ENGLISH VOCABULARY LEARNING STRATEGIES OF SENIOR HIGH SCHOOL STUDENTS

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วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาภาษาอังกฤษศึกษา มหาวิทยาลัยเทคโนโลยีสุรนารี ปีการศึกษา 2552

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งานวิจัยนี้มีจุดมุ่งหมายเพื่อศึกษาเกี่ยวกับกลวิธีการเรียนรู้คำศัพท์ภาอังกฤษของนักเรียน เมี๋ยว (Miao) ระดับมัธยมปลายในเขตปกครองตนเองฉินตงหนาน (Qiandongnan) ณ เมืองกุ้ยโจ ประเทศจีน (Guizhou, China) วัตถุประสงค์ของการศึกษามีคังนี้ 1. เพื่อสำรวจความเชื่อของ นักเรียนเมี๋ยวเกี่ยวกับการเรียนรู้คำศัพท์ 2. เพื่อสำรวจกลวิธีการเรียนรู้คำศัพท์ของนักเรียน 3. เพื่อศึกษาความแตกต่างในกลวิธีการเรียนรู้คำศัพท์ของนักเรียนหญิงและชายว่า 4. เพื่อค้นหากลวิธี เฉพาะในการเรียนรู้คำศัพท์ของนักเรียนเมี๋ยว

ตัวอย่างประชากรที่ใช้ในการศึกษาครั้งนี้มีคือนักเรียนชั้นมัธยมศึกษาปีที่ 5 (เกรด 11) จำนวน 450 คนจากโรงเรียนระดับมัธยมศึกษาตอนปลายในเขตปกครองตนเองฉินตงหนานโดยใช้ แบบสอบถามและการสัมภาษณ์ และนำข้อมูลมาวิเคราะห์ทั้งเชิงปริมาณและเชิงคุณภาพ แบบสอบถามใช้เก็บข้อมูลเรื่องความเชื่อเกี่ยวกับการเรียนรู้คำศัพท์ของนักเรียนเมื่ยวและรายงาน ส่วนตัวเกี่ยวกับกลวิธีการเรียนคำศัพท์ การสัมภาษณ์ใช้เก็บข้อมูลเชิงลึกเกี่ยวกับทัศนคติของ นักเรียนเมี้ยวที่มีต่อการเรียนศัพท์ภาษาอังกฤษและกลวิธีการเรียนศัพท์ภาษาอังกฤษ ความเที่ยงตรง ของแบบสอบถามและการสัมภาษณ์ใช้ค่าดัชนีความสอดคล้องระหว่างข้อคำถามกับเนื้อหา ค่าความ น่าเชื่อถือของแบบสอบถามคือ 0.818 และการสัมภาษณ์คือ 0.833 ความน่าเชื่อถือของ แบบสอบถามคำนวณโดยโปรแกรม SPSS เวอร์ชั่น 16.0 ใค้ค่าความน่าเชื่อถือของแบบสอบถามที่ ระดับ 0.944 (Cronbach alpha)

ผลการวิจัย

- 1. นักเรียนเมี้ยวในระดับมัธยมปลายเชื่อว่า "ควรเรียนและใช้คำศัพท์ และคำศัพท์นั้นจะ เรียนรู้ในบริบท" นักเรียนยังมีความเชื่อว่า "คำศัพท์จะจดจำโดยแยกออกจากบริบทได้"
- 2. กลวิธีการเรียนคำศัพท์แบ่งออกเป็น 4 ประเภท กลวิธีการเรียนรู้หรือกลวิธีพุทธิ ปัญญา (cognitive strategies) ถูกใช้อย่างสม่ำเสมอ ส่วนกลวิธีการแปล (translation strategies) ถูกนำมาใช้น้อยที่สุด ส่วนกลวิธีย่อยของทั้งสี่กลวิธีนั้น กลวิธีการใช้ พจนานุกรม (dictionary strategies) ถูกนำมาใช้มาก ในขณะที่กลวีการสื่อสาร (communicate strategies) ถูกนำมาใช้น้อยที่สุด

- 3. เมื่อเปรียบเทียบระหว่างเพศหญิงและเพศชาย เพศชายมีแนวโน้มใช้กลวิธีอภิปัญญา (metacognitive strategies) และกลวิธีการแปล (translation strategies)บ่อยกว่าเพศ หญิง แต่ กลวิธีพุทธิปัญญา และ กลวิธีทางจิตวิสัยและสังคม (social /affective strategies) ถูกใช้ไม่มาก
- นักเรียนเมี้ยวในระดับมัธยมปลายมีกลวิธีในการเรียนคำศัพท์แต่ไม่มาก กลวิธี
 ดังกล่าวเกี่ยวข้องกับลักษณะเด่นเฉพาะของภาษา และวัฒนธรรมของเมี้ยว (Miao)
 ในการเรียนศัพท์ภาษาอังกฤษ ประเด็นที่ 1 คือความสอดคล้องของเสียงของคำใน
 ภาษาเมี้ยว ประเด็นที่ 2 คือความสอดคล้องของความหมายของภาษาเมี้ยว และ
 ประเด็นที่ 3 คือความสอดคล้องของสัณฐานของวัตถุและสัตว์บางอย่าง

สาขาวิชาภาษาอังกฤษ ปีการศึกษา 2552 ลายมือชื่อนักศึกษา____ ลายมือชื่ออาจารย์ที่ปรึกษา SIXIANG PENG: ENGLISH VOCABULARY LEARNING

STRATEGIES OF SENIOR HIGH SCHOOL STUDENTS. THESIS

ADVISOR: SARIT SRIKHAO, Ph.D., 106 PP.

ENGLISH VOVCABULARY/LEARNING STRATEGY/SENIOR HIGH

SCHOOL/MIAO STUDENTS

This study aims to carry out an in-depth investigation on how the Miao students in senior high schools in Qiandongnan Miao and Dong Autonomous Prefecture in Guizhou Province, P. R. China learn English vocabulary. The purposes of this study were as follows: 1) to explore the Miao students' beliefs in English vocabulary learning; 2) to explore the Miao students' general strategies used in English vocabulary learning; 3) to find out if there were any differences in vocabulary learning strategies used by the male and female Miao students; and 4) to find out the

specific strategies the Miao students used in English vocabulary learning.

Four hundred and fifty 11th grade students from six senior high schools in Qiandongnan Miao and Dong Prefecture participated in the study. The questionnaire and the semi-structure interview were both quantitatively and qualitatively used to analyze the collected data. The questionnaire was used to elicit the Miao students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies, and the semi-structure interview was used to elicit more insight information about the Miao students' opinions in English vocabulary learning and their strategies. The validity of the questionnaire and the interview was checked by IOC. The result of

the questionnaire was 0.818, and that of the interview was 0.833. The reliability of the questionnaire was calculated by SPSS program version 16.0. The reliability (Cronbach alpha) of the questionnaire was found to be 0.944.

- Most of the Miao students in the senior high schools believed that "words should be studied and put to use" and "words should be acquired in context" while they also held a belief that "words can be memorized in isolation".
- 2. As for the four categories of vocabulary learning strategies, cognitive strategies were most commonly used, while translation strategies were least commonly used. Of the individual items under the sub-categories of the four strategies, "dictionary strategies" was most commonly used, while "communicate strategies" was least commonly used.
- Compared with the female Miao students, the male Miao students tended to use metacognitive and translation strategies more frequently, but they used cognitive and social/affective strategies less frequently.
- 4. The Miao students in the senior high schools, though not many, did have their own strategies in learning English vocabulary. These strategies were related to some unique natures of the Miao language and culture i.e. the sounds of a word, the meaning of a word, and the shape of certain objects or animals.

Scholl of English	Student's signature	
-	_	
Academic Year 2009	Advisor's signature	

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TABLE OF CONTENTS

Page
ABSTRACT (THAI)
ABSTRACT (ENGLISH)III
ACHNOWLEDGEMENTSV
TABLE OF CONTENTSVII
LIST OF TABLESXII
LIST OF FIGURESXIII
LIST OF ABBREVIATIONSXIV
CHAPTER
1. INTRODUCTION
1.1 Background
1.2 General Statement of the Problem5
1.2.1 English Teaching and Learning in Ethnic Regions5
1.2.2 Senior High School English Curriculum and
NMET in China6
1.2.3 Factors Influencing English Language Learning6
1.2.4 Research in English Teaching and Learning in Ethnic Regions7
1.3 Purposes of the Study7
1.4 Research Questions

	Page
1.5 Significance of the Study	9
1.6 Limitation of the Study	9
1.7 Definitions of Terms	11
1.8 Outline of the Thesis	12
1.9 Summary	14
2. RELATED LITERATURE REVIEW	15
2.1 Language Learning Strategies (LLS)	15
2.1.1 The definitions of learning, strategies and LLS	15
2.1.1.1 Learning	15
2.1.1.2 Strategies	16
2.1.1.3 Language Learning Strategies	16
2.1.2 LLS Classification	18
2.1.2.1 Oxford's LLS Classification	18
2.1.2.2 Cohen's LLS Classification	20
2.1.2.3 O'Malley & Chamot's LLS Classification	20
2.1.2.4 Stoffer's LLS Classification	23
2.1.2.5 The Classification of LLS in China	23
2.2 Vocabulary Learning Strategies(VLS)	24
2.2.1 The Definitions of VLS	24

Page
2.2.2. The Classification of VLS
2.2.2.1 The Classification of VLS in Other Countries25
2.2.2.2 The Classification of VLS in China
2.3 Previous Researches on Ethnic Students' LLS and VLS in China31
2.4 Summary
3. RESEARCH METHODOLOGY34
3.1 Population and Participants34
3.2 Research Instruments
3.2.1 Questionnaire
3.2.2 Interview
3.2.3 Validity and Reliability Check
3.2.3.1 The Content Validity Check
3.2.3.2 The Reliability Check for the Questionnaire
3.3 Data Collection
3.3.1 Procedure for the Questionnaire
3.3.2 Procedure for the Semi-Structured Interview41
3.4 Data Analysis42
3.4.1 Quantitive Analysis—ANOVA42
3.4.2 Qualitative Analysis

Page
3.5 The Pilot Study42
3.5.1 Participants
3.5.2 Research Instruments
3.5.3 Data Collection
3.5.4 Data Analysis44
3.5.5 Results
3.5.5.1 The Reliability Check for the Questionnaire44
3.5.5.2 Students' Beliefs on Vocabulary Learning45
3.5.5.3 Student's Self-Reports to VLS46
3.5.5.4 VLS Use between Male and Female Students
3.5.5.5 Semi-structured Interview
3.5.6 Implications for the Main Study49
3.5.7 Conclusion
3.6 Summary51
4. DATA ANALYSIS51
4.1 An Analysis of the Questionnaire on the Miao Students' VLS52
4.1.1 The Miao Students' Beliefs on English Vocabulary Learning53
4.1.2 VLS Use Reported by 409 Miao Senior High School
Students in QMDP54

Page
4.2 An Analysis of the Semi-structured Interview60
4.2.1 The 55 Interviewees' Beliefs on English Vocabulary Learning61
4.2.2 The Overview of the Responses to the Four Categories of VLS61
4.2.3 The 55 Interviewees' Views on Mandarin's Role(s)62
4.2.4 The 55 Interviewees' Views of the Specific Strategies Use63
4.3 Results
4.3.1 Answer to Research Question 164
4.3.2 Answer to Research Question 265
4.3.3 Answer to Research Question 365
4.3.4 Answer to Research Question 4
4.4 Summary66
5. CONCLUSIONS
5.1 Conclusions
5.2 Pedagogical Implications
5.3 Limitations of the Study72
5.4 Recommendations for Further Studies
REFERENCES75
APPENDICES85
CURRICULUM VITAE

LIST OF TABLES

Table Page
Table 1.1 Distribution of the Miao Population in QMDP2
Table 2.1 O'Malley & Chamot's classification of LLS
Table 3.1 The Reliability Check for VLSQ45
Table 3.2 Standard Deviation and Mean Scores of Students' Beliefs45
Table 3.3 The Mean Score and Standard Deviation of the 4 Categories of VLS46
Table 3.4 The Mean Score and Standard Deviation of Sub-Categories of VLS47
Table 3.5 The Mean Score and Standard Deviation of the 4 Categories of
VLS Use between Male and Female Students
Table 4.1 Standard Deviation and Mean Scores of Students' Beliefs53
Table 4.2 Standard Deviation and Mean Scores of the Miao Students'
Reported Overall Strategy Use
Table 4.3 The Mean Score and Standard Deviation of the Four Categories of VLS55
Table 4.4 The Mean Score and Standard Deviation of Sub-Categories of VLS56
Table 4.5 The Mean Score and Standard Deviation of the 4 Categories of
VLS Use between Male and Female Students59
Table 4.6 The Mean Score and Standard Deviation of the 4 Categories of
VLS Use by majors (Arts and Science)60
Table 4.7 The 55 interviewees' beliefs on English vocabulary learning

LIST OF FIGURES

Figure	Page	
Figure 1.1 Distribution of the Miao Population in QMDP	3	

LIST OF ABBREVIATIONS

ANOVAAna	alysis of Variance
EFLEn	glish as a Foreign Language
IASIte	m Analysis
IOCIter	m Objective Congruence Index
L1/ L2/ FLFir	rst / Second/ Foreign Language
LLSLai	nguage Learning Strategies
MOEMin	nistry of Education of PRC
NBSNat	tional Bureau of Statistics of China
NECThe	e New English Curriculum
NMETNa	tional Matriculation English Test
QMDPQia	andongnan Miao & Dong Prefecture
SPSSSta	tistics Package for Social Science
TEFLTea	ching English as a Foreign Language
TESLTea	sching English as a Second Language
VLSVoc	cabulary Learning Strategies

CHAPTER 1

INTRODUCTION

This chapter gives a brief introduction to the study which focuses on a Miao group in a very special ethnic region—southeast of Guizhou province in China. It covers the background of the study, the purposes of the study, research questions, the significance, limitation of the study, the outline of the thesis, and a summary of this chapter.

1.1 Background

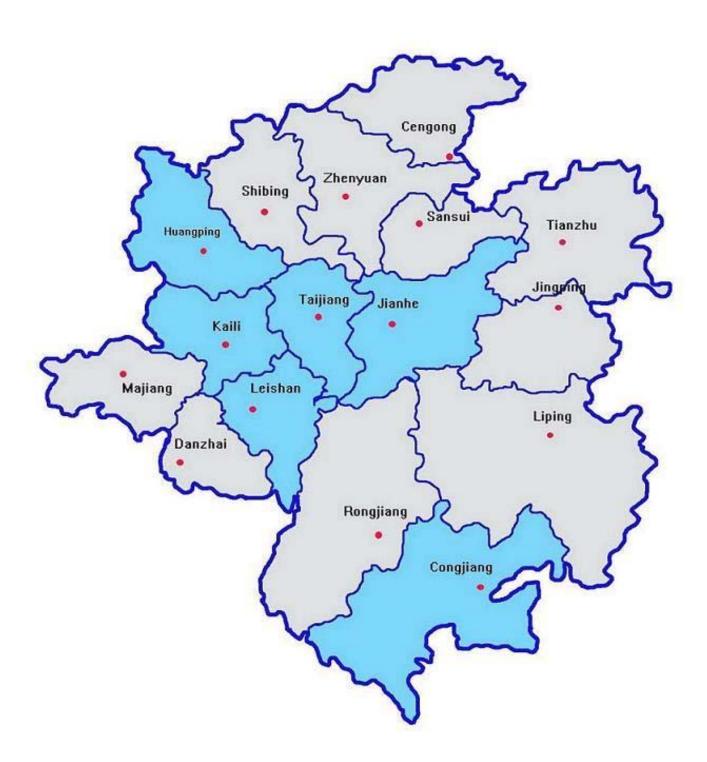
China is a unified, multi-national country with 56 nationalities in all. Among them, Han Chinese account for 91% of the total Chinese population and the other 55 ethnic groups make up the remaining 9%. Every ethnic group has its own language, unique cultural and educational background. Miao (is also called Hmong in English) is the fifth largest one among the ethnic groups with the population of more than 8,000,000 (NBS, 2003). According to the constitution, regional autonomy is practiced in areas where people of ethnic minorities live in compact communities. This is one of the basic political systems of China. There are 30 ethnic autonomous prefectures in China. Guizhou is a multi-national province with three ethnic autonomous prefectures. Qiandongnan Miao and Dong Autonomous Prefecture

(QMDP) is one of the prefectures, which is in south-east of Guizhou province, and has the largest ethnic population among 30 ethnic autonomous prefectures in China. It also has the highest concentration of Miao groups in China (NBS, 2008). There are 15 counties and a capital city in the prefecture. Most of senior high schools are for minorities. Kaili, Huangping, Taijiang, Congjiang, Jianhe and Leishan are the main counties where Miao live in concentrated communities (see Table 1.1 and Figure 1.1).

Table 1.1 Distribution of the Miao Population in QMDP

County/City	Population	Percentage (%)
Kaili	274,238	14.91
Huangping	161,211	8.77
Taijiang	135,827	7.39
Congjiang	129,626	7.05
Jianhe	112,950	6.14
Leishan	110,413	6.00
Total (6 counties)	924,265	50.26
Other 10 counties	914,629	49.74
Total (in QMDP)	1,838,894	100

Figure 1.1 Distribution of the Miao Population in QMDP



With the rapid development of economy, English has been playing more and more important roles in China. In accordance with the actual conditions in the ethnic areas. Chinese central government has worked out and adopted a series of policies and measures to assist these areas in developing their economies, and to mobilize and organize the developed areas where Han Chinese live for support in terms of economy, culture and education. In 1999, the central government made an important decision to implement the Great Western Development Strategy (GWDS). The policy covers 6 provinces (Gansu, Guizhou, Qinghai, Shanxi, Sichuan, and Yunnan), 5 autonomous regions (Guangxi, Inner Mongolia, Ningxia, Tibet, and Xinjiang), and 1 municipality (Chongqing). The main components of the strategy include the development of infrastructure (transport, hydropower plants, energy, and telecommunications), enticement of foreign investment, increased efforts on ecological protection (such as reforestation), promotion of education, and retention of talent flowing to richer provinces. Many measures have been taken to improve English Language teaching from primary school to university. As a result, bilingual teaching (teaching in both Mandarin and ethnic languages—Miao or Dong language) for ethnic primary and junior high school students in countryside is one of the specific policies in QMDP.

1.2 General Statement of the Problem

1.2.1 English Teaching and Learning in Ethnic Regions

English is a worldwide language. With world multipolarization and economic globalization, English is playing more and more important roles in the world. The Great Western Development Strategy needs more people with high English proficiency. That requires both qualified teachers and students with high English proficiency. However, English teaching in Qiandongnan is quite different from other developed areas. Firstly, Qiandongnan is a remote mountainous area, so educational conditions are comparatively poorer than those in other areas. Secondly, every ethnic group has its own language, but most of which have no written scripts/languages of their own. Thirdly, all the ethnic groups learn English as a foreign language (FL), not second language (L2), because their L2 is Putonghua/Mandarin. As a result, English teachers in Qiandongnan encounter many difficulties in teaching English as an FL in primary and middle schools even though the prefectural government has taken measures on the improvement of English teaching, e.g. bilingual teaching. As for the ethnic students, most of them cannot find an effective way to learn English. Ethnic cultures interfere the students' English learning. That is reflected in strategies employed in learning English, especially in English vocabulary leaning. Actually, Miao and Dong might have their own strategies in learning English because they have their own languages and unique cultures.

1.2.2 Senior High School English Curriculum and National MatriculationEnglish Test (NMET) in China

As senior high school students, they are required to take English courses as one of the three core courses (the other two are Chinese and Mathematics). To go to college or university, students must take National Matriculation English Test (NMET) which is held in June every year. In Chinese educational system, each academic year is divided into two semesters, each of which lasts twenty weeks. As for English courses, there is a national new English curriculum (NEC) / (language benchmarks) which were published by Ministry of Education of the People's Republic of China (MOE) in 2003. There are 9 levels in the NEC, which requires different English proficiency ranging from primary school to senior high school. According to the NEC, senior high school students are required to reach level 9 before they go to college or university. In senior high school, English is offered 4 hours of classroom training per week. There are different requirements on different language skills (listening, speaking, reading, and writing). As to the vocabulary in level 9, the students are required to master at least 3,400 English words (MOE, 2003) (See Appendix I).

1.2.3 Factors Influencing English Language Learning

There are number of factors which influence the success of English language learning. Since 1970s, the research focusing on second language acquisition has shifted from teaching to learning, and increasing studies have been

done from learners' perspective. Lots of studies have paid much attention to the relationship between learners' achievements and their individual differences—personality, motivation, aptitude, learning styles, learning strategies, gender and age, etc (Ellis, 1997). Learners and learning come to the center of the research: the differences of learning and learners are highlighted (Wang and Jin 2008, p. 30). One of the learners' variables—learning strategies, has been suggested as an important factor affecting learners. Vocabulary learning strategies is the core part of learning strategies.

1.2.4 Research in English Teaching and Learning in Ethnic Regions

In the past 30 years, many researchers (Rubin 1975, Naimen et al. 1978, Weinstein and Mayer 1986, Huang and Van Naersson 1987, Mayer 1988, Oxford 1990, 1992, 1993, 1996, Wen 1996, 2003, 2004, Cheng and Zheng 2002) focused on learning strategies, and most of them made great success. However, most of them take undergraduates as their research population, and few researchers focus on the English vocabulary learning strategies employed by ethnic students. Very few of research studies focus on the Miao students in senior high school in China.

1.3 Purposes of the Study

With the stated problems in **1.2.1**, the main focus of this study was to investigate in-depth how the Miao students in senior high schools in QMDP learn English vocabulary. The purposes of this study were as follows:

- 1) To explore the Miao students' beliefs on English vocabulary learning.
- 2) To explore the Miao students' general strategies used in English vocabulary learning.
- 3) To find out if there are any differences of vocabulary learning strategies used by the Miao students with gender.
- 4) To find out the Miao students' specific strategies in English vocabulary learning.

1.4 Research Questions

In order to accomplish the purposes of the study, the following four research questions below guided the present study:

- 1) What beliefs do the Miao students hold on English vocabulary learning?
- 2) What strategies are most and least commonly employed by the Miao students in English vocabulary learning?
- 3) Are there any differences of vocabulary learning strategies used by the Miao students with gender?
- 4) Do the Miao students have their own strategies in English vocabulary learning? If so, what are they?

1.5 Significance of the Study

Based on the questions and problems of English vocabulary learning strategies, this study made an attempt to help both teachers and students solve the problems above and enhance the development of learning and teaching English vocabulary in QMDP, and even in other ethnic regions in China. The effective English vocabulary learning strategies could enable the senior high school students to improve their English proficiency so that they could make greater progress in learning English further in college or /and university. The specific learning strategies employed by the Miao students would undoubtedly enable the teachers to explore different strategies in vocabulary teaching and training both in and out of the classroom. Furthermore, the study could enable more researchers to focus their studies on vocabulary learning strategies among different ethnic groups so as to improve English teaching and learning in ethnic regions in China.

1.6 Limitations of the Study

The strengths of this study were the use of both qualitative and quantitative methods yielding the process of in-depth data collection and analysis so that the findings of the study will be validated. However, like other research studies so far in the field of L2 vocabulary acquisition, the study brought in certain limitations which should be clarified to overcome doubts about the reliability and validity of the study. The following limitations applied to the present study. Firstly, the population of this

study was limited to the Miao population of Qiandongnan in Guizhou province, China. It might not be considered as representatives of the other Miao regions even though it has the largest Miao population in China. The population of the Miao students in senior high school might be the limitation because they were inadequate to represent the overall Miao students in China. Therefore, a large-scale survey study in the future is required to make the findings more generalizable.

Secondly, the purposive sampling procedure of this study decreased the generalizability of findings even though random sampling was used as well. The participants were chosen based on convenience and availability. This study was not generalized to all counties of senior high schools in QMDP since the aim for this study was to investigate in-depth how the Miao students in senior high schools learn English vocabulary.

Thirdly, in order to investigate how the Miao students in senior high schools learn English vocabulary, the research questions in the study only focused on the Miao students' beliefs in English vocabulary learning and general strategies of English vocabulary learning. This was also a limitation because no other questions were conducted such as correlation between strategies use and English proficiency, differences strategies used between/among different grades, etc.

1.7 Definitions of Terms

The following definitions are used in this study:

1.7.1 Miao

Miao, also called Hmong in English, is one of the 55 ethnic groups in China. In this study, it refers to the ethnic groups in southeast of Guizhou province, which is the fifth largest one among the 55 ethnic groups in China.

1.7.2 Ethnic autonomous prefecture

The ethnic autonomous prefecture is one of the important ethnic policies in China, which the people in ethnic regions have a number of autonomous rights.

There are 30 ethnic autonomous prefectures in China and Oiandongdongnan Miao and Dong Autonomous Prefecture is one of them.

1.7.3 Bilingual Language Teaching

Bilingual Language Teaching is a one of the educational policies for ethnic minorities in China. According to the policy, both Mandarin and ethnic language are used in classes from Grade 1 to Grade 9 in ethnic regions. For instance, ethnic language and culture courses are taught in ethnic languages while general disciplines are lectured in Chinese. According to NBS (2008), throughout the country, there are about ten thousand schools which conduct teaching in two languages, with the attendance of about six millions of students.

1.7.4 National Matriculation English Test

National Matriculation English Test is a nation-wide English test for senior high school students before they enter a college or university in China.

1.7.5 New English Curriculum (NEC)

New English Curriculum (NEC) is a new nation-wide curriculum (English language benchmarks) for basic English teaching and learning in China. The curriculum is divided into 9 levels which range from primary school, junior high school, to senior high school.

1.7.6 Middle School

Middle School refers to both junior high schools and senior high schools in China, which is from grade 7 to 12.

1.7.7 Item-Objective Congruence Index (IOC)

Item-Objective Congruence Index (IOC) described by Hambleton and Rovinelli (1986, pp. 287-302) is utilised to assess the degree to which an item has validity. The formula (IOC= $\sum R/N$) is based in the assumption that, in the ideal case, an item would be matched with only one objective of the set.

1.8 Outline of the Thesis

This thesis is composed of five chapters.

Chapter One is the background of the present study. It provides a brief introduction to the study which focuses on a Miao group in a very special ethnic

region—southeast of Guizhou province in China. It covers the background of the study, the purposes of the study, research questions, the significance and limitation of the study.

Chapter Two discusses the relevant research related to English learning strategies and vocabulary learning strategies in three parts. The first part is research studies on language learning strategies. The second part is research studies on vocabulary learning strategies. In the last part, research studies on ethnic students' learning strategies and vocabulary learning strategies are reviewed.

Chapter Three provides the principles of the present research methodology, which includes research design, methods of data collection, data analysis and a pilot study. It starts with the population of the present study, research instruments, methods of data collection as well as data analysis respectively.

Chapter Four presents the results of the data analysis related to the main study. Both quantative and qualitative data analysis are used to analyze the questionnaire and the semi-structured oral interview.

Chapter Five is the last chapter of the thesis. It draws a conclusion and gives a discussion to the results of the study. It consists of four sections. The first section summarizes all the results of the present study in terms of the Miao senior high school students' beliefs on English vocabulary learning and how English vocabulary learning strategies are employed by them, the second section discusses and proposes pedagogical implications in the EFL context in Ethnic regions in China,

the third section reports the limitations of the study, and the last section suggests the recommendations for future studies.

1.9 Summary

This chapter gave a brief introduction to the study. It first described the background of the study, and then, the general statement of problems in TEFL in QMDP, the purposes of the study, research questions, the significance of the study, limitation of the study, and some definitions of frequently used terms in the study were briefly discussed. An outline of this study was given in the final part of the chapter. In the next chapter, a review of the related literature on learning strategies and vocabulary learning strategies in the present study will be presented.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This chapter discusses the relevant research related to English learning strategies and vocabulary learning strategies. Three parts are classified: 1) research studies on language learning strategies; 2) research studies on vocabulary learning strategies; and 3) research studies on ethnic students' learning strategies and vocabulary learning strategies.

2.1 Language Learning Strategies (LLS)

2.1.1 The definitions of learning, strategies and LLS

2.1.1.1 Learning

There are a variety of definitions on learning. According to Webster's Dictionary, learning is defined as "the act or experience of one that learns; knowledge of skill acquired by instruction or study; modification of a behavioral tendency by experience." Learning is often defined as a change in behavior (Birkenholz, 1999), which is demonstrated by people implementing knowledge, skills, or practices derived from education. Brown (2001) defined learning as "learning is acquiring or getting of knowledge of a subject or a skill by study, experience, or instruction" (p. 7). While in the opinion of Rubin (1987), learning is "the process by which information is obtained, stored, retrieved, and used" (p.29).

2.1.1.2 Strategies

What are strategies? According to Brown (2001), "strategies are those specific 'attacks' that we make on a given problem. They are the moment-by-moment techniques that we employ to solve 'problems' posed by second language input and output" (p. 114). While Cohen (2000) stated that the term strategies has, in fact, been used to refer both to general approaches and to specific actions or techniques used to learn a second language (p. 9).

2.1.1.3 Language Learning Strategies (LLS)

The definition of learning strategies is not uniform, either. In the past 25 years, there is no consensus on the definition of language learning strategies due to different interpretations of strategy and learning. Different research studies have given different definitions of language learning strategies. Some definitions of learning strategies produced by different researchers are as follows:

Stern (1983) defined strategy as "...best reserved for general tendencies or overall characteristics of the approach employed by the language learner, leaving techniques as the term to refer to particular forms of observable learning behavior" (as cited in Rod Ellis 1999, p. 531). Weinstein and Mayer (1986) stated that learning strategies have learning facilitation as a goal and are intentional on the part of the learner. The goal of strategy use is to "affect the learner's motivational or affective state, or the way in which the learner selects, acquires, organizes, or integrates new knowledge" (as cited in O'Malley and Chamot 1990, p.43). Tarone (1983) defined

learning strategy as "an attempt to develop linguistic and sociolinguistic competence in the target language—to incorporate these into one's interlanguage competence" (p. 67). Chamot (1987) stated that "learning strategies are techniques, approaches or deliberate actions that students take in order to facilitate the learning, recall of both linguistic and content area information" (pp. 71-84). Rubin (1987) stated that "learning strategies are strategies that contribute to the development of the language system that the learner constructs and affect learning directly" (p. 22). Oxford (1992) defined learning strategies as "specific actions, behaviours, steps, or techniques that students (often intentionally) use to improve their progress in developing L2 skills. These strategies can facilitate the internalization, storage, retrieval, or use of the new language. Strategies are tools for the self-directed involvement necessary for developing communicative ability" (p.18-22). Ellis (1997) stated that "learning strategies are the particular approaches or techniques that learners employ to try to learn an L2. They can be behavioural (for example, repeating new words aloud to help you remember them) or they can be mental (for example, using the linguistic or situational context to infer the meaning of a new word)" (p. 76). Cohen (1998) stated "that learning strategies are learning processes which are consciously selected by the learner. The words "consciously selected" are important because they demonstrate the special character of strategy" (as cited in Ellis 1999, p. 531). Wenden (1998) defined learning strategies as "mental steps or operations that learners use to learn a new language and to regulate their efforts to do so" (p. 18).

From the definitions above, we can see there are some differences in the following aspects. Firstly, Oxford (1992) viewed language learning strategies as only behavioral, while in Weinstein and Mayer (1986) and Ellis' (1997) view, they are both behavioral and mental. Secondly, Chamot (1987) stated that learning strategies are "deliberate actions", and Cohen (1998) thought of learning strategies as conscious, but other researchers avoid addressing it. Thirdly, Stern (1983) believed that learning strategies can only refer to "approach", and "technique" is more concrete, however, other researchers use the term "strategies" to refer to the kind of behaviors that Stern (1983) called techniques. Finally, Rubin (1987) suggested that language learning strategies have direct effect on language development, while other researchers look on it as more indirect.

2.1.2 LLS Classification

As above 2.1.1 mentioned, there are different definitions of language learning strategies. Meanwhile, there are different criteria to classify learning strategies.

2.1.2.1 Oxford's LLS Classification

Oxford (1990) identified two main types of language learning strategies, direct and indirect. Direct strategies are the strategies that directly involve the target language in the sense that they need mental processing of the language. Indirect strategies indirectly support language learning by arranging, evaluating, lowering anxiety, encouraging oneself, cooperating with others, asking questions, and other

ways. Direct strategies include memory, cognitive and compensation strategies. Memory strategies are those that help students to store and retrieve information. Cognitive strategies enable learners to understand and produce new language. Compensation strategies allow learners to overcome knowledge gaps to communicate. Indirect strategies include three strategies: Metacognitive, affective and social strategies. Metacognitive strategies allow learners to control their own learning through organizing, planning, and evaluating. Affective strategies help learners gain control over their emotions, attitudes, motivations, and values. Social strategies help learners interact with other people.

The detailed Oxford's (1990) taxonomy of language learning strategies is as follows:

• Direct strategies

- 1. Memory strategies
 - A. Creating mental linkages
 - B. Applying images and sounds
 - C. Reviewing well
 - D. Implying action
- 2. Cognitive strategies
 - A. Practicing
 - B. Receiving and sending messages
 - C. Analyzing and reasoning
 - D. Creating structure for input and output
- 3. Compensation strategies
 - A. Guessing intelligently
 - B. Overcoming limitations in speaking and writing

Indirect strategies

- 1. Metacognitive Strategies
 - A. Centering your learning
 - B. Arranging and planning your learning
 - C. Evaluating your learning
- 2. Affective Strategies

- A. Lowering your anxiety
- B. Encouraging yourself
- C. Taking your emotional temperature
- 3. Social Strategies
 - A. Asking questions
 - B. Cooperating with others
 - C. Empathizing with others

2.1.2.2 Cohen's LLS Classification

Cohen (2000) suggested that language learning strategies include strategies for identifying the material that needs to be learned, distinguishing it from other material if needed to be, grouping it for easier learning (e.g. grouping vocabulary by category into nouns, verbs, adjectives, adverbs, and so forth), having repeated contact with the material (e.g. through classroom tasks or the completion of homework assignments), and formally committing the material to memory when it does not seem to be acquired naturally (whether through rote memory techniques such as repetition, the use of mnemonics, or some other memory technique).

2.1.2.3 O'Malley and Chamot's LLS Classification

O'Malley and Chamot (1990) have studied the use of strategies by learners of English as a second language (ESL) in the United States. Typically, strategies are divided into three main categories (see Table 2.1). "Metacognitive" is a term used in information-processing theory to indicate an "executive" function, strategies that involve planning for learning, thinking about the learning process as it is taking place, monitoring of one's production or comprehension, and evaluating learning after an activity is completed. "Cognitive" strategies are limited to specific learning tasks and

involve more direct manipulation of the learning material itself. "Social/affective" strategies have to do with social-mediating activity and transacting with others, it will be noted that the latter category, along with some of the other strategies listed in Table 2.1, are actually communication strategies. The detailed classification of O'Malley and Chamot (1990) is as follows:

Table 2.1: O'Malley and Chamot's classification of LLS

LEARNING STRATEGIES	DESCRIPTION
METACOGNITIVE	
Advance Organizers	Making a general but comprehensive preview of the organizing concept or principle in an anticipated learning activity.
Directed Attention	Deciding in advance to attend in general to a learning task and to ignore irrelevant distracters.
Selective Attention	Deciding in advance to attend specific aspects of language input or situational details that will cue the retention of language input.
Self-monitoring	Planning for and rehearsing linguistic components necessary to carry out an upcoming language task.
Delayed production	Consciously deciding to postpone speaking to learn initially through listening comprehension.
Self-evaluation	Checking the outcomes of one's own language learning against an internal measure of completeness and accuracy.
COGNITIVE	
Repetition	Imitating a language model including overt practice and silent rehearsal.

LEARNING STRATEGIES	DESCRIPTION
Resourcing	Defining or expanding a definition of a word or concept through use of target language reference material.
Directed Physical Response	Relating new information to physical action as with directives.
Translation	Using the first language as a base for understanding and/or producing the second language.
Grouping	Recording or reclassifying and perhaps labeling the material to be learned based on common attributes.
Note-making	Writing down the main idea, important points outline, or summary of information presented orally or in writing.
Deduction	Consciously applying rules to produce or understand the second language.
Imagery	Relating new information to visual concepts in memory via familiar easily retrievable visualizations, phrases or locations.
Auditory Representation	Retention of the sound or similar sound for a word, phrase or longer language sequence.
Key word	Remembering a new word in the second language by 1) identifying a familiar word in the first language that sounds like or otherwise resembles the new word and 2) generating easily recalled images of some relationship with the new word.
Contextualization	Placing a word or phrase in a meaningful language sequence.
Elaboration	Relating new information to other concepts in memory.
Transfer	Using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task.
Inference	Using available information to guess meanings of new items, predict outcome or fill in missing information.

LEARNING STRATEGIES	DESCRIPTION
SOCIAL/AFFECTIVE	
Cooperation	Working with one or more peers to obtain feedback, pool information or model a language activity.
Question for clarification	Asking a teacher or other native speaker for repetition paraphrasing, explanation and/ or examples.

2.1.2.4 Stoffer's LLS Classification

Recent research by Stoffer (1995) shows considerable promise in providing an empirical basis for category assignment. A factor analysis of the 53 items on her vocabulary strategy survey showed the following nine categories:

- 1. Strategies involving authentic language use
- 2. Strategies involving creative activities
- 3. Strategies used for self-motivation
- 4. Strategies used to create mental linkages
- 5. Memory strategies
- 6. Visual/auditory strategies
- 7. Strategies involving physical action
- 8. Strategies used to overcome anxiety
- 9. Strategies used to organize words.

2.1.2.5 The Classifications of LLS in China

Research into language learning strategies is also studied by many researchers in China. Wen (1993) divided strategies into two main classes: management strategies and language learning strategies. Cheng and Zheng (2002) divided strategies into four classes: cognitive, metacognitive, affective, and communicative strategies. In addition, there is also a general classification in NEC

(2003): The New English Curriculum (NEC), which is a new nation-wide curriculum (English language benchmarks) for English teaching and learning in China, divides English language learning strategies into cognitive strategies, control strategies, communicative strategies, and resource strategies, etc. (MOE, 2003). Cognitive strategies refer to the approaches and methods which learners use to perform specific learning tasks. Control strategies refer to the strategies which learners plan, implement, evaluate and adjust their learning process and/or learning result(s). Communicative strategies refer to the strategies which learners make good use of opportunities to communicate, maintain and improve communicative competence. Resource strategies refer to strategies which learners effectively use different media to learning and use English language.

2.2 Vocabulary Learning Strategies (VLS)

2.2.1 The Definitions of VLS

Researchers define vocabulary learning strategies just according to the definition of learning strategies. According to Nation (2001), "vocabulary learning strategies are a part of language learning strategies which in turn are a part of general learning strategies" (p. 217). Based on O'Malley and Chamot's (1990) definition of learning strategies, Schmitt (1997) claimed that learning is "the process by which information is obtained, stored, retrieved and used. Therefore, vocabulary learning strategies could be any which affect this broadly defined process" (p. 203). Nation

(2001), instead of providing a clear-cut definition of vocabulary learning strategies, has opted for listing their characteristics. Nation (2001) stated that "a strategy must involve choice (i.e. there should be several strategies to choose from), be complex (i.e. there should be several steps to learn), require knowledge and benefit from training, and increase the efficiency of vocabulary learning and vocabulary use" (p. 217).

2.2.2. The Classifications of VLS

According to Nation (2001), "there have been a number of attempts to develop taxonomy of vocabulary learning strategies, usually as part of a piece of research into learner's strategy use" (p. 217).

2.2.2.1 The Classification of VLS in EFL Context

The following are some representative classifications:

O'Malley and Chamot (1990) divided vocabulary learning strategies into three categories: cognitive, metacognitive and social/affective. Cognitive strategies are specified as learning steps that learners take to transform new material, for instance, inference, contextual guessing and relating new information to other concepts from memory. Metacognitive strategies involve consciously directing one's own efforts into the learning task. Social/affective strategies involve interaction with another person or taking control of ones' own feelings on language learning.

Gu and Johnson (1996) conducted a questionnaire to investigate Chinese advanced learners' use of English vocabulary learning strategies, they divided

vocabulary learning strategies into two classes: cognitive and metacognitive strategies.

Cognitive strategies include memory strategies, classification strategies, guessing strategies, dictionary strategies, note-taking strategies and activation strategies.

Metacognitive strategies include plan-making strategies, self-evaluating strategies, self-evaluating strategies, self-checking strategies and selectively distributing attention strategies.

Nation (2001) divided vocabulary learning strategies into three general classes: planning, sources and process.

- Planning (Choosing what to focus on and when to focus on it): includes choosing words, choosing the aspects of word knowledge, choosing strategies, and planning repetition
- Sources (Finding information about words): involves analyzing the words, using word part, learning from word cards, using context, using a dictionary, consulting a reference source in L1 and L2, and using parallels in L1 and L2
- Process (Establishing knowledge): includes noticing, retrieving, and generating

Stoffer (1995) conducted a questionnaire which contained 53 items on the vocabulary learning strategy inventory and the strategy inventory for language learning designed to measure specifically vocabulary learning strategies. The findings of her study showed that the 53 items which she has clustered into 9 categories by factor analysis as follows:

- Strategies involving authentic language use
- Strategies used for self-motivation
- Strategies used to organize words
- Strategies used to create mental linkages
- Memory strategies
- Strategies involving creative activities
- Strategies involving physical action
- Strategies used to overcome anxiety
- Visual/auditory strategies

Lawson and Hogben (1996) classified vocabulary learning strategies based on the information obtained through the think-aloud procedure and interviews provided by 15 university students learning Italian in Australia. The individual vocabulary learning strategies were classified under four different classes:

- Repetition: Reading of related word, simple rehearsal, writing of word and meaning, cumulative rehearsal, and testing
- Word Feature analysis: Spelling, word classification, and suffix
- Simple Elaboration: Sentence translation, simple use of context, appearance similarity, and sound link
- Complex Elaboration: Complex use of context, paraphrase, and Mnemonic

Schmitt (1997) has developed a taxonomy of vocabulary learning strategies based on an extensive language learning strategies' taxonomy organized by Oxford's (1990), including memory, cognitive, compensation, metacognitive, affective, and social strategies. The following is the strategy inventory offered by Schmitt (1997):

1. Strategies for the discovery of a new word's meaning

These strategies include determination strategies (analyze part of speech, analyze affixes and roots, check for L1 cognate, analyze any available pictures or gestures, guess meaning from textual context, and use a dictionary(bilingual or monolingual) and social strategies(ask teacher for a synonym, paraphrase, or L1 translation of new word; ask classmate for meaning).

2. Strategies for consolidating a word once it has been encountered

These strategies involve social strategies(study and practice meaning in a group, interact with native speaker), memory strategies(connect word to a previous personal experience, associate the word with its coordinates, connect the word in its synonyms and antonyms, use semantic maps, image word form, image word's meaning, use keyword method, group words together to study them, study the spelling of a word, say new word aloud when studying, use physical action when learning a word), cognitive strategies(verbal repetition, written repetition, word lists, put English labels on physical objects, and keep a vocabulary notebook), and metacognitive strategies (use English-language media—songs, movies, newscasts etc., test oneself with word tests, skip or pass new word, and continue to study word over time).

2.2.2.2 The Classification of VLS in China

Like many researchers on language learning strategies, research studies on vocabulary learning strategies are also focused in China.

According to Wen (1995), there are seven strategies in learning English vocabulary: strategies on clarifying between positive and negative words, context strategies, guessing strategies, dictionary strategies, strategies on combining guessing and dictionary, affixation strategies and classification strategies.

Zhang (2004) divided English vocabulary learning into three stages: unconscious memory stage, comprehension memory stage and digestion stage, which is quiet similar to Gu and Johnson's (1996) classification because they are all related to cognitive and metacognitive strategies.

Ma (2003) divided English vocabulary learning strategies in textbook into four classes: rote memory (including repetition reading, writing and reciting), association memory, independence memory (a single word or meaning), and connection memory (according to context to memorize). The 4 categories of strategies are all about cognitive strategies because they are all about memory strategies which are just one of the sub-categories of cognitive strategies.

Wang (1998) divided English vocabulary learning strategies into seven classes. They are planning, word lists, repetition, association, speech analysis, context, and pragmatic strategies. Yao and Wu (1999) divided English vocabulary memory strategies into nine classes: repetition, association, classification, application, word

lists, context, speech analysis, review, and management strategies. The classifications of Wang (1998), Yao and Wu's (1999) are quiet similar to Gu and Johnson's (1996) classification because the strategies they classify are all related to cognitive and metacognitive strategies.

In summary, as discussed above in **2.2.2.1** and **2.2.2.2**, in the past 25 years, there are many research studies on vocabulary learning strategies in EFL context. As for the classification of vocabulary learning strategies, different researchers divided them into different classes/categories based on different criteria.

The classification of vocabulary learning strategies used in the present study is mainly from Gu and Johnson (1996) and O'Malley and Chamot's (1990) classification, the reasons why their classification is chosen are as follow: 1) O'Malley and Chamot's (1990) classification is reasonable and comprehensive, each of its major categories are described in detail; 2) Gu and Johnson's (1996) classification is one of the most comprehensive classification systems to date; and 3) their classifications accord with the senior high school students in China. They are divided into metacognitive strategies, cognitive strategies, social/affective strategies and translation strategies. According to Oxford (1990), "metacognitive strategies are actions which go beyond purely cognitive devices, and which provide a way for learners to coordinate their own learning process" (p.136). Schmitt (2000) interpreted metacognitive and cognitive strategies as follow: "metacognitive strategies involve decisions about planning, monitoring, and evaluating the best ways to study a new

word. They include, for example, using English-language media (songs, movies, newscasts, etc.), using spaced word practice (expansion of rehearsal), testing oneself with word tests, skipping or passing new word, continuing to study a word over time. Cognitive strategies are the ones that the learner uses to manipulate or transform the target language. The cognitive strategies include using verbal repetition, using written repetition, using word lists, putting English labels on physical objects, and keeping a vocabulary notebook" (p.205). Brown (1987) stated that "social/affective strategies are related to social-mediating activity and transacting with others" (pp.93-94). Social/affective strategies have to do with social mediating activity and interacting with others. Translation will be used as one of the 4 categories of vocabulary learning strategies even though it can be regarded as a sub-category under cognitive strategies because majority of Miao students take English as a foreign language (FL). Translation strategies in the present study include four sub-categories: English-Mandarin (translate English to mandarin), English-Miao (translate English to Miao language), English-Mandarin-Miao (translate English to Mandarin first and then to Miao language), English-Miao-Mandarin (translate English to Miao language first and then to Mandarin) and English-Miao/Mandarin (translate English to either Miao or Mandarin) Strategies.

2.3 Previous Research Studies on Ethnic students' LLS and VLS in China

In the past few years, there were a few research studies on ethnic student's learning strategies and vocabulary learning strategies in China.

In order to investigate how Li ethnic students learn English, Chen (2005) used a questionnaire and an interview to carry out a study on 192 Li ethnic junior high school students in Wuzhishan, Hainan province, where Li ethnic people live in most concentrated communities. Her study revealed that Li ethnic minority students 1) did not tend to employ variety of learning strategies, which include metacognitive, cognitive, and social/effective strategies; 2) seldom used reading strategies because they do not have their own ethnic written words; and 3) tended to use communicative and listening strategies.

Similarly, in Chuxiong Yi Nationality Autonomous Prefecture, of Yunnan province, Zhou (2007) used a questionnaire to investigate 59 Yi junior high students in a middle school in the prefecture. The findings showed that the Yi students were good at metacognitive strategies and social-affective strategies, but not good at cognitive strategies. A majority of Yi students rarely used translation strategies.

In Hubei province, Wan (2008) used a questionnaire to investigate the vocabulary learning strategies adopted by 233 ethnic minority undergraduate students in South-Central University for Nationalities. The study showed that college students from China's ethnic minority areas: 1) they employed a wide range of strategies to

learn English vocabulary which involve cognitive, metacognitive and social/effective strategies; 2) they preferred cognitive strategies; and 3) "consulting strategy" which students ask questions for clarifying a word was proved to be the most frequently used strategy whereas "cooperating strategy" which students learn vocabulary cooperating with others was the least used one in social/effective strategies.

In Guizhou province, Yin (2008) investigated 232 ethnic minority students' English learning from the point of view on learning strategy. A questionnaire answered by ethnic minority students in Guizhou University was used to explore how the ethnic minority students used learning strategies in their English study. The result of the study showed that: 1) cognitive strategies were most commonly used; 2) metacognitive and memory strategies came the second; 3) translation strategies were also used; and 4) communicative, compensation, and social-affective strategies were comparatively seldom adopted in English vocabulary learning.

From the above, it could be seen that there were some research studies on ethnic students from universities and/or middle schools. The researchers just took undergraduates as their research subject(s), or they just took many ethnic groups as a whole to conduct their studies. However, as for such a large ethnic population of Miao group in China, no researcher focused on their learning strategies or vocabulary learning strategies.

2.4 Summary

In this chapter, the related literature provided an overall picture of the previous research studies on second language (L2) and/or foreign language (FL) learning and vocabulary learning strategies. It also discussed the relevance of the present study to preceding research studies. It started with research studies on language learning strategies, research studies on vocabulary learning strategies, and research studies on ethnic students' learning strategies and vocabulary learning strategies. Through the broad related literature review in the field of vocabulary learning strategies, it could be seen that different researchers have different vocabulary learning strategy classification criteria. Previous research studies have been carried out in a variety of purposes of the investigation, target populations, research instruments, methods of data collection, places of research conduction, and different variables or factors. The next chapter will concentrate on the design and methodology implemented in the present study.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter discusses the principles of the present research methodology. It includes research design, methods of data collection, data analysis and a pilot study. It starts with the population of the present study, research instruments, methods of data collection as well as data analysis respectively.

3.1 Population and Participants

From the data compiled from Qiandongnan Education Office (2008), the total number of establishments in the target population is estimated at 9,264. According to Krejcie and Morgan's (1970) sample size estimation formula (see Appendix I), the suggested sample size for a population of 10,000 is 370 or 3.7% of the population. Therefore, this study was conducted among 450 grade-11 students fro same curriculum (NEC) and used the same English textbooks in the prefecture. 150 of the students were from Kaili Senior High School for Nationalities, and the other 300 students were from the other five senior high schools for nationalities (Huangping, Taijiang, Congjiang, Jianhe, and Leishan) with the same number of students (N=60). All the participants will respond to the questionnaire. According to Audit Sampling Criteria (2008), the representative interview sample size should be no less than 53

(see Appendix III), therefore, 55 Miao students participated in the interview (among the interviewees, 15 of them were from Kaili Senior High School for Nationalities, and 40 of them were from the other five schools with the same number of students <N=8>). The reason why the researcher purposively selected the 450 students from the six schools in different counties was as follows:

Firstly, the researcher selected 450 Grade 11 senior high school students was to ensure that the sample size were sufficient to answer the questionnaire, and in the end, 409 valid questionnaire papers were obtained because 41 of them were answered by Han Chinese or other ethnic students, which were not valid questionnaire papers. Secondly, they were from the six counties where Miao live in concentrated communities. The majority of them speak Miao language as first language (L1), Mandarin as a second language (L2) and English as a foreign language (FL). Thirdly, they have been studying English for five years since junior high school. They were to finish their English courses in that semester in senior high school because they would concentrate on preparing for the upcoming college entrance examination in Grade 12. The majority of the students have formed their own learning methods and styles in English learning. Fourthly, they were eager to master as much vocabulary as possible to improve their four skills so that they could go to good universities in the coming year. Finally, they might encounter more or less difficulties in English vocabulary learning, which they hoped to be solved. As a result, the participants could represent the main body of the Miao students in the senior high schools in QMDP.

3.2 Research Instruments

In order to achieve the purpose of present study and to answer the research questions mentioned in **1.4**, a questionnaire and an interview were both quantitatively and qualitatively used to analyze the collected data in the study.

3.2.1 Questionnaire

The questionnaire (see Appendix IV) in this study was used to elicit Miao students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies. The designing of the questionnaire was based on O'Malley and Chamot (1990) and Gu and Johnson's (1996) classification of vocabulary learning strategies, and then mainly adopted Gu and Johnson's (1996, pp. 673-679) "Vocabulary Learning Questionnaire(VLQ Version 3) along with Gu and Johnson's (1996) "VLQ5[©] Chinese Version" (as cited in Gu and Hu, pp. 14-19) because they are relatively comprehensive ones that reflect previous quantitative and qualitative research (as cited in Gu and Johnson, 1996, p. 648), the reliability of the questionnaire is 0.69.

The questionnaire can be designed and used to collect vast quantities of data from a variety of respondents. They have a number of benefits over other forms of data collection: they are usually inexpensive to administer; very little training is needed to develop them; and they can be easily and quick analyzed once completed (Wilkinson and Birmingham, 2003). In the present study, all of the questionnaire items in English were translated into Chinese to avoid misunderstanding and

confusing. The questionnaire included students' beliefs in vocabulary learning and the four categories of vocabulary learning strategies. The questionnaire consisted of three parts: 1) personal information—gender, major and nationality; 2)12 items concerning students' beliefs in vocabulary learning (No. 1-12); and 3) 78 items concerning vocabulary learning strategies, which are divided into four categories: metacognitive strategies(11 items: No. 13-23), cognitive strategies (45 items: No. 24-68), social/affective strategies (7 items: No. 69-75) and translation strategies (15 items: No. 76-90). Metacognitive strategies were divided into three sub-categories—planning, selective attention, and self-initiation. Cognitive strategies were divided into five categories—memorization, guessing, dictionary use, note-taking and activation strategies. As mentioned in 2.2.2.2, translation strategies were used as one of the four categories of vocabulary learning strategies to explore how Miao students use English as a FL when learning English vocabulary even though they could be regarded as one of the sub-categories of cognitive strategies. The students gave their opinions in terms of a five-point scale (Likert Scales).

3.2.2 Interview

In the present study, a semi-structured face-to-face interview (see Appendix VI) was conducted. Robson (Cannel and Kahn, as cited in Robson, 1993, p. 229) explains that an interview is "a conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information and focused by him or her on content specified by research objectives of systematic description

prediction or explanation." A face-to-face interview offers the researcher the opportunity to ask participants directly about what is going on and thus it is a "shortcut" in seeking answers to research questions (Robson, 1993). The reason why the researchers choose a face-to face interview is stated by Nunan (1992) "...because of its flexibility, the semi-structured interview has found favour with many researchers, particularly those working within an interpretative research tradition" (p. 149). Besides the flexibility it gives to the interviewer, the semi-structured interview also gives the interviewee a degree of power and control over the course of the interview. Since the purpose of this semi-structure interview was to elicit more insight information about Miao students' attitudes to English vocabulary learning and English vocabulary learning strategies, not to test students' English proficiency. The interview consisted of two parts: 1) personal information—gender, major and nationality and 2) 12 guided interview questions: one question concerning students' beliefs in vocabulary learning (No. 1) and 11 questions concerning vocabulary learning strategies, which include metacognitive strategies (No. 2,3 and 4), cognitive strategies (No. 5,6,7 and 8), social/affective strategies (No.9 and 10), translation strategies (No. 11) and any other strategies out of the questionnaire mentioned (No. 12). The interviewees included 20 male students and 35 female students, among of them, 25 majored in Arts and 30 in Science.

3.2.3 Validity and Reliability Check

The validity and reliability of the data collection instruments are very

important to their overall measurement qualities. Since the questionnaire depends on the readability of the statements and the actual wordings used in the items, piloting the questionnaire is a very important step in the questionnaire construction (Dornyei, 2003) to obtain information about reliability and validity of the instrument. As mentioned above **3.2.1**, to avoid misunderstanding and confusion, all of the questionnaire items and interview questions in English were translated into Chinese. Therefore, in the present study, the validity and reliability were checked as follows:

3.2.3.1 The Content Validity Check

Firstly, to check whether the questionnaire items and interview questions could measure what they were designed for, the Chinese translation versions together with the evaluation form for content validity check were sent to three experts. These experts were all full-professors and were academically qualified in China, one of whom has taught Middle School English Methodology for English major undergraduates for more than 20 years in Guizhou Normal University, Guizhou, China. Then, the experts read the relevance of each item to the purpose of the questionnaire and the appropriateness of the content areas, and then checked the evaluation form by using Item-Objective Congruence Index (IOC) as a validation method for the relevancy of the content and the objective of the questionnaire. The evaluation form used a 3-point scales (1 = relevant, 0 = uncertain, -1 = irrelevant).

Next, adjusted to the experts' advice and checked the results of IOC index for each item and question by item analysis (IAS). According to Booncherd (1974),

the acceptable value should be higher or equal to $0.5 \ (\ge 0.5)$. The result of current questionnaire was 0.818 and the interview questionnaire was 0.833 (see Appendix VIII). That was to say, both items and questions fell between that. The result of the item analysis from the IOC revealed that there were 8 unacceptable items in the 90 items because they were irrelevant to the research question and/or purposes of the present study. All the interview questions were relevant to the research questions in 1.4. And then, the researcher improved and corrected the unacceptable items/questions according to the 3 experts' opinions and suggestions.

Finally, a pilot study was conducted. The questionnaire items were tried out with thirty students and interview questions were tried out with six students who were all the subject of this study from Kaili Senior High School for Minorities.

3.2.3.2 The Reliability Check for the Questionnaire

In order to determine the internal consistency of 90 items of the questionnaire, Cronbach's Alpha Coefficiency (α), the most appropriate reliability index for reliability check, was used to check the internal consistency of the questionnaire items by analyzing the data from the pilot study. According to Devellis (1991), good reliability of the questionnaire will be found if the alpha is at least equal 0.70 ($\alpha \ge 0.70$). The reliability check from the pilot study was 0.944 ($\alpha = 0.944$), therefore, the questionnaire in the present study was reliable.

3.3 Data Collection

The present study aimed to investigate in-depth how Miao students learn English vocabulary in senior high schools in Qiandongnan Miao and Dong prefecture.

3.3.1 Procedure for the Questionnaire

The questionnaires were sent to 450 students by the English teachers in a normal class in different schools from May to June, 2009. The questionnaires were expected to be returned within 30-40 minutes. After the questionnaires were returned, the data were collected and stored in the data table and the usable data were selected by analyzing the questionnaire individually. All the data in any question were collected to analyze in its domain.

3.3.2 Procedure for the Semi-Structured Interview

Fifty-five Miao students were randomly selected to be interviewed as interviewees from the six schools in this study. The researcher visited the target students—interviewees and conducted the interview session using semi-structured questions after receiving the questionnaire from each school. The answers from the students were recorded by using both note-taking techniques and audio visual materials—MP4.

3.4 Data analysis

After collecting the effective data (answers of students' questionnaire papers and answers to the interview questions), the researcher analyzed the data by **SPSS 16.0 for Windows** (Statistics Package for the Social Science). The methods of data analyses in the study involved both quantitative and qualitative analysis.

3.4.1 Quantitative Analysis—ANOVA

Analysis of Variance (ANOVA)—One-way in General Linear Model in Statistical Package for the Social Science (SPSS) was used quantitatively in the questionnaire to analyze the results for individual ideas. Descriptive statistics were obtained to see the overall patterns of vocabulary learning strategies used by the Miao students.

3.4.2 Qualitative Analysis

Data collected from students' questionnaires and semi-structured interviews were analyzed qualitatively to describe how, why and what strategies were used in English vocabulary learning.

3.5 The Pilot Study

According to Lancaster (2004), a pilot, or feasibility study, is a small experiment designed to test logistics and gather information prior to a larger study, in order to improve the latter's quality and efficiency. A pilot study can reveal deficiencies in the design of a proposed experiment or procedure and these can then

be addressed before time and resources are expended on large scale studies. In order to obtain data to help to conduct the main study as well as help the researcher see any weak points of the procedure, a pilot study was conducted prior to the main study.

3.5.1 Participants

Thirty Grade 11 students from Kaili Senior High School for Minorities participated in the pilot study. The participants were selected on the basis of convenience and availability. One-half of them majored in Arts and the other half majored in Science. There were 12 female students and 18 male students. Six of them (4 male and 2 female) participated as interviewees for the oral interview.

3.5.2 Research Instruments

As mentioned in 3.2, the instruments used in the pilot study included a written questionnaire and an oral interview. The questionnaire was used to elicit Miao students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies. The oral interview was used to obtain more in-depth information about Miao students' attitudes to English vocabulary learning and English vocabulary learning strategies.

3.5.3 Data Collection

The pilot study started on March 19, 2009. The treatment of the pilot study lasted for about two weeks. As mentioned in **3.3**, the fulfillment of questionnaire and interview was follows:

Firstly, thirty Grade 11 students from Kaili Senior High School for Minorities participated in answering the questionnaire in a normal evening class on March 19, 2009. After some key points of directions to the questionnaire answering, the researcher administered 30 questionnaire papers with 30 students who voluntarily participated. Secondly, in order to obtain more detailed information in the interview, after the questionnaire papers were returned, the researcher randomly selected 6 students from the thirty participants to participate in the oral interview on the next two evenings. There were 4 male students and 2 female students participating as interviewees. The researcher delivered interview questions to each of them 5 minutes earlier before the interview time so as to give the interviewees sufficient time to think how to answer the questions more in detail. The Chinese language was also used for better understanding and convenience. All the students' interviews were recorded by MP4, transcribed and translated into English for data analyses. The whole interview lasted about 3 hours.

3.5.4 Data analysis

The data obtained from the questionnaire and oral interviews were submitted to either quantitative or qualitative analysis. What follows were the results of the data analyses.

3.5.5 Results

3.5.5.1 The Reliability Check for the Questionnaire

As mentioned in **3.2.3.1**, according to Devellis (1991), good reliability of

the questionnaire will be found if the alpha (α) is at least equal 0.70 ($\alpha \ge 0.70$). After being collected from the questionnaire, the data were calculated using **SPSS 16.0** for Windows. The reliability value was found to be 0.944 ($\alpha = 0.944$), which is much higher than 0.70(see Table 3.1). That was to say, the present questionnaire was reliable and could be used in the main study.

Table 3.1 The Reliability Check for VLQ

Reliability Statistics		
Cronbach's Alpha N of Items		
.944	90	

3.5.5.2 Students' Beliefs on Vocabulary Learning

The mean scores and standard deviations of the students' beliefs on vocabulary learning are as follows (see Table 3.2):

Table 3.2 shows that most Miao students believe that words should be studied and put to use (Mean=3.97, S.D=1.03). Words should be acquired in context comes to the second rank (Mean=3.32, S.D=1.08). While they also hold a belief that words should be memorized (Mean=3.26, S.D=1.09). This indicates that majority of Miao students hold the belief that integrated models should be utilized in vocabulary learning instead of memorizing an isolated word.

Table 3.2 Standard Deviation and Mean Scores of Students' Beliefs

Students' Beliefs on Vocabulary Learning		S.D	N
Words should be memorized	3.26	1.09	30
Words should be acquired in context	3.32	1.08	30
Words should be studied and put to use	3.97	1.03	30

3.5.5.3 Student's Self-Reports to VLS

The mean score and standard deviation of every category and sub-category of vocabulary learning strategies are displayed as follows:

Table 3.3 The Mean Score and Standard Deviation of the 4 Categories of VLS

Categories	N	Mean	S.D
Metacognitive Strategies	30	2.44	1.071
Cognitive Strategies	30	2.63	1.166
Social/Affective Strategies	30	2.47	1.026
Translation Strategies	30	2.25	1.042

Table 3.3 presents descriptive statistics on the 4 categories of learning strategies. It shows that cognitive strategies (M=2.63, S.D=1.166) and social/affective strategies (M=2.47, S.D=1.026) stand at the first two places. Guessing strategies rank the third (M=2.58, S.D=1.029), and translation strategies rank the lowest (M=2.25, S.D=1.042). This indicates that majority of students tend to adopt cognitive strategies in their vocabulary learning compared with the other three strategies. They seldom use translation strategies in vocabulary learning.

Table 3.4 The Mean Score and Standard Deviation of Sub-Categories of VLS

Categories	Sub-Categories		Mean	S.D
	Planning	30	2.30	.967
Metacgnitive Strategies	Selective Attention	30	2.52	1.142
	Self-Initiation	30	2.43	1.056
	Guessing Strategies	30	2.58	1.029
	Dictionary Strategies	30	3.07	1.271
Cognitive Strategies	Note-Taking Strategies	30	2.59	1.176
	Memory Strategies	30	2.53	1.201
	Activation Strategies	30	2.43	1.040
Social/Affective			2.03	.870
Strategies	Affective Strategies	30	3.07	1.183
	English-Mandarin Strategies	30	4.01	1.054
	English-Miao Strategies	30	1.87	.969
Translation Strategies	English-Mandarin-Miao Strategies	30	1.82	1.059
	English-Miao-Mandarin Strategies	30	1.71	1.000
	English-Miao/Mandarin Strategies	30	1.86	1.132

Table 3.4 presents descriptive statistics on each sub-category of the 4 categories of learning strategies. It shows that some sub-category of learning strategies rank comparatively high. It can be seen that English-Mandarin strategies (M=4.01, S.D=1.054), affective strategies (M=3.07, S.D=1.183) /dictionary strategies (M=3.07, S.D=1.271), and note-taking strategies (M=2.59, S.D=1.176) stand at the first 3 places, and the other 4 sub-categories of translation strategies rank the lowest 4 strategies. This indicates that: 1) the majority of the Miao students tend to use English-Mandarin strategies even though Mandarin is their L2; 2) they tend to

adopt cognitive strategies such as dictionary, effective, and note-taking strategies; 3) they seldom use translation strategies related to Miao language in vocabulary learning.

3.5.5.4 Self-Reports to VLS Use between Male and Female Students

The mean score and standard deviation of every category of vocabulary learning strategies are displayed as follows:

Table 3.5 The Mean Score and Standard Deviation of the 4 Categories of VLS Use between Male and Female Students

Categories	Gender	N	Mean	S.D
Metacgnitive Strategies	Male	18	2.51	1.05
	Female	12	2.34	1.07
Cognitive Strategies	Male	18	2.70	1.19
	Female	12	2.52	1.14
Social/Affective Strategies	Male	18	2.58	0.97
	Female	12	2.31	1.02
Translation Strategies	Male	18	2.26	1.12
	Female	12	2.24	0.83

Table 3.5 shows descriptive statistics on the four categories of learning strategies use between male and female students. It shows that compared with the female Miao students, the male Miao students tend to use more strategies from cognitive strategies (M=2.70, S.D=1.19), social/affective strategies (M=2.58, S.D=0.97), metacognitive (M=2.51, S.D=1.05), and translation strategies (M=2.24, S.D=0.83).

3.5.5.5 Semi-structured Interview

The results from the oral interviews conducted with the six interviewees showed that: 1) four of them held attitudes towards "Words should be studied and put to use" and two of them thought "Words should be acquired in context"; 2) four of them were good at learning vocabulary by using variety of strategies which cognitive strategies comes the first and translation strategies comes the last, two of them didn't know what meaning by "learning strategies" so that they seldom effectively used them in English learning; 3) three of them indicated that they had their own strategies related to some specific features of Miao language in learning vocabulary, while three of them indicated they had no ideas about what specific strategies are when learning English vocabulary; and 4) four of the interviewees suggested that Mandarin play very important roles in English vocabulary learning, while two of them insisted that vocabulary be much easier for memorizing in mind if they can be related to Miao language.

3.5.6 Implications for the Main Study

The results from the pilot study provided the researcher with some implications for the main study, which were mainly about the questionnaire design and data collection methods.

3.5.6.1 Some Items in the Questionnaire Needed Improving

As mentioned above in **3.2.1**, the designing of the questionnaire mainly adopted Gu and Johnson's "Vocabulary Learning Questionnaire" (VLQ—English

Version 3 and VLQ 5[©]—Chinese Version) because they are relatively comprehensive ones that reflect previous quantitative and qualitative research. Nevertheless, some of the items need improving because the participants in the present study are senior high school students, not undergraduates. Item No.30, 51, 61, and 57 in the questionnaire, were founded to need either improving or rewriting to suit the participants for the main study.

3.5.6.2 The Questions in the Interview Needed Specifying on a Certain Category of VLS and Needed Improving and Rewriting

As discussed above in **3.2.2**, the purpose of this semi-structure interview was to elicit more insight information about Miao students' attitudes to English vocabulary learning and English vocabulary learning strategies. Therefore, the items in the interview should specify the four categories of vocabulary learning strategies besides the Miao student's belief on English vocabulary learning. Moreover, item No.1, 3, 8, and 12 needed either improving or rewriting.

3.5.7 Conclusion

As a pilot study, the present results must be considered tentatively. Nevertheless, the current pilot study could be considered to indicate how English vocabulary learning strategies are employed by the Miao students, and how they influence and promote English learning.

3.6 Summary

In sum, this chapter discusses the research methodology employed in the present study. A written questionnaire and an oral interview were conducted to investigate in-depth the Miao senior high school students' beliefs on English vocabulary learning and general vocabulary learning strategies use. The procedures of the data collection were described. The data analyses for the questionnaire and the interview involves both quantitatively and qualitatively. This chapter concludes with the description of the pilot study. In the next chapter, the results of the data analyses for the main study will be presented.

CHAPTER 4

DATA ANALYSIS

This chapter presents the results of the data analysis related to the main study. As this study was to explore the Miao students' beliefs on English vocabulary learning and general vocabulary learning strategies use, both quantative and qualitative data analysis were used to analyze the questionnaire and the semi-structured oral interview. The results of the data analysis were as follows:

4.1 An Analysis of the Questionnaire on the Miao Students' VLS

As mentioned in **3.2.1** and **3.3.1**, the questionnaire (see Appendix IV) in this study was used to elicit Miao students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies.

Four hundred and fifty Miao students from 6 senior high schools in six counties in QMDP were distributed to answer the questionnaire papers from 28 May to 10 June, 2009. The questionnaire papers were returned within 30-40 minutes in each school. After the questionnaires were returned, the data were collected and stored in the data table. In the end, 409 valid questionnaire papers were collected (41 questionnaire papers are not accepted because the participants are not Miao, but Han Chinese and other ethnic groups) by analyzing the questionnaire individually. All the

data in any question were collected to analyze in its domain. The researcher analyzed the data by **SPSS 16.0 for Windows** (Statistics Package for the Social Science). The results of the data analysis are as follows:

4.1.1 The Miao Students' Beliefs on English Vocabulary Learning

The mean scores and standard deviations of the Miao students' beliefs on vocabulary learning are as follows (see **Table 4. 1**):

Table 4.1 Standard Deviation and Mean Scores of Students' Beliefs

Students' Beliefs on Vocabulary Learning	Mean	S.D	N
Words should be memorized	3.04	1.09	409
Words should be acquired in context	3.61	0.93	409
Words should be studied and put to use	4.15	0.89	409

Table 4.1 shows that the Miao students' beliefs are different in terms of the three kinds of English vocabulary learning. It was clear that "Words should be studied and put to use" and "Words should be acquired in context" are more acceptable by the Miao students than "Words should be memorized". That is to say, most Miao students believe that words should be studied and put to use (Mean=4.15, S.D=0.89). Words should be acquired in context comes in the second rank (Mean=3.61, S.D=0.93). While they also held a belief that words should be memorized (Mean=3.04, S.D=1.09). It was found that majority of Miao students held the belief that integrated models should be utilized in vocabulary learning instead of memorizing an isolated word. This accorded in some researchers' (Tian 2006, Hou 2008, Zhang 2007) findings in China.

4.1.2 VLS Use Reported by 409 Miao Senior High School Students in QMDP

As mentioned above in **3.2.1**, of the questionnaire, the participants gave their opinions in terms of a five-point scale (Likert Scales), ranging from "not appropriate to my situations" which is valued as 1, "seldom appropriate to my situations" valued as 2, "sometimes appropriate to my situations" valued as 3, "often appropriate to my situations" valued as 4, and "always appropriate to my situations" valued as 5. Therefore, the average value of frequency of strategy use can be valued from 1.00 to 5.00, with 3 being the mid-point of the minimum and maximum values. The mean score of strategy use of any categories or items valued from 1.00 to 2.50 is considered as "low use", from 2.50 to 3.50 is considered "moderate use", and from 3.50 to 5.00 "highly use".

4.1.2.1 Standard Deviation and Mean Scores of the Miao Students'

Overall Vocabulary Learning Strategies Use

The result of the holistic mean score and standard deviation across the vocabulary learning strategy questionnaire responded by 409 Miao senior high school students in QMDP is presented as follows (see Table 4.2):

Table 4.2 shows that as a whole, the frequency of the Miao senior high students' vocabulary learning strategies use is "moderate use" (Mean=2.82, S.D=1.16) because the mean score is less than 3. This indicated that the Miao senior high students did not tend to use a wide range of strategies in vocabulary learning.

Table 4.2 Standard Deviation and Mean Scores of the Miao Students' Reported

Overall Strategy Use

	Mean Score (Mean)	Standard Deviation (S.D)	Number of Students (N)
Students' Reported			
Overall Strategy Use	2.82	1.16	409

4.1.2.2 The Miao Student's Self-Reports to the Four Categories of VLS

The mean score and standard deviation of the four categories of vocabulary learning strategies are displayed as follows:

Table 4.3 The Mean Score and Standard Deviation of the Four Categories of VLS

Categories	N	Mean	S.D
Metacognitive Strategies	409	2.80	1.18
Cognitive Strategies	409	3.02	1.14
Social/Affective Strategies	409	2.73	1.21
Translation Strategies	409	2.29	1.20

Table 4.3 presents descriptive statistics on the four categories of learning strategies. The higher the mean score is, the more often the strategy is employed. From the table, we can see that the mean score of cognitive strategies are 3.02 and the mean scores of the rest of the three categories are above 2. Thus, it could be concluded that cognitive strategies (M=3.02, S.D=1.14) were the most frequently used, metacognitive strategies (M=2.80, S.D=1.18) came to the second place, social/affective strategies (M=2.73, S.D=1.21) ranked the third place, and translation strategies got the lowest rank (M=2.29, S.D=1.20). This indicated that the majority of the Miao students tended

to adopt cognitive strategies in their vocabulary learning compared with the other three strategies (metacognitive, social/affective and translation strategies). They seldom adopted translation strategies in vocabulary learning.

4.1.2.3 The Miao Student's Self-Reports to the Sub-Categories of VLS

Table 4.4 presents descriptive statistics on each sub-category of the 4 categories of vocabulary learning strategies. It shows as follows:

Table 4.4 The Mean Score and Standard Deviation of Sub-Categories of VLS

Categories	Sub-Categories	N	Mean	S.D
	Planning	409	2.84	1.10
Metacognitive Strategies	Selective Attention	409	2.94	1.16
8	Self-Initiation	409	2.55	1.27
	Guessing Strategies	409	3.12	1.07
Cognitive	Dictionary Strategies	409	3.29	1.16
Strategies	Note-Taking Strategies	409	3.20	1.22
	Memory Strategies	409	2.86	1.15
	Activation Strategies	409	2.98	1.09
Social/Affective	Social Strategies	409	3.03	1.23
Strategies	Affective Strategies	409	2.32	1.19
	English-Mandarin Strategies	409	3.25	1.22
Translation	English-Miao Strategies	409	2.02	1.22
Strategies	English-Mandarin-Miao Strategies	409	2.16	1.24
	English-Miao-Mandarin Strategies	409	1.97	1.15
	English-Miao/Mandarin Strategies	409	2.10	1.17

Firstly, in the three strategies under metacognitive strategies, "Selective Attention" (M=2.94, S.D=1.16) came the first place of the three sub-categories, "Planning" came the second, while "Self-Initiation" (M=2.55, S.D=1.27) came the last. This indicated that the Miao students were not good at using metacognitive strategies because all the mean scores were below 3.

Secondly, under the 5 strategies of cognitive strategies, "Dictionary Strategies" (M=3.29, S.D=1.16) was the most commonly used strategy. The orders of the mean scores from the highest to the lowest under cognitive strategies were listed as follow: dictionary strategies, note-taking strategies, guessing strategies, activation strategies, and memory strategies. "Note-Taking Strategies" (M=3.20, S.D=1.22) stood for the second place of the five sub-categories. "Guessing Strategies" (M=3.12, S.D=1.07) came to the third place, "Activation Strategies" (M=2.98, S.D=1.09) came to the fourth one, and "Memory Strategies" (M=2.86, S.D=1.15) came to the last order. From the table, it could be conclude that most Miao students tended to rely on dictionaries and not-taking strategies in vocabulary learning, but they less commonly adopted memory strategies.

Thirdly, as for social/affective strategies, "Social Strategies" (M=3.03, S.D=1.23) was comparatively higher than "Affective Strategies" (M=2.32, S.D=1.19) in terms of both mean score and standard deviation.

Fourthly, as for translation strategies, "English-Mandarin Strategies" (M=3.25, S.D=1.22) came the first place in the five sub categories. "English-Mandarin-Miao

Strategies" (M=2.16, S.D=1.24) and "English-Miao/Mandarin Strategies" (M=2.10, S.D=1.17) came to the second and the third one, and "English-Miao Strategies" (M=2.02, S.D=1.22) got the last rank. This indicated that Mandarin played a very important role in English vocabulary learning even though the Miao students took it as an L2.

Of the 78 individual items under the 4 categories of strategies in the questionnaire, the item "When I want to confirm my guess about a word, I look it up." (M=3.76) under "Dictionary Strategies" was the most commonly used strategy. While the item "I can actively communicate with foreigners" (M=1.86) under "Social/effective Strategies" was the least commonly used one.

On the basis of analyzing the frequencies of vocabulary learning strategies used by the Miao students, it was found that most of the Miao senior high school students used cognitive strategies and did not tend to use social/effective strategies in English vocabulary learning.

4.1.2.4 Self-Reports to VLS Use between Male and Female Students

The mean scores and standard deviation of every category of vocabulary learning strategies use between male and female Miao students are displayed as follows (see Table 4.5):

Table 4.5 shows descriptive statistics on the 4 categories of learning strategies use between male and female students. It was found that there were a little differences of the strategies use between the male and female Miao students.

Compared with the female Miao students, the male Miao students tended to use metacognitive and translation strategies more frequently, but they used cognitive and social/effective strategies less frequently.

Table 4.5 The Mean Score and Standard Deviation of the 4 Categories of VLS

Use between Male and Female Students

Categories	Gender	N	Mean	S.D
Metacognitive Strategies	Male	233	2.81	1.18
	Female	176	2.78	1.15
Cognitive Strategies	Male	233	3.01	1.12
	Female	176	3.04	1.15
Social/Affective Strategies	Male	233	2.72	1.23
	Female	176	2.73	1.20
Translation Strategies	Male	233	2.35	1.20
	Female	176	2.22	1.19

4.1.2.5 Self-Reports to VLS Use between Arts and Science Students

The mean scores and standard deviation of every category of vocabulary learning strategies use between the Miao students major in Arts and Science are displayed as follows (see Table 4.6):

Table 4.6 shows that there are clear differences between the Miao students major in Arts and Science in terms of the four categories of vocabulary learning strategies use. The Miao students major in Arts tended to use more strategies in English vocabulary learning than those who major in Science in senior high school.

Table 4.6 The Mean Score and Standard Deviation of the 4 Categories of VLS

Use by majors (Arts and Science)

Categories	Major	N	Mean	Std. D
Metacognitive Strategies	Arts	220	2.83	1.16
	Science	189	2.76	1.17
Cognitive Strategies	Arts	220	3.05	1.15
	Science	189	2.99	1.13
Social/Affective Strategies	Arts	220	2.76	1.24
	Science	189	2.69	1.17
Translation Strategies	Arts	220	2. 32	1. 18
	Science	189	2. 26	1. 21

4.2 An Analysis of the Semi-structured Interview

As **3.2.2** and **3.3.2** mentioned, the purpose of this semi-structure interview was to elicit more insight information about Miao students' attitudes to English vocabulary learning and English vocabulary learning strategies.

Fifty-five Miao students were randomly selected to be interviewed as interviewees from the six schools after the questionnaires were returned. The researcher visited the target students—interviewees, and conducted the interview session using semi-structured questions after receiving the questionnaire from each school. The answers from the students were recorded by using both note-taking techniques and audio visual materials—MP4. The results from the oral interviews conducted with the 55 interviewees are analyzed as follows:

4.2.1 The 55 Interviewees' Beliefs on English Vocabulary Learning

Table 4.7 The 55 interviewees' beliefs on English vocabulary learning

	Question Item(s)		Gender		Major		Responses		
		M	F	A	S	YES	NO		
1.	Do you think that memorizing words								
	is important to English learning?	20	35	25	30	55	0	55	

M=Male F=Female A=Arts S=Science N=Number of the Interviewees

Table 4.7 shows that all the interviewees hold the same belief that memorizing words is important to English learning. This indicated that the Miao students have realized that vocabulary the key factor in English learning. They should learn vocabulary in various ways to make English learning more effective.

4.2.2 The Overview of the Responses to the Four Categories of VLS

The records of interviews revealed the interviewees' strategies use on English vocabulary learning.

First, the Miao students knew very little about vocabulary learning strategies so that they would be unlikely to use a wide range of vocabulary learning strategies when learning English. Very few English teachers in senior high school in ethnic regions knew learning strategies and vocabulary learning strategies so that they hardly trained their students how to use different strategies in learning English vocabulary.

Second, the Miao students tended to frequently use cognitive strategies compared with metacognitive, social/affective, and translation strategies. That was

the same way they learn Mandarin from primary school.

Third, the Miao students could use some strategies related to metacognitive strategies, but they did not know how to carry them out. This was because they did not know how to plan, manage, and evaluate what they have learnt.

Fourth, they seldom used translation strategies even though they insisted that Mandarin played a very important role in English vocabulary learning.

4.2.3 The 55 Interviewees' Views on Mandarin's Role(s)

The results from the interviews show that Mandarin is L2 for the Miao students and it plays a very important role in English vocabulary learning.

According to the bilingual education policy in Ethnic regions, both Mandarin and Ethnic language should be used as teaching languages from Grade 1 to Grade 9 in countryside. Therefore, they all should have begun to learn Mandarin from grade one. But this not the case: it's true that they all began to learn Mandarin from Grade 1, there are few qualified teachers in those schools in remote countryside. Most teachers in those schools just teach Mandarin in class, they never speak Mandarin out of class but Miao language, so the Miao students cannot learn Mandarin well like Han Chinese. After 9-year compulsory education, the Miao students go to senior high schools like Han Chinese and other ethnic group students. As for the English teachers in senior high schools, very few of them can speak Miao language. They teach English courses both in English and Mandarin. That is to say, Miao language is not used in English class any more in senior high school.

As 1.2.1 mentioned, English teaching in QMDP is quite different from other developed areas. As a result, English teachers in QMDP encounter many difficulties in teaching English as an FL in primary and middle schools even though the prefectural government has taken measures on how to improve English teaching, e.g. bilingual teaching. However, very few English teachers can have a lesson in pure English without Mandarin. When going to senior high school, the Miao students must know Mandarin well to understand teachers' instructions in English class. As a result, among the 55 interviewees: 8 of them said they hardly could understand what the English teacher taught in class at the beginning of grade 10 because of their poor Mandarin; 20 of them admitted that they could understand; and 27 of them insisted that they have to make up and practice both spoken and written Mandarin to understand teachers' instructions and textbooks better. Therefore, it could be concluded that Mandarin was very important for the Miao students as an L2 in English vocabulary learning.

4.2.4 The 55 Interviewees' Views of the Specific Strategies Use

From the records of interviews, 34 of the interviewees suggested they have no any other specific vocabulary learning strategies but those mentioned in the questionnaire they responded, while 21 of them insisted that they have their own strategies related to some unique natures of Miao language and culture in learning vocabulary. That can be concluded as follows:

4.2.4.1 VLS Related to the Sound of a Word in Miao Language

When learning English vocabulary, the Miao students tended to explore some words which were similar to some Miao vocabulary in sound/pronunciation, which were agreed to be an easy way to remember. e.g. "dress" is similar to Miao language "Jieel"(Chinese "確春", a mill for hulling rice in the past in countryside but it could still be found in some Miao villages).

4.2.4.2 VLS Related to the Meaning of a Word in Miao Language

For a certain English words, the Miao students tended to memorize them in another way that could be imagined as a meaning of a certain word or a process of doing/making something in Miao language, which were also considered as an effective way to memorize. e.g. when learning "purpose", some Miao students memorize it by linking with the meaning of its Miao language.

4.2.4.3 VLS Related to the Shape of a Certain Object or an Animal

The Miao students tended to memorize some English words linked with the shape of a certain object or animal. For example, when learning "banana", the Miao students will imagine what a hand of bananas looks like, which is different from "imagery strategies" in the questionnaire.

4.3 Results

4.3.1 Answer to Research Question 1:

What beliefs do the Miao students hold on English vocabulary learning?

The Miao students' beliefs were different in terms of the three kinds of

English vocabulary learning. The majority of the Miao students believed that "Words should be studied and put to use" and "Words should be acquired in context". While they also held a belief that words should be memorized. This indicated that most of the Miao students realized that vocabulary learning was not just a mechanical task. They held the belief that integrated models should be utilized in vocabulary learning instead of memorizing an isolated word.

4.3.2 Answer to Research Question 2:

What strategies are most and least commonly employed by the Miao students in English vocabulary learning?

Of the four categories of strategies, cognitive strategies were most commonly used, while translation strategies were least commonly used. The rank of the mean scores from the highest to the lowest under the four categories of strategies was listed as follow: cognitive strategies, metacognitive strategies, social/effective strategies, and translation strategies. Of the individual items under the sub-categories of the four strategies, "When I want to confirm my guess about a word, I look it up." in "Dictionary Strategies" was the most commonly used one. While "I can actively communicate with foreigners" in "Social/effective Strategies" was the least commonly used one.

4.3.3 Answer to Research Question 3:

Are there any differences of vocabulary learning strategies used by the Miao students with gender?

In general, there were a little differences of the strategies use between the male and female Miao students. Compared with the female Miao students, the male Miao students tended to use metacognitive and translation strategies more frequently, but they used cognitive and social/effective strategies less frequently.

4.3.4 Answer to Research Question 4:

Do the Miao students have their own strategies in English vocabulary learning?

If so, what are they?

The Miao students in senior high school, though not many, did have their own strategies in learning English vocabulary. These strategies were related to some unique natures of Miao language and culture: 1) related to the sound of a word in Miao language; 2) related to the meaning of a word in Miao language; and 3) related to the shape of a certain object or an animal.

4.4 Summary

This chapter provided the data analysis for the main study, which included the data analysis for the questionnaire and the interview involving both quantitative and qualitative analysis. In the next chapter, the findings of the study, pedagogical implications, limitations and recommendations of the study will be presented.

CHAPTER 5

CONCLUSIONS

This chapter draws a conclusion and gives a discussion to the results of the study. It consists of four sections. The first section summarizes all the results of the present study in terms of the Miao senior high school students' beliefs on English vocabulary learning and how English vocabulary learning strategies are employed by them, the second section discusses and proposes pedagogical implications in the EFL context in Ethnic regions in China, the third section reports the limitations of the study, and the last section suggests the recommendations for future studies.

5.1 Conclusions

This study was to investigate in-depth how the Miao students in senior high schools in QMDP learn English vocabulary. A questionnaire and an oral interview were used to collect the data in the study. Based on the analysis of the collected data, the conclusions can be drawn as follows:

1. Most of the Miao students in senior high school believed that "words should be studied and put to use" (Mean=4.15, S.D=0.89) and that "words should be acquired in context" (Mean=3.61, S.D=0.93). While they also held a belief that "words can be memorized in isolation" (Mean=3.04, S.D=1.09).

- 2. As for the 4 categories of vocabulary learning strategies, cognitive strategies were most commonly used, while translation strategies were least commonly used. The rank of the mean scores from the highest to the lowest under the 4 categories of strategies was listed as follow: cognitive strategies (M=3.02, S.D=1.14), metacognitive strategies (M=2.80, S.D=1.18), social/effective strategies (M=2.73, S.D=1.21), and translation strategies (M=2.29, S.D=1.20). Of the individual items under the sub-categories of the four strategies, "dictionary strategies" (M=3.76, S.D=1.09) was the most commonly used one. While "communicate strategies" (M=1.86, S.D=1.10) was the least commonly used one.
- 3. Compared with the female Miao students, the male Miao students tended to use metacognitive and translation strategies more frequently, but they used cognitive and social/effective strategies less frequently.
- 4. The Miao students in senior high school, though not many, did have their own strategies in learning English vocabulary. These strategies were related to some unique natures of Miao language and culture: 1) related to the sound of a word in Miao language; 2) related to the meaning of a word in Miao language; and 3) related to the shape of a certain object or an animal.

5.2 Pedagogical Implications

The findings of the present study have some pedagogical implications for both the ethnic students and English teachers in general in ethnic regions in China. It

helps teachers in accomplishing their challenging task of teaching English in ethnic regions. Teachers can help ethnic students use more vocabulary learning strategies to facilitate their vocabulary learning

5.2.1 Teachers Are a Key Factor in the Successful Implementation of Classroom Teaching in an EFL Class

Unlike any other developed regions in China, English teachers play more important roles in EFL classroom in countryside in ethnic regions. In English leaning, a large vocabulary is the basis for successful communication. But teaching vocabulary is a difficult task for an English teacher in ethnic regions. And at the same time vocabulary learning often makes students bored and even makes them discouraged when they encounter more and more new words in the process of reading. Therefore, proper techniques and strategies in teaching vocabulary can help an English teacher reduce the difficulties in teaching vocabulary and at the same time encourage his/her students to use more appropriate strategies to learn English. In the modern English classroom, teachers are expected to act as a planner, a role model, a coach, a facilitator, an information provider, a counselor, a communicator, an authentic language user, and an organizer, etc. On the one hand, more qualified teachers in multi-language in ethnic regions are needed ("Qualified teachers" here refer to those who can communicate with ethnic students in not only English/Mandarin but also ethnic language—Miao language). They should be trained to know when and how to utilize the appropriate language both in and out of

classroom. On the other hand, teacher training is necessary in ethnic regions. Teacher training includes both teaching methodology and technology in English teaching in ethnic regions. Not every English teacher knows what learning strategy and vocabulary learning strategy mean. Therefore, training teachers in learning strategy and vocabulary strategy is necessary. As a good English teacher, he or she should know what learning strategy and vocabulary learning strategy mean so that he or she can teach students how to use appropriate strategies in vocabulary learning. As for teachers' vocabulary learning strategies training, we can carry out from the following two aspects:

One is to train English majors at Teachers' College or Normal University so that they can teach students some proper strategies after graduation. In China, most of English teachers are graduated from Teacher' College or Normal University which is a school created to train undergraduates to be teachers. Therefore, students training at college or university should be an effective way.

Two is to do in-service training for English teachers. The local educational administrative department in ethnic regions can start a training course on English vocabulary learning strategies.

Furthermore, as an English teacher, no matter what strategies we adopt in our teaching, we should keep this in our mind: students' interest is the most important factor in learning English. If a student has no any interest in learning English, even the best technique or strategy will not work for him/her. Therefore, all

the strategies we adopted are to stimulate and promote students' interests in English vocabulary learning.

5.2.2 Students Are the Key Participants in an EFL Class

As for students in ethnic regions, they are the key factor in English teaching and learning in an EFL class. As mentioned above, the majority of the Miao students have realized the importance of vocabulary learning, but a number of students do not know what concepts of learning strategies are, for some English teachers have never trained them before. Therefore, the study can help the students in ethnic regions get more ideas on understanding the concepts of vocabulary learning strategies, especially on the use of these strategies effectively in English learning. The ethnic students need to become more aware of their central role in the learning process. They should learn to take an increasing amount of responsibility for their English leaning. With their English teachers' help, the ethnic students should know more about how metacognitive and social/effective strategies are effectively used in English vocabulary learning. In addition, extracurricular activities are also important for the students, they should make good use of English extracurricular activities to practice vocabulary learning strategies training: e.g. using English games or short plays for training students' cooperative learning and communicative competence (social/effective strategies).

Both students and teachers in ethnic regions need to become more aware of the importance of strategies use in English vocabulary learning. Effective

strategies in vocabulary learning will undoubtedly improve ethnic students' English proficiency and improve English teaching and learning as well in ethnic regions in China.

5.3 Limitations of the Study

As mentioned in **1.6**, the strengths of this study are the use of both qualitative and quantitative methods yielding the process of in-depth data collection and analysis so that the findings of the study will be validated. However, like other research studies so far in the field of language acquisition, the study brings in certain limitations which should be clarified to overcome doubts about the reliability and validity of the study. The following limitations apply to the present study.

Firstly, the population of this study was limited to the Miao population of Qiandongnan in Guizhou province, China. It might not be considered as representatives of the other Miao regions even though it has the largest Miao population in China. The population of the Miao students in senior high school was the limitation because they were inadequate to represent the overall Miao students in China.

Secondly, the purposive sampling procedure of this study decreased the generalizability of findings even though random sampling was used as well. The participants were chosen based on convenience and availability. This study was not generalized to all counties of senior high schools in QMDP since the aim for this

study was to investigate in-depth how the Miao students in senior high schools learn English vocabulary.

Thirdly, in order to investigate how the Miao students in senior high schools learn English vocabulary, the research questions in the study only focused on the Miao students' beliefs in English vocabulary learning and general strategies of English vocabulary learning.

5.4 Recommendations for Further Studies

Based on the limitations discussed in **5.3** above, the researcher offers some recommendations for further studies in L2 vocabulary learning in ethnic regions in China.

Firstly, a large-scale survey study covering the regions where all the Miao peoples live in compact communities in China in the future is required so as to make the findings of the study more generalizable.

Secondly, more research methods/instruments such as classroom observation, diary studies, etc. together with questionnaire and interview are needed to use triangulatedly to collect data in the future studies so that the findings of the study could be more reliable.

Thirdly, more research questions related to the Miao students' vocabulary learning strategies could be conducted in future studies, such as the correlation between strategies use and English proficiency, differences strategies used between/among different grades, etc.

Finally, more studies in this area are clearly needed: 1) a case study of vocabulary learning strategies in a certain school could be conducted to find how English vocabulary learning strategies are employed by junior or senior high school students; 2) a comparative study on vocabulary strategies use and change between the Miao junior and senior high school students could be conducted in the future to explore how vocabulary learning strategies are used and changed from junior high school students to senior high school students; and 3) a longitudinal study on the Miao students' vocabulary learning strategies could also be conducted in the future study to explore the in-depth correlations between strategies use and scores of vocabulary tests or English proficiency tests.

REFERENCES

- Birkenholz, R. J. (1999). Effective Adult Learning. Danville, IL: Interstate Publishers, Inc.
- Booncherd, P., (1974). Evaluation by References Criteria, Concepts and Methods.

 Faculty of Educational Study, Srinakrindravirot University (Ed.) Fundamental

 Education Division (pp: 89-299). Bangkok: ISBN: 974-275-874-3.
- Brown, H. D. (2000). *Principles of Language Learning & Teaching*: Longman Publishing.
- Brown, H. D. (2001). Teaching by principles: An interactive approach to language pedagogy.
- Brown, J. D. (2001). *Using Surveys in Language Programs*. Cambridge: Cambridge University Press.
- Chamot, A. U. (1987). *The learning strategies of ESL students*. In A. Wenden and J. Rubin(Eds.). *Learner Strategies in Language Learning*. New York: Prentice Hall.
- Chen, H. (2005). An Empirical Study of Ethnic Students' English Learning Strategies.

 *Journal of Inner Mongolia Agricultural University(Social Science Edition),

 7(4), 256-259.
- Chen, W. W. (2003). Current Trends of Vocabulary Teaching and Learning Strategies for EFL Settings. *Journal of Feng Chia University*(7), 187-224.

- Cheng, X. T & Zheng, M. (2002). *English Learning Strategies*. Beijing: Foreign Language Teaching and Research Press.
- Cohen, A. D. (1990). Language Learning: Insights for Learners, Teachers, and Researches.: Newbury House.
- Cohen, A. D. (2000). *Strategies in Learning and Using a Second Language*. Beijing: Foreign Language Teaching and Research Press.
- DeVellis, R. F. (1991). Scale Development: theory and applications. In Applied Social Research Methods Series (Vol. 26). Newbury Park: Sage.
- Dornyei, Z. (2003). Questionnaires in second language research: construction, administration, and processing. Mahwah New Jersey: Lawrence Erlbaum Associates Inc.
- Ellis, R. (1997). Second Language Acquisition. Oxford: Oxford University Press.
- Ellis, R. (1999). *The Study of Second Language Acquisition*. London: Oxford University Press.
- Gu, Y. Q., & Hu, G. W. (2003). English vocabulary learning strategies, vocabulary size and the change of English Achievements. In Wen, Q. F. & Wang, L. F. (Eds.). Theoretical Issues on English Learning Strategies (pp. 125-143). Xi'an: Shanxi Normal University Press.
- Gu, Y. Q., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning*, 46(4), 643-679.

- Hambleton, R.K., Rovinelli, R.J. (1986), "Assessing the dimensionality of a set of test items", *Applied Psychological Measurement*, Vol. 10 pp.287-302.
- Hou, Y. H. (2008). A Survey of Chinese High School Students' Vocabulary Learning Strategies. Central China Normal University, Wuhan.
- Huang, X. H.& Van Naerssen, M. (1987). Learning strategies for oral communication. *Applied Linguistics*, 8(3), 287-307.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Lawson, M. J., & Hogben, D. (1996). The vocabulary learning strategies of foreign language students. *Language Learning*, 46(1), 101-135.
- Ma, G. H., & Cheng, Y. F. (2003). A Theoretical Model of Second Language

 Learning Strategies. *Journal of University of Shanghai for Science and*Technology(Social Science), 25(4), 33-36.
- Mayer, R. (1988). Learning strategies: An overview. In Weinstein, C., E. Goetz, and P. Alexander (Eds.), *Learning and Study Strategies: Issues in Assessment, Instruction, and Evaluation* (pp. 11-22). New York: Academic Press.
- MOE. (2003). *The New English Curriculum for Senior High School*. Beijing: The People's Education Press.
- Naiman, N., Frohlich, M., Stern, H. H. & Todesco, A. (1978). *The good language learner*. Toronto: Ontario Institute for Studies in Education.

- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
- NBS. 2003. *Tabulation on Nationalities of 2000 Population Census of China*. Beijing: The Ethnic Publishing House.
- NBS. 2008. China Statistical Yearbook of 2008. Beijing: China Statistics Press.
- Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge: Cambridge University Press.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning Strategies in Second Language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. L., Crookall, D., Cohen, A. Lavine, R., Nyikos, M. and Sutter, W. (1990). Strategy training for language learners: six situational case studies and a training model. *Foreign Language Annals* 22(3), 197-216.
- Oxford, R. (1992/1993). Language learning strategies in a nutshell: Update and ESL suggestions. *TESOL Journal*, 2(2), 18-22.
- Oxford, R. L. (1996). Employing a questionnaire to assess the use of language learning strategies. *Applied Language Learning*, 7(1 & 2), 25-45.
- Robson, C. (1993). Real World Research: A Resource for Social Scientist and Practitioner-Researcher. Oxford: Blackwell Publishers Ltd.
- Rubin, J. (1975). What the "good language learner" can teach us. TESOL Quarterly, 9, p.41-51.

- Rubin, J. (1987). Learning strategies: Theoretical assumptions, research history and typology. In A. Wenden & J. Rubin (Eds.). Learner Strategies and Language Learning (pp. 15-29). Englewood Cliffs, NJ: Prentice Hall.
- Schmitt, N., & McCarthy, M. (1997). *Vocabulary Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge university press.
- Stoffer, L. (1995). University Foreign Language Students' Choice of Vocabulary

 Learning Strategies as Related to Individual Difference Variables.

 Unpublished Unpublished PhD Dissertation. University of Alabama.
- Tarone, E. (1983). Some thoughts on the notion of 'communication strategy'. In C. Faerch & G. Kasper (Eds.), Strategies in Interlanguage Communication (pp. 61-74). London: Longman.
- Tian, L. M. (2006). A Study on Vocabulary Learning Strategies among High School Students. Liaoning Normal University, Shenyang.
- Vann, R., & Abraham, R. (1990). Strategies of Unsuccessful Language Learners.

 TESOL Quarterly, 24(2), 177-198.
- Wan, G. R. (2008). Study on English Vocabulary Learning Strategies by College Students from China's Minority Groups. *Journal of Inner Mongolia University for Nationalities*(Social Sciences), 34(2), 46-49.

- Wang, M. L. & Jin, G. C. (2008). *Learning styles and English teaching*. US -China Foreign Language: Vol. 6, No. 5. Retrieved on 15 November 2008. http://www.linguist.org.cn/doc/uc200805/uc20080507.pdf
- Wang, W. Y. (1998). Beliefs, strategies and English vocabulary retention. *Foreign Language Teaching and Research*, 40(1), 49-54.
- Wen, Q. F. (1995). A study of one successful and one less successful English learners. Foreign Languages Teaching and Research, 103(3), 61–66.
- Wen, Q. F. (1996). *On English Language Learning Strategies*. Shanghai: Shanghai Foreign Language Education Press.
- Wen, Q. F. & Wang, L. F.(Eds.) (2003). Studies on English Learning Strategies of Chinese Learners. Xi'an: Shanxi Normal University Press.
- Wen, Q. F. & Wang, L. F. (Eds.) (2004). *Theoretical Issues on English Learning Strategies*. Xi'an: Shanxi Normal University Press.
- Weinstein, C. E. & Mayer, R. E. (1986). The teaching of learning strategies. In M.Wittrock (Ed.), Handbook of Research on Teaching (pp. 315-327). New York: Macmillan.
- Wilkinson, D., & Birmingham, P. (2003). *Using Research Instruments: A Guide for Researchers*. London: RoutledgeFalmer.
- Yao, M. L., Wu, J. M., & Hui, P. (2000). The English Vocabulary Memorizing Strategies of Junior Middle School Students. *Psychological Science*, 23(6).

- Yin, D. T. (2008). *Minority Undergraduate Students' English Learning Strategies--A*Case Study of Guizhou University. Unpublished MA. Dissertation.

 South-WestUniversity.
- Zhang, Q. R. (2004). The stages of English vocabulary learning strategies. *Henan Education*, (9), 24-25.
- Zhou, L. (2007). Investigation and Analysis of English Learning Strategies on the Minority Students of Junior. *Journal of Chuxiong Normal University*, 22(4), 93-99.

APPENDIX A

The Language Requirements of Level 9 in NEC

Language	Descriptions
Requirements	Descriptions
Vocabulary	 Be able to express and understand different functions, intentions, and attitudes, etc; Be able to use learned vocabulary to name and explain a subject, and be able to describe behavior and a concept, etc; Be able to master 3000 words and 400-500 phrases or idioms.
Grammar	 Be able to know more about how to express time, place and location; Be able to know more about how to compare between/among people and subjects; Be able to use appropriate ways to describe and express one's own ideas, attitudes and feelings; Be able to learn and master the structure of a text and logic schema.
Functions	 Be able to understand and express functions on greetings, farewell, thanks, and introduction, etc. in variety of settings; Be able to effectively express daily life, such as giving opinions, making a judgment, blame, and complaint, etc; Be able to use learned functions to learn and master some new functions; Be able to use communicative functions in a real life.
Topic	 Be able to be familiar with some topics on personal information, family, and society, etc; Be able to be familiar with some topics on customs, science, culture, and arts, etc; Be able to be familiar with some topics on daily life in English-speaking countries.

APPENDIX B

Sample Size Determination

Table for Determination Sample Size from a Given Population

Population Size	Sample Size	Population Size	Sample Size	Population Size	Sample Size
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364

Population Size	Sample Size	Population Size	Sample Size	Population Size	Sample Size
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	<u>10000</u>	<u>370</u>
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

The sample size in the table above is Krejcie & Morgan's (1970, pp. 607-610) "Table for Determination Sample Size from a Given Population", which is calculated by using their sample size estimation formula (see **Figure 3.1**).

Figure 3.1 Krejcie & Morgan's (1970) sample size estimation formula:

 $S \approx 369$

$$\mathbf{S} = \frac{\mathbf{X}^2 \, \text{NP} \, (\text{1-P})}{\mathbf{d}^2 \, (\text{N-1}) + \mathbf{X}^2 \, \text{NP} \, (\text{1-P})}$$

$$\mathbf{S} = [3.841 \times 9264 \times 0.5 \times (1 - 0.5)] / \, [0.0025 \times 9263 + 3.841 \times 0.5 \times (1 - 0.5)]$$

$$\mathbf{S} = (3.841 \times 9264 \times 0.25) / \, (23.1575 + 0.96025)$$

$$\mathbf{S} = 8895.756 / 24.11775$$

$$\mathbf{S} \approx 368.85$$

Note: S = required sample size

N =the given population size;

P = population proportion that for table construction has been assumed to be .50, as this magnitude yields the maximum possible sample size required;

d = the degree of accuracy as reflected by the amount of error that can be tolerated in the fluctuation of a sample proportion p about the population proportion P - the value for d being .05 in the calculations for entries in the table;

 X^2 = table value of chi-square for one degree of freedom relative to the desired level of confidence, which was 3.841 for the .95 confidence level represented by entries in the table.

APPENDIX C
Criteria for Determining a Representative Interview Sample

Participants	Minimum	Participants	Minimum	Participants	Minimum
	Interviews		Interviews		Interviews
0-9	ALL	86-99	22	<u>339-369</u>	<u>53</u>
10-12	9	100-149	24	370-475	58
13-17	11	150-199	26	476-550	65
18-24	13	200-220	30	551-600	70
25-30	15	221-240	35	601-700	80
31-44	17	241-299	37	701-800	86
45-64	19	300-320	42	801-900	90
65-85	21	321-338	47	901-1,000	100

(cf.: Alberta Municipal Health & Safety Association. http://www.amhsa.net)

APPENDIX D

The Miao Students' English VLSQ (English Version)

Part 1 The Student's Background Information Questionnaire

Directions: Please provide the information about yourself by choosing the choices given (\checkmark) or write the response where necessary.

1. Your name:		_School:	
2. Your gender:	☐ Male		☐ Female
3. Nationality:	☐ Miao		□ Others
4. Your major:	☐ Arts		☐ Science

Part 2 The Student's Beliefs on Vocabulary Learning Strategies Questionnaire

Directions: This questionnaire is designed to gather information about your opinions on vocabulary learning and vocabulary learning strategies. Please read each statement carefully and click ($\sqrt{\ }$) the response which describes your opinions. The number 5 to 1 stand for the following responses:

Student's Beliefs on Vocabulary learningStudent's Vocabulary learning Strategies Use5 = strongly agree5 = always appropriate to my situations4 = agree4 = often appropriate to my situations3 = undecided3 = sometimes appropriate to my situations2 = disagree2 = seldom appropriate to my situations1 = strongly disagree1 = not appropriate to my situations

No.	Student' Beliefs on Vocabulary learning					
1	Once the English equivalents of all Chinese words have been	1	2	3	4	5
	remembered, English is learned.					
2	The best way to remember words is to memorize word lists or	1	2	3	4	5
	dictionaries.					
3	Remembering the meanings of a word is an end in itself.	1	2	3	4	5
4	A good memory is all you need to learn a foreign language well.	1	2	3	4	5
5	Repetition is the best way to remember words.	1	2	3	4	5
6	You can only acquire a large vocabulary by memory of individual words.	1	2	3	4	5
7	The meanings of a considerable amount of words can be picked up	1	2	3	4	5
	through reading.					
8	One can expand his vocabulary simply through reading a lot.	1	2	3	4	5
9	Guessing words in context is one of the best ways to learn vocabulary.	1	2	3	4	5
10	When you come across a word several times in different context, you	1	2	3	4	5
	will know what it means.					
11	One should pay attention to set phrases and collocations that go with a	1	2	3	4	5
	word.					
12	The least a learner should know about a word is its form, its meaning,	1	2	3	4	5
	and its basic usage.					
No.	Student's Vocabulary Learning Strategies					
13	I can arrange when and how mangy words I will memorize.	1	2	3	4	5
14	I arrange a short-term goal and a long-term goal for memorizing new	1	2	3	4	5
	words.					
15	I check my progress on word study regularly.	1	2	3	4	5
16	I often do self-evaluation for my words study so as to improve	1	2	3	4	5
	memorizing methods/strategies.					
			•		•	
17	I know when a new word or phrase is essential for adequate	1	2	3	4	5
17	I know when a new word or phrase is essential for adequate comprehension of a passage.	1	2	3	4	5
17 18		1	2 2	3	4	5
	comprehension of a passage.					
18	comprehension of a passage. I know which words are important for me to learn.	1	2	3	4	5
18	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I	1	2	3	4	5
18 19	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I need to remember it.	1	2 2	3	4	5 5
18 19	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I need to remember it. I know what cues I should use in guessing the meaning of a particular	1	2 2	3	4	5 5
18 19 20	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I need to remember it. I know what cues I should use in guessing the meaning of a particular word.	1 1 1	2 2	3 3	4 4	5 5 5
18 19 20 21	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I need to remember it. I know what cues I should use in guessing the meaning of a particular word. Besides textbooks, I look for other readings that fall under my interest.	1 1 1	2 2 2	3 3	4 4	5 5 5
18 19 20 21	comprehension of a passage. I know which words are important for me to learn. When I meet a new word or phrase, I have a clear sense of whether I need to remember it. I know what cues I should use in guessing the meaning of a particular word. Besides textbooks, I look for other readings that fall under my interest. I wouldn't learn what my English teacher doesn't tell us to learn.	1 1 1	2 2 2	3 3	4 4	5 5 5

No.	Student's Vocabulary Learning Strategies					
24	I make use of the logical development in the context (e.g., cause and	1	2	3	4	5
2.5	effect) when guessing the meaning of a word.		_	_	_	_
25	I make use of my common sense and knowledge of the world when	1	2	3	4	5
	guessing the meaning of a word.			_		
26	I make use of my knowledge of the topic when guessing the meaning of a word.	1	2	3	4	5
27	I make use of the grammatical structure of a sentence when guessing the	1	2	3	4	5
	meaning of a new word.					
28	I look for any examples provided in the context when guessing the	1	2	3	4	5
	meaning of a new word.					
29	I make use of the part of speech of a new word when guessing its	1	2	3	4	5
	meaning.					
30	I analyze the word structure (prefix, root, and suffix) when guessing the	1	2	3	4	5
	meaning of a word.					
31	When I see an unfamiliar word again and again, I look it up.	1	2	3	4	5
32	When I want to confirm my guess about a word, I look it up.	1	2	3	4	5
33	When not knowing a word prevents me from understanding a whole	1	2	3	4	5
	sentence or even a whole paragraph, I look it up.					
34	I pay attention to the examples of use when I look up a word in a	1	2	3	4	5
	dictionary.					
35	When I want to know more about a word that I already have some	1	2	3	4	5
	knowledge of, I look it up.					
36	When I don't know the usage of a word I already have some knowledge	1	2	3	4	5
	of, I look it up.					
37	I make a note when I want to help myself distinguish between the	1	2	3	4	5
	meanings of two or more words.					
38	If the new word I try to look p seems to have a prefix or suffix, I will try	1	2	3	4	5
	the entry for the stem.					
39	I make a note when I see a useful expression or phrase.	1	2	3	4	5
40	I make a note when I think the word I'm looking up is relevant to my	1	2	3	4	5
	personal interest.					
41	I take down grammatical information about a word when I look it up.	1	2	3	4	5
42	I note down examples showing the usages of the word I look up.	1	2	3	4	5
43	I make vocabulary lists of new words that I meet.	1	2	3	4	5
44	I keep the vocabulary lists of new words that make.	1	2	3	4	5
45	I go through my vocabulary list several times until I am sure that I don't	1	2	3	4	5
	have any words on that list that I still don't understand.					
46	I make / buy vocabulary cards and take them with me wherever I go.	1	2	3	4	5
47	When I try to remember a word, I repeat it aloud to myself.	1	2	3	4	5
48	When I try to remember a word, I repeat its pronunciation in my mind.	1	2	3	4	5

No.	Student's Vocabulary Learning Strategies					
49	When I try to remember a word, I write it repeatedly.	1	2	3	4	5
50	I memorize the spelling of a word letter by letter.	1	2	3	4	5
51	I attach physical sensations to certain words (e.g., stinking) when I try	1	2	3	4	5
	to remember them.					
52	I act out a word in order to remember it better.	1	2	3	4	5
53	I create a mental image of the new word to help me remember it.	1	2	3	4	5
54	I associate a new word to a known English word that looks similar.	1	2	3	4	5
55	I remember together words that sound similar.	1	2	3	4	5
56	I remember together words that are spelled similarly.	1	2	3	4	5
57	I analyze words in terms of prefixes, stems, and suffixes.	1	2	3	4	5
58	I deliberately study word-formation rules in order to remember more	1	2	3	4	5
	words					
59	I memorize the commonly used stems and prefixes.	1	2	3	4	5
60	When I meet a new word, I search in my memory and see if I have any	1	2	3	4	5
	synonyms and antonyms in my vocabulary stock.					
61	I group words into categories (e.g., animals, vegetables, utensils, etc.)	1	2	3	4	5
62	When I try to remember a word, I remember the sentence in which the	1	2	3	4	5
	word is used.					
63	I remember the new word together with the context where the new word	1	2	3	4	5
	occurs.					
64	I try to read as much as possible so that I can make use of the words I	1	2	3	4	5
	tried to remember.					
65	I make up my own sentences using the words I just learned.	1	2	3	4	5
66	I try to use the newly learned words as much as possible in speech and	1	2	3	4	5
	writing.					
67	I try to use newly learned words in imaginary situations in my mind.	1	2	3	4	5
68	I try to use newly learned words in real situations.	1	2	3	4	5
69	I often make discussion on how to memorize new words with others.	1	2	3	4	5
70	When encountering new words, I ask teachers or classmate for help.	1	2	3	4	5
71	I can quieten myself down to memorize words.	1	2	3	4	5
72	I encourage myself when I make less progress on new words learning.	1	2	3	4	5
73	I can actively communicate with foreigners.	1	2	3	4	5
74	I often take part in English corner to make good use of learned words.	1	2	3	4	5
75	I feel frustrated when encountering complicated words.	1	2	3	4	5
76	When memorizing a new word, I often memorize its Mandarin meaning	1	2	3	4	5
	first.					
77	When memorizing a new word, I often memorize its Miao meaning	1	2	3	4	5
	first.					
78	When memorizing a new word, I often memorize its Mandarin meaning	1	2	3	4	5
	first, and then translate it into Miao for memory.					

No.	Student's Vocabulary Learning Strategies					
79	When memorizing a new word, I often memorize its Miao meaning	1	2	3	4	5
	first, and then translate it into Mandarin for memory.					
80	When memorizing a new word, I often memorize its meaning by both	1	2	3	4	5
	Miao and Mandarin for memory.					
81	When speaking, I arrange the meanings what I will express in	1	2	3	4	5
	Mandarin, and than translate them from Chinese to English.					
82	When speaking, I arrange the meanings what I will express in Miao, and	1	2	3	4	5
	than translate them from Miao to English.					
83	When speaking, I arrange the meanings what I will express in Miao to	1	2	3	4	5
	Mandarin, and then translate them from Mandarin to English.					
84	When speaking, I arrange the meanings what I will express in Mandarin	1	2	3	4	5
	to Miao, and then translate them from Miao to English.					
85	When speaking, I arrange the meanings what I will express in Mandarin	1	2	3	4	5
	and Miao, and then translate them into English.					
86	When writing a composition, I arrange the meanings what I will express	1	2	3	4	5
	in Mandarin, and than translate them from Chinese to English.					
87	When writing a composition, I arrange the meanings what I will express	1	2	3	4	5
	in Miao, and than translate them from Miao to English.					
88	When writing a composition, I arrange the meanings what I will express	1	2	3	4	5
	in Miao to Mandarin, and then translate them from Mandarin to English.					
89	When writing a composition, I arrange the meanings what I will express	1	2	3	4	5
	in Mandarin to Miao, and then translate them from Miao to English.					
90	When writing a composition, I arrange the meanings what I will express	1	2	3	4	5
	in Mandarin and Miao, and then translate them into English.					

APPENDIX E

The Miao Students' English VLSQ (Chinese Version)

高中苗族学生英语词汇学习策略使用情况调查问卷

亲爱的同学: 你好!

为了让老师更好地了解你的英语学习情况,促进你的英语学习,为科学统计提供可靠的依据,特制定此《高中苗族学生英语词汇学习策略调查问卷》调查表。请你在仔细阅读后,根据你的实际情况如实填写。你填写的问卷将对我的研究有极大的帮助。

谢谢你的支持和合作!

第一部分 个人基本情况

	请在	三下列	刊横线	上填上相关信息、	在相应的	i "□"	'内划(、	/)。	
1.	姓名:			_ (可以不填)		性别	」: □ 男		□女
2.	民族:		苗族	□其他					
3.	学校:					班级	:		_
4.	科别:		文科	□ 理科					

第二部分 词汇学习观念和策略调查问卷

以下是常见的英语词汇学习观点和词汇学习的策略与方法, 请仔细阅读每一句话,并从5分量表中选择一个适合于你的数字,在该句后面的格内划(√),以表示你对这句话认同程度。以下是5分量表所代表的意思:

英语词汇学习观念英语词汇学习策略1 = 非常不赞同1 = 非常不适用于我2 = 不赞同2 = 很少适用于我3 = 说不清楚3 = 有时适用于我4 = 赞同4 = 通常适用于我5 = 非常赞同5 = 非常适用于我

序号	词汇学习观念	1	2	3	4	5
1	记住了所有中文词在英语中的对应词,也就学会了英语。	1	2	3	4	5
2	记忆英语单词的最好方法是背诵词典或词汇表。	1	2	3	4	5
3	学习英语单词的目的是把单词记住。	1	2	3	4	5
4	记性好就能学好外语。	1	2	3	4	5
5	记忆英语单词的最好办法是一遍遍的重复。	1	2	3	4	5
6	只有一个一个地去记,才能掌握大量的词汇。	1	2	3	4	5
7	很多英语单词的意义都可以通过阅读来获得。	1	2	3	4	5
8	英语词汇量可以通过大量的阅读来扩大。	1	2	3	4	5
9	通过上下文猜测词义是词汇学习的最好方法之一。	1	2	3	4	5
10	同一个词在不同的上下文中出现几次就会知道它的含义。	1	2	3	4	5
11	记单词时应留意一个词的固定搭配和短语。如: cut—down, cut—off。	1	2	3	4	5
12	学会一个单词最起码也应该掌握它的形式、意义和基本用法。	1	2	3	4	5
13	我会合理安排记忆词汇的时间和数量。	1	2	3	4	5
14	我制定词汇学习的短期目标和长期目标。	1	2	3	4	5
15	我定期检查自己的词汇学习进展情况,看自己是否有进步。	1	2	3	4	5
16	我经常评价自己的词汇学习效果,总结学习方法。一旦发现自己的词 汇学习方式不太有效时就进行调整。	1	2	3	4	5
17	我知道什么时候一个词对文章的理解很重要。	1	2	3	4	5
18	我知道哪些词是我学习的重点。	1	2	3	4	5
19	遇到一个生词时我很清楚该不该记它。	1	2	3	4	5
20	我知道该用什么线索去猜测一个单词的意义。	1	2	3	4	5
21	除课本以外,我还找自己感兴趣的课外读物去读。	1	2	3	4	5
22	老师没要求学的我就不去学。(*)	1	2	3	4	5
23	老师没讲的语言点我就不去管它。(*)	1	2	3	4	5
24	我根据上下文的逻辑发展(如,因果关系)来推断一个词的含义。	1	2	3	4	5
25	我运用常识以及一般性知识来推测一个生词的意义。	1	2	3	4	5
26	我运用自己对所读内容的背景知识来推测一个生词的意义。	1	2	3	4	5
27	我运用句子的语法结构来推测一个生词的意义。	1	2	3	4	5
28	我根据上下文所提供的例子来判断一个生词的意义。	1	2	3	4	5
29	我根据词类来猜测一个生词的意义。	1	2	3	4	5
30	我通过分析一个单词的结构(前缀、词根和后缀)来推测它的含义。	1	2	3	4	5
31	我反复见到一个生词时就要查词典。	1	2	3	4	5
32	当我想证实自己猜测的意义时就查词典。	1	2	3	4	5
33	当一个词妨碍我对一句话或一整段文章的理解时就查词典。	1	2	3	4	5
34	查词典时我留意例句中的用法。	1	2	3	4	5
35	当我想加深一个已知词的了解时就查词典。	1	2	3	4	5
36	当我想知道一个已知词的用法时就查词典。	1	2	3	4	5
37	当我想知道两个或几个词之间意义上的异同时就查词典。	1	2	3	4	5
38	查一个似乎有前缀或后缀的词时我就查这个词的词根。	1	2	3	4	5
39	当我认为所查的词很常用时就记笔记。	1	2	3	4	5
40	当我对所查的词感兴趣时就记笔记。	1	2	3	4	5

序号	词汇学习策略	1	2	3	4	5
41	查一个词时我记下它的语法内容。	1	2	3	4	5
42	我在笔记里记下显示所查词用法的例子。	1	2	3	4	5
43	我把遇见的生词抄在自己的生词本上。	1	2	3	4	5
44	我保留自己的单词本。	1	2	3	4	5
45	我把自己背过的单词本或单词表复习几遍直到不再有生词为止。	1	2	3	4	5
46	我制作单词卡片,走到哪儿带到哪儿。	1	2	3	4	5
47	想记住一个词,我就一遍遍反复朗读它。	1	2	3	4	5
48	我记一个单词时在脑海里重复它的发音。	1	2	3	4	5
49	想记住一个词,我就一遍遍的反复抄写。	1	2	3	4	5
50	我一个字母一个字母地背诵单词的拼法。	1	2	3	4	5
51	记某些单词(如 stinking 臭的)时我把感觉和意义一块记以帮助记忆。	1	2	3	4	5
52	我常把一个单词表演出来以帮助自己的记忆。	1	2	3	4	5
53	记单词时我在头脑中创造一幅图画以帮助记忆。	1	2	3	4	5
54	记一个生词时我联想一个与其发音相像的英语熟词。	1	2	3	4	5
55	我把发音类似的词放在一起。	1	2	3	4	5
56	我把拼写类似的词放在一起。	1	2	3	4	5
57	我通过分析单词的前缀、词根和后缀来帮助记忆。	1	2	3	4	5
58	我有意学习构词法以记住更多生词。	1	2	3	4	5
59	我背诵常用的词根和前缀。	1	2	3	4	5
60	遇见一个生词时我想一想自己是否知道它的同义词或反义词。	1	2	3	4	5
61	我把单词分类记(如 动物、蔬菜、日用品等)。	1	2	3	4	5
62	记生词时,我通过生词所出现的句子来记。	1	2	3	4	5
63	记生词时,我通过生词和其所出现的上下文一起来记。	1	2	3	4	5
64	我大量阅读以便能够运用自己记过的生词。	1	2	3	4	5
65	我用学过的单词自己造句。	1	2	3	4	5
66	我尽量多在说和写时运用新学过的生词。	1	2	3	4	5
67	我尽量在自己想象的情境中运用新学过的生词。	1	2	3	4	5
68	我尽量在实际的情景中运用新学过的生词。	1	2	3	4	5
69	我常常与老师或同学讨论如何记住英语单词。	1	2	3	4	5
70	当遇到生词时我会主动问老师和同学。	1	2	3	4	5
71	我能够静下心来学习词汇而不受干扰。	1	2	3	4	5
72	在词汇学习效果不明显时,我会鼓励自己别泄气。	1	2	3	4	5
73	我会主动找外国人用英语交流。	1	2	3	4	5
74	我常常参加英语角活动并尽量使用所学词汇。	1	2	3	4	5
75	遇见复杂难记的单词时,我会觉得烦躁。	1	2	3	4	5
76	我在记英语单词时,通常是直接记单词的汉语意思。	1	2	3	4	5
77	我在记英语单词时,通常是直接记单词的苗语意思。	1	2	3	4	5
78	我在记英语单词时,通常是先记单词的汉语意思, 再用苗语记忆。	1	2	3	4	5
79	我在记英语单词时,通常是先记单词的苗语意思, 再用汉语记忆。	1	2	3	4	5
80	我在记英语单词时,通常是通过汉语和苗语交互记忆。	1	2	3	4	5

序号	词汇学习策略	1	2	3	4	5
81	我在说英语时,常常是先用汉语词汇组织意思,再用英语表达出来。	1	2	3	4	5
82	我在说英语时,常常是先用苗语词汇组织意思,再用英语表达出来。	1	2	3	4	5
83	我在说英语时,常常是先用苗语词汇组织意思,再通过汉语翻译成英语表达出来。	1	2	3	4	5
84	我在说英语时,常常是先用汉语词汇组织意思,再通过苗语翻译成英语表达出来。	1	2	3	4	5
85	我在说英语时,常常是用汉语和苗语词汇交互组织意思,再用英语表达出来。	1	2	3	4	5
86	我在写英语作文时,常常是先用汉语词汇组织意思,再译成英语。	1	2	3	4	5
87	我在写英语作文时,常常是先用苗语词汇组织意思,再译成英语。	1	2	3	4	5
88	我在写英语作文时,常常是先用苗语词汇组织意思,再通过汉语翻译成英语。	1	2	3	4	5
89	我在写英语作文时,常常是先用汉语词汇组织意思,再通过苗语翻译成英语。	1	2	3	4	5
90	我在写英语作文时,常常是用汉语和苗语词汇交互组织意思,再用英语表达出来。	1	2	3	4	5

APPENDIX F

List of Questions for the Semi-Structured Interview (English version)

rart 1 The Student's Dackground Information Questionnaire									
Directions: Pleas	irections: Please provide the information about yourself by choosing the choices								
given (√) or wri	te the response where nece	ssary.							
1. Your name:	School:								
2. Your gender:	☐ Male	\square Female							
3. Nationality:	☐ Miao	\Box Others							
4. Your major:	□ Arts	☐ Science							
Part 2 The Semi	i-structured Interview Qu	estionnaire							
1. Do you think	that memorizing words is	important to English	learning?						
2. Do you think	it's important to make plan	ns for learning words	s?						

- 3. Are you willing to buy books or magazines related to English learning to learn vocabulary out of class?
- 4. How often do you review the words you learned? And how to test yourself on vocabulary?
- 5. What do you think the most effective memorizing method is?
- 6. Do you often guess it's meaning when encountering a new word? If yes, what factors can be used to guess a new word in a passage?
- 7. Do you often take notes encountering a new word? If yes, what information will you take down?
- 8. Do you often use dictionary? If yes, what's the role of a dictionary in English learning?

- 9. Do you often study English words with classmates or friends?
- 10. Have you many opportunities to communicate with English native speakers or friends in English?
- 11. Is Mandarin your L1 or L2? What role does it play in your English vocabulary learning?
- 12. In addition to the items in *the Vocabulary Learning Strategies Questionnaire*, have you any other specific strategies used in vocabulary learning?

APPENDIX G

List of questions for Semi-Structured Interview (Chinese Version)

高中苗族学生英语词汇学习策略使用情况访谈题目

亲爱的同学: 你好!

第一部分 个人基本情况

为了让老师更进一步的了解你的英语学习情况,在《高中苗族学生英语词汇学习策略调查问卷》调查表的基础上,增加了访谈内容。为了增强访谈效果,请你先根据你的实际情况如实填写第一部分;再就第二部分的每一个问题进行认真思考,5分钟后老师将逐一进行面对面的交谈。谢谢你的支持和合作!

, , , , , , , , , , , , , , , ,	1 114 > 0		
1. 姓名:		性别:□ 男	□ 女
2. 民族: □ 苗族	□其他		
3. 学校:		班级:	
4. 科别: □ 文科	□ 理科		

第二部分 词汇学习观念和策略访谈问题

- 1. 你认为记单词对于学习英语是否重要?如果重要,那么你认为: a. 单词需要背一学英语应该记单词? b. 单词需要在用中学?
- 2. 你认为在英语学习中,制定计划对于单词学习是否重要?
- 3. 你会主动购买相关书籍,在课外学习和记忆英语词汇吗?
- 4. 你通常多久复习所学过的单词?如何测试自己?请举例说明。
- 5. 你认为记忆单词最有效的方法是什么?请举例说明。

- 6. 当你遇见生词时你是不是常常猜测其意思?如果是,那么你认为文章中哪些因素可以利用起来猜测生词的词义?
- 7. 你在学习过程中遇见生词时是否做笔记?如果是,你通常会记下哪些与单词有关的信息?
- 8. 词典在你的英语学习过程中起到什么作用?你在阅读英语文章时用词典吗?如果用,你什么时候用,又是怎样用的?
- 9. 你常常跟同学或朋友一块学习词汇吗(比如相互听写单词,做游戏学习单词,猜谜语等等)?
- 10. 你与朋友、老师或外国人用英语交流的机会多不多?
- 11. 汉语对你来说是母语还是第二语言?它在英语词汇学习中起到什么作用?如果汉语是二语,那么你在学习英语词汇时采取的具体模式是: a. 汉语→英语? b. 苗语→英语? c. 苗语→汉语→英语? d. 汉语→苗语→英语? e. 汉语/苗语→英语?
- 12. 除了《词汇学习策略调查问卷》中涉及的各种策略外,你有没有自己独特的词汇学习策略?请具体举例说明。

APPENDIX H

Item Analysis (IAS) and Item-Objective Congruence Index (IOC) Check of the Questionnaire

1. Students' English Vocabulary Learning Strategies Questionnaire

No.	Expert No. 1	Expert No. 2	Expert No. 3	Result
1	1	1	1	√
2	1	1	1	√
3	1	1	1	√
4	1	0	1	√
5	1	1	1	√
6	-1	-1	0	X
7	1	1	1	√
8	1	1	1	√
9	1	1	1	\checkmark
10	1	1	1	\checkmark
11	-1	0	-1	X
12	1	1	1	\checkmark
13	1	1	1	√
14	1	1	1	√
15	1	1	1	√
16	0	1	1	√
17	1	-1	1	√
18	1	1	1	√
19	-1	0	-1	X
20	1	1	1	√
21	-1	-1	1	\checkmark
22	1	1	1	\checkmark
23	1	1	0	√
24	1	0	1	√
25	0	1	1	√
26	1	1	1	√
27	1	1	1	√

No.	Expert No. 1	Expert No. 2	Expert No. 3	Result
28	1	1	1	√
29	0	1	0	√
30	1	1	1	√
31	1	0	1	√
32	1	1	0	√
33	1	-1	1	√
34	1	1	1	√
35	0	1	1	√
36	1	0	1	√
37	1	1	1	√
38	1	1	1	√
39	-1	-1	-1	X
40	1	1	1	√
41	0	1	1	\checkmark
42	1	1	1	\checkmark
43	1	1	1	\checkmark
44	-1	-1	-1	X
45	1	1	1	\checkmark
46	1	0	1	\checkmark
47	1	1	1	\checkmark
48	1	1	1	\checkmark
49	1	1	1	\checkmark
50	0	1	1	\checkmark
51	1	1	1	\checkmark
52	1	1	0	\checkmark
53	1	1	1	√
54	1	1	1	√
55	-1	-1	-1	X
56	1	1	1	√
57	-1	-1	-1	X
58	1	1	1	√
59	1	0	1	√
60	1	1	1	√
61	1	1	1	√
62	1	1	1	√
63	1	1	1	√
64	1	1	1	√
65	1	1	1	√
66	1	1	1	√

No.	Expert No. 1	Expert No. 2	Expert No. 3	Result
67	1	1	1	√
68	1	1	1	√
69	-1	-1	-1	X
70	1	1	1	√
71	1	1	1	\checkmark
72	1	1	1	\checkmark
73	0	1	1	\checkmark
74	1	1	0	\checkmark
75	1	0	1	\checkmark
76	1	1	1	\checkmark
77	1	1	1	√
78	1	1	1	\checkmark
79	1	1	1	\checkmark
80	-1	1	1	\checkmark
81	1	0	1	\checkmark
82	1	1	1	\checkmark
83	1	1	1	\checkmark
84	1	1	0	\checkmark
85	1	1	1	\checkmark
86	1	-1	1	√
87	1	1	1	√
88	1	0	1	
89	1	1	1	\checkmark
90	1	1	1	
Total	75	68	78	

• Notes: 1. "1" for the item is congruence with objective

2. "-1" for the item is not congruence with objective

3. "0" for the expert not sure

• Result of IOC:

 $(IOC = \sum R/N)$

Item number: 90

R=75+68+78=221 (Scores from experts)

N=3 (Numbers of expert)

IOC=221/3=73.67

Percentage: 73.67/90x100%=81.85%

2. The Semi-Structured Interview Questions

No.	Expert No. 1	Expert No. 2	Expert No. 3	Result
1	1	1	1	√
2	0	1	0	√
3	1	1	1	√
4	1	1	1	√
5	1	1	1	√
6	1	1	1	√
7	1	1	1	√
8	1	1	1	√
9	1	1	0	√
10	0	1	1	√
11	1	1	0	<i>√</i>
12	1	0	1	√
Total	10	11	9	

- Notes: 1. "1" for the item is congruence with objective
 - 2. "-1" for the item is not congruence with objective
 - 3. "0" for the expert not sure

• Result of IOC:

 $(IOC = \sum R/N)$

Item number: 90

R=10+11+9=30 (Scores from experts)

N=3 (Numbers of expert)

IOC=30/3=10

Percentage: 10/12x100%=83.33%

CURRICULUM VITAE

Sixiang Peng was born on 15 November, 1971 in Guizhou province of China. He graduated from Kaili Teachers' College, the former name of Kaili University, in 1994. He studied Japanese at Beijing Language University from 1993 to 1995. He studied English at Guizhou Educational College from 1995 to 1997 with a Bachelor of Arts degree in English Linguistics and Literature. He studied as a visiting scholar in 1999 at Sichuan Normal University.

Upon graduation from Beijing Language University in 1994, Sixiang Peng started his teaching career at Kaili University. He is currently an associate professor at Institute of Foreign Languages Studies of Kaili University. He is also a vice-director of Editoral Department of Journal of Kaili Unibversity, Kaili University, China.

Since 2007, he has been enrolled in the MA. Program of English Language Studies at the School of English, Institute of Social Technology, Suranaree University of Technology, Thailand. Her research interests are linguistics and applied linguistics. He can be reached at the email: flyingpeng2010@hotmail.com.