts.

Table 15 Sub- category LLS Uses by Different Variables

Group	Pearson Correlation Sig.	Organizing					
		Remembering More Effectively	Using you're your Mental Process	Compensating For Missing Knowledge	And Evaluating Your Learning	Managing Your Emotions	Learning With Others
gender	Pearson Correlation Sig. (2- tailed)	.124	.195*	.172*	.232**	.041	.198*
age	Pearson Correlation Sig. (2- tailed)	.017	.101	.196*	.257**	.092	.224**
<b>Marital status</b>	Pearson Correlation Sig. (2- tailed)	-.036	-.192*	-.228**	-3.29**	-.173*	-.333**
years of work	Pearson Correlation	.013	.138	.185*	.262**	.163*	.292**

experience	tion						
	Sig. (2-tailed)	.873	.094	.025*	.001	.049*	.000
current	Pearson	.124	.149	.202*	.216**	.187*	.262**
working	Correlation						
hours	tion						
	Sig. (2-tailed)	.136	.073	.014	.009	.023	.001
Full-time	Pearson	.091	.224**	.273**	.305**	.144	.300**
or part-time	Correlation						
	tion						
	Sig. (2-tailed)	.275	.006	.001	.000	.083	.000

\*P < 0.05 ; \*\* p < 0.01

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

H04: There is no significant relationship between the mean LLSs total sub-scores (sums) and gender, age, marital status, years of previous work experience, current working hours and academic status (part-time or full-time).

Ha4: There is a significant relationship between the mean LLS total sub-scores and gender, age, marital status, years of previous work experience, current working hours, and academic status (part-time or full-time).

Table 15 shows "Remembering More Effectively", namely memory strategy, universally had no significant correlation with any factors under study. Otherwise the rest of the sub-category strategies had a certain degree of relation with the factors. I will present the remainder of the result of relations as follows:

The correlations of "Using You're Mental Power" (cognitive strategy) and factors, gender ( $p = .018$ ), marital status ( $p = .020$ ), are statically significant at the 0.05 level and academic status ( $p = .006$ ) at the 0.01 level. Although the corrections are significant statistically none of the relations in the Pearson Correlation is strong. Academic status is the strongest, only .224 which still belongs to the weak relation range (below .30) (Utts & Heckard, 2006). As for other factors, such as age, years of work experience and current working hours, due to the large p value ( $P > 0.05$ ) the correlations are considered not significant.

The sub-category "Compensating for Missing Knowledge" (Compensatory strategy) has significant relation with all the factors but at different p value level. The correlations of compensatory strategy with gender ( $p = .037$ ), age ( $p = .018$ ), years of work experience ( $p = .025$ ) and current working hours ( $p = .014$ ) are statistically significant at the 0.05 level but stronger with marital status and academic status at the 0.01 level. In terms of strength of the relation none of them is over .30 in Pearson Correction. The highest one is marital status (-.228) that means the relationship between the compensatory strategy and the factor marital status is the strongest of all the factors. The negative relation indicates that the unmarried students reports more LLS use. But on the second look, I found that there is only one student married in the full-time group. The great difference in the number of married students between the two groups make the comparison weak. So I have learned

that in China marital status study among graduate need to handle with great care before using that as a variable in research.

Also the "Organizing and Evaluating Your Learning" and "Learning with Others" (metacognitive and social strategy) are statistically significant correlated with all the studied factors at either the 0.01 level, except for the factor, gender (0.016) at the 0.05 level with social strategy. The strongest relation between the factors and sub-category strategies were among the two categories (Pearson Correlation over .30). Listed in order of strength as follows:

- 1) social strategy and marital status (-.33)
- 2) metacognitive strategy and marital status (-.33)
- 3) metacognitive strategy and academic status (.305)
- 4) social strategy and academic status (.30)

In conclusion the statistics have shown marital status and academic status are the two factors displaying stronger relation with social and metacognitive strategies in this study.

Besides the memory strategy which has no relation with any factors, the affecting strategy " Managing Your Emotion" has the least relation with the given factors The correlation coefficient is not statically significant between affecting strategy and gender, age, and academic status. The correlations were statically significant with marital status, years of work experience and current working hours but all the correlations are significant at the 0.05 level and the strength of relation are very weak, much lower than .30 (marital status -.173; years of work experience.163; current working hours .187).

## Summary

The principle findings from this investigation include:

- 1) Part-time students reported more language learning strategy uses than full-time students.
- 2) Both full-time and part-time students used more metacognitive strategies more than other strategies.
- 3) The frequency orders of the sub-strategies were almost the identical between the full-time and part-time students.
- 4) All the studied factors were statically significant correlated with the general language learning strategy but the strengths of the relation were weak.
- 5) Marital status and academic status had the strongest relation with metacognitive and social strategies.

## Chapter 5

### A Discussion of the Findings

According to the results of the descriptive statistics and independent samples t-test, the general profile of strategy use by the two groups, drawn from the Strategy Inventory for Language Learning (SILL) in this study was very consistent. Especially the order of language learning strategy (LLS) use frequency which was almost identical: metacognitive, cognitive, compensatory, social, memory and affective strategies except for a minor switch of memory and social strategies between the two groups. This section presents cognitive and cultural interpretations of the results in terms of 1) the difference and similarity of LLS use 2) the factors affecting the choice of LLS, gender, age, marital status, years of work experience, current working hours and academic status 3) the comments on the learning strategies of SILL from subjects.

#### **The Analysis of Difference and Similarity of LLS Use of Two Groups**

##### **Overall Strategy Use of Both Groups Fell in the Medium Range**

The average (sum) mean of overall LLS use between the part-time and full-time is 3.34 vs. 3.04 (Table 11). Both numbers fall within the range of medium use of language learning strategies. The P value of the independent sample t-test is 0.002 (Table 12) which is much smaller than 0.05. So the difference of the two means is statistically significant. Definitely part-time students have used more language learning strategies than full-time students. However both means belong to the medium used range of language learning strategies. The subjects represent the highest-level English learners among Chinese students except doctoral students whose goals are beyond improving

English proficiency. Why are both strategy uses within the medium range?

First Chinese students are not as aware of their language learning strategies. In Chinese class teaching, English is taught mainly as knowledge and teachers are authoritative figures. The way how students learn has not gained enough attention either from teachers or students. But Nyikos (1987) found that learners used only a narrow range of strategies and were generally unaware of the strategies they used. Therefore subjects in this study may not report the strategies they actually used.

Another reason is that Chinese students are not typically encouraged to communicate or work collaboratively. Active and self-directed learning is not advocated either. However strategies are tools for active, self-directed involvement needed for developing L2 communication ability (O'Malley & Chamot, 1990). Being offered almost no self-directed learning instructions or courses in TJFSU the subjects have been denied the chance of developing or employing LLS.

In addition gaining communication proficiency is not the realistic top goal of English learning because the chance of genuine English communication is still rare in Chinese society. Students know even after they reach a certain level of communication proficiency if they don't use it at work or society the English proficiency cannot be maintained. However to get through the master degree program they are required to pass a series tests in which skills such as listening, reading and grammar knowledge take the major percentage. Therefore students do not make a great effort to improve their communication skills. But the strategies on the SILL are mainly for communication proficiency development. As English major graduates, most of them know that to develop

a native-like proficiency is very important. When I asked them in the small talk after class "Why they don't give much effort to communication proficiency development?" They listed a few reasons which were: 1) hard to find a native speaker 2) too shy to communicate 3) want to talk to native speakers but don't know what to say 4) too busy.

Finally, the strategies in the SILL focusing communication and involving a lot of work with native speakers are not feasible to Chinese students since there are few such speakers available in Chinese learning environments such as " I look for people I can talk to in English", "I ask the English speaker to correct me when I talk" and " I ask for help from an English speaker". In fact quite a few students mentioned that they don't have a chance to communicate with native speakers, let alone to develop communication strategies like a compensatory strategy. Another problem with the construct validity of the SILL is memory strategies. They don't include rote memory and repetition items, which are the basis of much of the successful memorizing by Asian students (Lee & Oxford, 2008). The memory strategies of the SILL based on visual, auditory and kinesthetic modalities may not fit Chinese student's learning habits especially for adults. For instance "I physically act out new English words. (For example, when you learn the word "jump", you could get up and actually jump to help you memorize this word.)" and "I use rhymes to remember new English words". Besides, the memory strategies are basically for vocabulary learning which is not sufficient for advanced English learners. In conclusion both groups are equally susceptible to the influence of the above cognitive and cultural reasons. Then it is understandable that their use of overall language learning strategies has fallen in the medium used range.

In fact Lee and Oxford (2008) found similar problems with the SILL and advised minor revisions on ethnic related strategies and memory strategies. In this research I agree with their suggestions of making changes of the SILL to adapt to the culture ( learning tradition) and learning context and I also suggest the adaptation to advanced proficiency level and adults learners. At last this study makes me realize that it is hard to find or create a universally feasible "SILL".

### **Part-time Students Reported More LLS Uses than Full-time Students**

Compared with the analysis on the causes of “medium used” range of LLS, it is even harder try to explain the difference in strategy use between the two groups. In reality, there are many factors influencing learner's choice of LLSs , and some are target language proficiency level, age, learning tasks, learning goal, social role, contextual variables (teacher and peer variables), learning style, attitude, motivation and so on (Wenden, 1986; Cohen, 2003; Oxford & Ehrman, 1995; Dreyer & Oxford,1996; Lan & Oxford, 2003). To specifically identify the specific causes for the difference in this case needs a more comprehensive quantitative research design to further exclude many confounding variables but it is beyond the purpose of this study which is to determine the relation, not the cause. To help understand the difference in two groups I would examine the most possible factors contributing to the difference in light of previous research findings and the specific cultural and learning contexts.

In this study the two groups' crucial difference is their academic status which creates many sub-differences of the groups such as age, proficiency level, learning goals, program requirements, learning tasks, and so on. Considering the wide range of

differences I will focus on only a few very prominent differences of the two groups.

Age is an important factor studied in previous research but the findings are mixed and complex. For example Nambiar (2009) concluded age does appear to have an influence on how LLS are used but the findings do not yield a clear indication of how age impacts the LLS use. Many studies showed the difference of LLS use between children and adults (Purdue & Oliver, 1999; Ehrman & Oxford, 1989; Oxford, 1986) but they cannot specifically identify that age is the sole factor influence for the use of LLS. In this research subjects are all adults with the age difference between full-time students (23.5) and part-time students (29.9) at 5.4 years. For adults the difference is not great in terms of physical cognitive development. However their different life experience should have more influence on their cognitive thinking. Concerning how social, cultural, economic, and political forces shape the development of adult thinking Merriam et al., (2007) argues that these contextual factors may be what influences an adult's cognitive development. Part-time students are more experienced in life and work comparing to professional students, most of whom have no or limited work and social experience, therefore part-time students could be more open-minded, resourceful and reflective. Consequently they are likely to develop the stronger cognitive ability and employ more LLS use. That may be the reason part-time students used more cognitive strategies than their full-time counter parts.

Another possibility is part-time students have shouldered more pressure due to the test requirements for graduation and also due to greater tuition pressure. Most of them have to work and at the same time take care of their family and economic responsibility

so there is less time available for study. In addition, unlike full-time students mostly living on campus, part-time students meet only on weekends for class. Perhaps they have fewer resources available in terms of library and assistance from teachers and peers. The pressure and disadvantages may compel them to look for better ways to deal with school work and then turn to discover and use more LLS to assist with their learning. The actual situation of part-time students may explain why they used more metacognitive, compensatory and social strategies than full-time students did.

Because I personally collected data from full-time students three times, I had a chance to talk to them. Through communication I felt part-time students were very hard working and determined. One example told to me was that no matter how bad the weather is they always tried to attend class. Some even came to class directly from their business trip. One of the students was late the day I collected data. She told me her child was sick and she had to take him to the hospital first that morning. This group of students really has their hands full. Personally I feel Chinese employers are not as supportive as American ones because of the management attitude and inflexible work schedules. On the way to attain the education goal they have more practical barriers than the other group that may contribute to more strategy use.

Besides the number of part-time vs. full-time subjects is not balanced (part-time 45 vs. full-time 102) and that could have an impact on the statistical result. Also the subjects' attitude toward this research could attribute to the difference. Because I personally went to collect data from full-time students I made some explanations. Quite a few students asked interesting questions relating to this research and even wanted to contact me for

further information on the topic. Part-time participants understood the research better and were serious about the survey questions. It proved that there were less invalid responses (only 2 identical responses) from the part-time group. But the attitude of part-time students was not as serious because I was unable to administer the survey in person.

### **Both Part-time and Full-time Students Used Metacognitive Strategy More Often Than Other Strategies**

In terms of age and English proficiency level both groups represent the highest. They are the senior learners at the top level of English learning in the Chinese traditional education system (not including the self-directed learning system). The high frequent metacognitive strategy use corresponds with the findings that metacognitive strategy is used more by older or more advanced level of learners (O'Malley et al., 1985; Chamot, 1987; Wu, 2008).

Metacognitive strategies help learners find out or figure out what they need to do. The use of metacognitive strategies ignites one's thinking and can lead to more profound learning and improved performance, especially among learners who are struggling (Anderson, 2002). So it is likely that graduates employ these strategies to make the advanced level learning profound and effective. And these strategies may also help manage the imminent career and life pressure (struggling), especially for the part-time group. Most importantly metacognitive strategies provide adult learners the ability to take control of their learning which was needed most in their busy life schedule.

Looking at the metacognitive strategies in the SILL I found that most of them are the learning methods that Chinese teachers usually advocate in class such as " I notice my

English mistakes and use that information to help me do better", " I pay attention when someone is speaking English", and "I plan my schedule so I will have enough time to study English". So Chinese cultural background may be another reason of the preference to metacognitive strategies just as Oxford (1994) revealed that certain cultures encourage some strategies among learners.

### **The Similar Order of Strategy Frequency of the Two Groups**

In this study, part-time and full-time students displayed similar order of strategy frequency. Besides high frequency use of metacognitive strategies both groups showed the least use of affective strategies. Compensatory strategy use was in the middle of the order but there is a little switch in the order list between the social and memory strategies use between the two groups. Unlike the common belief that Asian students prefer rote memorization, Memory strategy use was not high on the list especially for the Part-time students.

Table 16 Order of Strategy Frequency of Part-time and Full-time Students

Order	Part-time students(Average Mean)	Full-time Student(Average Mean)
1	Metacognitive (3.69)	Metacognitive (3.19)
2	Cognitive (3.47)	Cognitive (3.17)
3	Compensatory (3.47)	Compensatory (3.04)
4	Social (3.43 )	Memory (2.91)
5	Memory (3.02)	Social (2.88)
6	Affective (3.01)	Affective (2.79)

Source: Original

For both groups the frequency order of cognitive strategies followed right after metacognitive strategies. This result conforms to the finding that metacognitive strategies are often used together with cognitive, supporting each other (O'Malley & Chamot, 1990). Since these students are high level English learners they have been very experienced in English learning and may have realized that well-combinations of metacognitive and cognitive strategies often have more impact than single strategies (Oxford, 1994).

The low frequency use of social and affective strategies can be explained by Oxford's (1990a) hypothesis that learners are not familiar with paying attention to their own feelings and social relationships as part of the second language (L2) learning process. In the case of Chinese student this is quite true. In everyday life Chinese are not encouraged to express or discuss personal feelings. Monitor one's feelings is scarcely mentioned in Chinese classroom. The part-time group reported more use of social

strategy than memory strategy because I think they need to assist each other due to less availability of resources and limited learning time.

Interestingly, the use of memory strategies was not high on the order list. The possible reason could be the fact I have mentioned, the strategies of the SILL does not reflect the oriental students' learning habits. In fact most comments I received about the construct are centered on memory strategies in which students listed some strategies they used but not included in the SILL. I will discuss this in the following analysis. Another reason is that at the advanced level the focus of English learning is not, or not that much, at specific language learning skills such as memory and compensatory strategies. Many findings supporting the claim that Asian students use rote memorization and language rules were done to the low or medium level language learners who are still trying to master the basics of the target language which requires a lot of specific skills (Lee & Oxford, 2008; Wu, 2008; Politzer, & McGroarty, 1985; Tyacke & Mendelsohn, 1986).

There is no statistically significant difference between the two groups on the use of last two strategies on the order list, memory and affective strategies. That could, in part, be due to the influence of Chinese culture as memorization is a learning tradition and emotion control habits were deeply rooted in the Chinese social and education systems.

### **The Analysis of Factors Affecting the Choices of LLS**

#### **All the Given Factors Are Significantly Related to Overall LLS Use**

The correlations between gender, age, marital status, years of work experience, current working hours and academic status and the reported overall LLS use were statistically significant but the strengths of relation were not strong (below .3 in Pearson

Correlation). The result that female and older students reported using more LLS is congruent with most of the research findings (Oxford, 1993; Oxford & Ehrman, 1993; Green & Oxford, 1995; Oxford & Ehrman, 1995; Dreyer & Oxford, 1996; Land & Oxford, 2003). The positive relation between years of work experience, current working hours and academic status with LLS use support the hypothesis I have mentioned that their rich life and work experiences helped to develop their ability to be reflective, open-minded and independent. Therefore they are more likely to look for more and different ways to make the learning effective.

But the negative relation between the marriage status and overall LLS use is hard to explain. The result means married students used fewer strategies than unmarried ones. The only reason I can come up with is their busier life agenda and more family responsibility (might have children) allow them less time to reflect about the learning which leads to less strategy use. But this is a weak argument. Definitely the data from this research are not enough to make any complete explanation. This finding needs further research on other factors such as their motivation, goals, beliefs, affective factors (barriers) and even their English proficiency.

### **The Correlation between Given Factors and Sub-category Strategies Are Complex**

Unlike the overall strategies the sub-category strategies showed different degrees of relation with the factors under study. There is no given factor significantly related to each sub-category strategy. The less frequently used strategies, memory and affective strategies, displayed weak relationships with all the given factors. In fact memory strategy is not significantly related to any given factors. The correlation of affective

strategies and all the given factors is also less significant. That may be because the real affecting factor is Chinese culture as I have explained or it could be found in other reasons.

Like the overall strategies, compensatory, metacognitive and social strategies were significantly related to all the given factors. But cognitive strategies displayed a complex relation, related to gender, marital status and academic status but not significantly related to age, years of work experience and current working hours. Cognitive strategies are skills involving direct analysis, transformation, or synthesis of the target language (Oxford, 1990a). The subjects of this study having learned English for at least 16 years in the Chinese education system may have already formed solid a cognitive English learning habit. Therefore cognitive strategies were not likely to be quite subjected to changes by then or outside influence were not big enough to influence it.

The negative correlation between marital status and all the sub-category strategies is hard to explain. There is a need for further research on this factor besides the explanation "The subjects had no time to reflect their learning so showed less use of strategies". The last possibility influencing this data result is the big difference in the number of subjects such as 33 male vs. 114 female; 45 part-time vs. 102 full-time. And 78 out of 147 students had zero years of working experience; 79 students had zero current working hours.

### **Marital Status and Academic Status Displayed the Strongest Relation with Social and Metacognitive Strategies**

Among all the given factors, only marital status and academic status displayed the

strongest relation (Pearson correlations are over .3) with social and metacognitive strategies even though all given factors were significantly related to both strategies. The two given factors could make a difference in students' life experience. Being full-time employees and part-time students could give them better managing and social abilities which can be transferred to English learning and lead to active use of metacognitive and social strategy. Because there has not been any research done on the two variables I could not relate to any previous research findings for an explanation. But adult learners who used more metacognitive strategies may have some relation with my findings (Oh, 1992; Touba, 1992; Ehrman, 1996; Ehrman, & Oxford, 1990). The stronger negative relation between the marital status and the two strategies is even impossible to make any assumption with this data. One important fact affecting this result is the number of married students in full-time students is very small, only one student married. The difference in marital status between the two groups is huge. I need more data and careful study of this variable, especially the full-time group due to much less married students. Therefore the result from my study cannot accurately explain the relationship and it needs further study.

### **Comments on the Learning Strategies of SILL from Research Participants**

Students' comments focus on two open-ended questions: "Which of the 50 strategies are not practical to you?" and "Are there any strategies you have used but are not included in the questionnaire?" The two open-ended questions are included in the end of the questionnaire. Most of them did not comment on them. Only about 10% subjects had given answers to the questions. The summary of the comments are as follows

### 1). Not Appropriate Strategies

- a) Strategies are not appropriate for Chinese learners such as "I look for words in my own language that are similar to new words in English." Since there is little similarity between English and Chinese language systems so it is not possible to do it. As for the pronunciation Chinese English teachers usually do not encourage learners to do that. For example some preschool English teachers tried to teach "Thank You" in a Chinese way and pronounced it "san kei you". In China this way of teaching received a great level of criticism due to the inaccurate pronunciation association".
- b) Strategies are not appropriate for adults. For example "I use rhymes to remember new English words." and "I physically act out new English words. (For example, when you learn the word "jump", you could get up and actually jump to help you memory this word.)" Even the strategy "I practice the sounds of English" is not the focus of that level. I got a chance to talk with junior and senior college English majors about this strategy. To my surprise they all liked to be corrected if their pronunciation was not correct but this seldom happened in the advanced English teaching.
- c) Strategies are not practical in a Chinese learning context. Due to the limited contact with native speakers those strategies focus on oral communication with native English speakers such as "I ask for help from English speakers." Interestingly I came across an interesting comment "if I don't understand the text or have a question about it, how can I use the strategy 'I ask questions in English'.

That comment reflected student's belief of English as "knowledge based instead of communication oriented". The priority of English is as knowledge for student to understand, not for use to solve the problem. It proved that learner's belief had a connection with their learning strategy uses (Horwitz, 1988; Yang, 1999; Winke, 2007).

## **2). Not Included or Precise Strategies.**

- a) Students focused mostly on the way of English input. They mentioned that they "read English newspapers or magazines in English", "online English reading" "recite good English speeches or articles" and "Listen to English songs". We can see they focused on authentic English reading. They believe the authentic materials represent the high level of English, but this kind of reading still aims at learning and not receiving information in a communicative way. Reciting is mentioned but not focusing at how to do it. Instead learners start to pay attention to the larger picture (what to recite): the quality of English, entire English text instead of vocabulary, grammar or pronunciation. The strategy for getting the authentic, quality input represents learner's focus of English learning, striving for elevated English language. So the memory strategies of the SILL are focusing more on vocabulary learning and do not represent this kind of learning.
- b) They also mention some output ways such as "practice self-talk" "try to speak before people or make a presentation" because of the lack of real communication context teachers encourage students to use English as a way of acting out that is to put learners in the context of the stage performance. They often prepared a lot

before giving a talk. The author heard a lot about the use of this strategy. For instance, my Chinese English teacher told us that he became very fluent in English through excessive self-talk or practice.

- c) "Don't know what to talk with foreigners" is mentioned a lot. This is not only the question students launched in this research. I, as an English teacher and living and working in the U. S. for many years often find myself in this conundrum due to the culture difference. A lot of times I was quiet because I was afraid that I asked the wrong question or made an inappropriate question. My students (junior and senior college English majors) told me they are afraid that they may make language mistakes as they are not confident in their language communication ability. I find many of undergraduate are fearful of talking in class for similar reasons.

In general most of the findings can be explained within the framework of cognition and culture. That helps test the previous research and get attention to the influence of Chinese cultural factors in language learning strategy research. At the same time this study has produced questions for further research such as the influencing factor, marital status. Importantly it contributes to the better understanding of language learning strategy and the development of the research instrument.

### **Limitations of the Research**

Due to the large number of students from the full-time group, the data were not collected by me. There were more invalid responses (53). Some of them are even identical answers (5); some incomplete (8) and around 40 students from Japanese majors

answered the questionnaires because of miscommunication. I excluded them as their English proficiency level is very much different from English majors. I have learned that the logistic details could influence subjects' attitude toward the research and then make a difference in data quality.

Another limitation is unknown variables such as proficiency levels, career goals and learning motivation. These factors cannot be explained because this research did not collect the participant's entrance examination scores and lacked measurement of the strength of career goal or learning motivation. This limit should be considered in further study.

### **Summary**

The new knowledge gained from the analysis shows that students in different programs (part-time or full-time) learn differently. There are far more factors affecting the learning process besides the given factors this study has addressed. In this case the English teaching method in the Chinese classroom, learning goals and learning environment, Chinese social and educational tradition might be equally responsible for the choice of adult learning strategies. The factors affecting the choice of LLS use is very specific to the student's learning situation. Therefore it is dangerous to use a "well-used" research instrument. Another lesson learned from this research is the logistics of the survey administration, the presence of the researcher, which all might affect the quality of the research data.

## Chapter 6

### **Conclusion, Implications and Recommendations for Practice and Future Research**

The findings of this study can draw attention to the theoretical and practical implications for research on academic status and advanced proficiency level. Recommendations for teaching, administration and future research will be discussed for future research in similar circumstances. Researcher's reflection will be included in the end.

### **Conclusion**

This study has shown that the part-time student and full-time student learn English in a different way. The academic status is the key factor attributed for the difference. Thus the academic factor should be taken into consideration in the study of Chinese language education. Although both groups are composed of adult learners working on their master degree study in English, their language learning strategy uses are quite different. The difference shows that the learning characteristics of adults are more varied and diverse. The findings also expand the magnitude of the factors likely to affect the use of language learning strategies. Besides the known factors having been studied, the fundamental influence may also come from learners' actual learning environment such as available learning time, resources, assistance from peers and instructors, work experience and family responsibilities which make up a learner's real academic status in Chinese colleges. And those factors interacted and are interwoven into the adult's learning situation. In summary, the adult language learners' learning strategies are more susceptible to the influence of the complicated learning situation. Therefore there are

more factors affecting adult learning strategies and hence strategies could be more varied as well.

The influence of two prominent factors, advanced English level and Chinese culture, shed some insights on the uniqueness of the Chinese student's language learning strategy (LLS) use. The study finding is contrary to the common impression that Asian students prefer rote learning and excessively use memory strategies. In reality the metacognitive strategies which have been used most are ones that strongly express and prove the characteristic of adult learners. Another finding informs us that students with advanced English proficiency prefer authentic material learning because their goal is more than to learn correct English. They want to acquire native like speaking skills and are interested in the beauty of English writing.

The problems which students mentioned about the LLS shows no matter how good a research construct has been designed it needs to be altered to the uniqueness of the research. Each research is has its unique aspect. For instance, communication-oriented strategies are not practical for the Chinese learning environment. Emotion related strategies are not congruent with the Chinese social and educational tradition. This lesson could also benefit the research construct development as well.

After a further look at the sub-category strategies, the research also has revealed both part-time and full-time students employed the metacognitive strategies most. The result not only provides the evidence supporting other research findings that adults tended to use more metacognitive strategy than younger learners but also proves the existing adult learning theory (Knowles, 1975, 1984). Adult learners prefer to take an active

control of their learning. In general the finding confirms that adult learners learn differently from children.

### **Recommendations for Teaching**

The study can inform practical classroom teaching from different perceptions. First given the difference of the full-time and part-time graduates teachers need to actively alter their teaching material, methods, assignment and etc. Second, to cater to different groups teachers should conduct a further analysis of the learner's goals, needs, barriers and learner's demographic characteristics as this research shows the marital status makes a difference in how students learn. Third, due to the active use of metacognitive strategy teachers should design assignments, class activities and tests allowing adult learners to take responsibility of their learning. Finally, because of teachers' authoritative status in the Chinese classroom they should explicitly promoted the use of less used strategies such as affective strategy. Students must receive explicit instruction on learning strategy use. For example teachers need to demonstrate for students on how to choose the strategy that has the best chance of success in a given situation. Research indicates that language learners at all levels use strategies, but that some or most of them are not fully aware of the strategies they use or the strategies that might be most helpful to use (Chamot & Kupper, 1989).

### **Recommendations for Administration**

The program should be designed to fit learners' strategy use such as to use the student's metacognitive ability to the maximum by providing self-directed learning and online courses. It can also give students more control through flexible administration. For

example extending the program duration and providing a summer section or condensed courses (a two week course in summer session) like American universities. At last pay attention to the demographic characteristics of the learners and communicate with teachers so that they will be encouraged to develop teaching to the student's learning.

The above recommendation may be a bit difficult to apply right now as it concerns more than just teachers however it is not impossible. There is more and more flexibility and authority given to the school administration in China. Chinese education is still under transformation.

### **Recommendations for Future Research**

1. This study makes me realize that it is difficult to find a universally feasible "SILL". Each researcher should take his unique situation into consideration in questionnaires design. If he can't make a brand new research construct, he should at least make some alterations of the existing construct according to the research.

2. When studying the full-time and part-time groups there should be more factors involved such as proficiency level, career goal or learning motivation. Possibly a focus group study should be done first to pre-decide the factors to be studied in each research.

3. I learned that the logistic details could make a difference in data quality. If possible researchers should make a direct contact with research participants so to give more clear instructions and answer possible questions. The most important is he can advocate the significance of the study and raise the subject's attention to the study.

4. Since this study shows a significant relation between marital status and LLS use but it is difficult to explain. It is necessary to further explore this relation or carry out

similar research to test the result of this research.

### **Reflection of the Researcher**

When I reflect the research there are two things I felt deeply about. The first one is the data collection process. The second one is the question American teachers asked me “why do you choose part-time and full-time students as separate groups to compare”.

### **Data Collection Process**

While collecting data I deeply felt that Chinese students are not interested in taking part in research. After communicating with some of them I developed some understanding about that fact. First there is no protection of the subjects such as the IRB system in the university of the United States. Even though the researcher makes a serious promise about privacy they are still reluctant to do so as the trust between people is very low in Chinese society now. Second students are not interested in the things which have no influence on them especially full-time students as they are already busy enough. But when I went to collect the data the second and third time I not only brought small presents but also took time to explain what they would benefit by knowing the language learning strategies. Many students showed interest and provided quality responses. Third, it is important to get support from the class instructor. When the instructor asked me some questions about the research and commented on the importance of this research in front of the class. Obviously this has some impact on subjects' attitude about my research. Students asked questions about the strategies on the questionnaires to make sure they understood the survey questions. At last if I had to do it again I would make sure that I collected all of the data myself, not asking someone to administrate the survey. The

presence of the researcher will impact participants' attitude about the research and raise the awareness toward the research.

### **Why Research on the Difference between Full-time and Part-time Students**

When I proposed the topic of my dissertation research American teachers asked me why separate students into full-time and part-time? It is true that in American people don't give much attention to the fact of students who are full-time or part-time as most of students work in some way during school. But in China there is a big difference due to the limited education resources and government subsidiary to the full-time students. I reflected on this question later many time? I went to school in American both as a full-time and part-time student. I feel my way of learning was different. While working full-time and going to school I had to manage my time carefully and evaluate my school work from time to time. The research findings have coincided with my experience and proved there is a difference in learning strategy use.

### **The Lesson Learned**

When I look back on the process of pursuing my Ph.D. degree there is much to say but the most important lesson I have learned is being disciplined to overcome my procrastination. Holding down a full-time position and going to school at the same time were really tough and a good excuse to procrastinate. When the time came for writing this dissertation I was so burned out and because of my reserved personality, I was very reluctant to ask for help during the data process therefore became very frustrated. But I know I would not give up so I kept encouraging myself and found ways to relax myself like the part-time students in my research. At that time I found I was facing the barriers

they have. Thanks to my advisor, Rosemarie and my husband Brian's support and encouragement for with their help I completed this dissertation. I deeply feel this is a process of self-discovery and self-challenge. Most of all it is a process of self-completing.

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## Appendix A

### Language Learning Strategies (SILL Version 7.0 ESL/EFL)

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
- 
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 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 use rhymes to remember new English words.
  6. I use flash cards to remember new English words.
  7. I physically act out new English words. (For example, when you learn the word “jump”, you could get up and actually jump to help you memory this word.)
  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 the street sign.
  10. I say or write new English words several times.
  11. I try to talk like a native English speaker.
  12. I practice the sounds of English.
  13. I use the English words I know in different ways.
  14. I start conversation in English.
  15. I watch English language TV shows spoken in English or go to movies.
  16. I read for pleasure in English.
  17. I write notes, messages, letters, and reports in English.
  18. I first skim an English passage (read over the passage quickly) then go back and read carefully.
  19. I look for words in my own language 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.

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 word.
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.
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.
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 using English.
41. I give myself a reward of 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 a language learning diary.
44. I talk to someone else about how I feel when I am learning English.
45. If I do not understand something in English, I ask the other person to slow down.
46. I ask English speakers to correct me when I speak English.
47. I practice English with other students.
48. I ask for help from English speakers.
49. I ask questions in English.
50. I try to learn about the culture of English speakers.

### **Worksheet for Answering and Scoring the SILL**

1. The blanks (\_\_\_\_) are numbered for each item on the SILL.
2. Write your response to each item (that is, write 1, 2, 3, 4, or 5) in each of the blanks.
3. Add up each column. Put the result on the line marked SUM.
4. Divide by the number under SUM to get the average for each column. Round this average off to the nearest tenth, as in 3.6.
5. Figure out your overall average. To do this, add up all the SUMs for the different parts of the SILL. Then divide by 50.
6. When you have finished, your teacher will give you the Profile of Results. Copy your averages (for each part and for the whole SILL) from the Worksheet to the profile.

Part A	Part B	Part C	Part D	Part E	Part F
1 _____	10 _____	24 _____	30 _____	39 _____	45 _____
2 _____	11 _____	25 _____	31 _____	40 _____	46 _____
3 _____	12 _____	26 _____	32 _____	41 _____	47 _____
4 _____	13 _____	27 _____	33 _____	42 _____	48 _____
5 _____	14 _____	28 _____	34 _____	43 _____	49 _____
6 _____	15 _____	29 _____	35 _____	44 _____	50 _____
7 _____	16 _____		36 _____		
8 _____	17 _____		37 _____		
9 _____	18 _____		38 _____		
	19 _____				
	20 _____				
	21 _____				
	22 _____				
	23 _____				

Whole SILL

SUM \_\_\_\_\_ SUM \_\_\_\_\_ SUM \_\_\_\_\_ SUM \_\_\_\_\_ SUM \_\_\_\_\_ SUM \_\_\_\_\_ = \_\_\_\_\_  
 $\div 9 =$  \_\_\_\_\_  $\div 14 =$  \_\_\_\_\_  $\div 6 =$  \_\_\_\_\_  $\div 9 =$  \_\_\_\_\_  $\div 6 =$  \_\_\_\_\_  $\div 6 =$  \_\_\_\_\_  $\div 50 =$  \_\_\_\_\_

Overall Average

### Profile of Results on the SILL

You will receive this Profile after you have completed the Worksheet. This profile will show your SILL results. These results will tell you the kinds of strategies you use in learning English. There are no right or wrong answers.

To complete this profile, transfer your averages for each part of the SILL, and your overall average for the whole SILL. These averages are found on the Worksheet.

<u>Part</u>	<u>What Strategies Are Covered</u>	<u>Your Average on This Part</u>
A	Remembering more effectively	_____
B	Using all your mental processes	_____
C	Compensating for missing knowledge	_____
D	Organizing and evaluating your learning	_____
E	Managing your emotions	_____
F	Learning with others	_____
Your Overall Average		_____

### Key to Understanding Your Averages

High	Always or almost always used	4.5 to 5.0
	Usually used	3.5 to 4.4
Medium	Sometimes used	2.5 to 3.4
	Generally not used	1.5 to 2.4
Low	Never or almost never used	1.0 to 1.4

### **What These Average Mean to You**

The overall average tells how often you use strategies for learning English. Each part of the SILL represents a group of learning strategies. The averages for each part of the SILL show which groups of strategies you use the most for learning English.

The best use of strategies depends on your age, personality, and purpose for learning. If you have a very low average on one or more parts of the SILL, there may be some new strategies in these groups that you might want to use. Ask your teacher about these.

**Appendix B**

On Fri, Nov 2, 2012 at 3:53 PM, <irb@umn.edu> wrote:

TO : parkx002@umn.edu, sunxx103@umn.edu,

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2

SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS;

OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 1210E23021

Principal Investigator: Wei Meyer

Title(s):

Study of Adult Language Learning Strategies Used by Full-time and Part-time Graduate English Majors in China

This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter.

This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

**SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.**

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study's expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at (612) 626-5654.

You may go to the View Completed section of eResearch Central at <http://eresearch.umn.edu/> to view further details on your study.

The IRB wishes you success with this research.

We have created a short survey that will only take a couple of minutes to complete. The questions are basic but will give us guidance on what areas are showing improvement and what areas we need to focus on:

<https://umsurvey.umn.edu/index.php?sid=94693&lang=um>

## Appendix C

### Survey Instructions for Participants

Dear participants

Thanks very much for your time and effort in supporting my doctoral research. This is completely voluntary. Your information is only used for this research and will be properly kept. When this research is completed all the data will be destroyed. You are free to stop completing the survey anytime you want.

In order to protect your identity, you don't write your name on the survey. If you don't feel comfortable give any information, please just leave it blank. You will be asked to give your age, gender, academic status, years of work experience, job status and marital status at the end of the survey.

For any further questions please feel free to contact Wei Sun at :

Email: [sunwei@tjfsu.edu.cn](mailto:sunwei@tjfsu.edu.cn)

Tel: 022-23281181

I am very happy to answer any question related to the research. Thanks again sincerely for your support.

Sun Wei