AN ADAPTATION OF THE TOTAL LITERACY SYSTEM FOR THE EVALUATION OF BILINGUAL EDUCATION AMONG MINORITY NATIONALITIES IN SOUTHWEST CHINA

Tsuyoshi Midomaru

Presented to Payap University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Linguistics Faculty of Arts

Payap University
March 2010
AN ADAPTATION OF THE TOTAL LITERACY SYSTEM FOR
THE EVALUATION OF BILINGUAL EDUCATION AMONG
MINORITY NATIONALITIES IN SOUTHWEST CHINA

MA
LING
PYU
2010
AN ADAPTATION OF THE TOTAL LITERACY SYSTEM FOR THE EVALUATION OF BILINGUAL EDUCATION AMONG MINORITY NATIONALITIES IN SOUTHWEST CHINA

Tsuyoshi Midomaru

Presented to Payap University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Linguistics

Faculty of Arts

Payap University
March 2010
Title An adaptation of the total literacy system for the evaluation of bilingual education among minority nationalities in Southwest China

Researcher Tsuyoshi Midomaru

Degree Master of Arts in Linguistics
Payap University, Chiang Mai, Thailand

Main Advisor Dr. Kimmo Kosonen

Approval Date 19 March 2010

The members of the thesis examining committee

1. ____________________________ Committee Chair
   (Dr. Isara Choosri)

2. ____________________________ Committee Member
   (Dr. Kimmo Kosonen)

3. ____________________________ Committee Member
   (Dr. Elissa Ikeda)

This thesis is accepted as partial fulfillment of the requirements for the degree of Master of Arts in Linguistics.

_________________________________
(Aj. Malee Kongwannit )
Dean of the Faculty of Arts
Curriculum development
and program development

Institution building/organizational

Policy and planning

Ideological

Evaluation

Post-literacy

Teaching-learning

Orientation/training

Media and materials

Professional support

Mobilizational

1 3 5

Dehong Dai program
ACKNOWLEDGEMENTS

First and foremost, I would like to give thanks to God. He provided me with all the help, protection and guidance to complete this thesis. I hope the outcomes of this study may glorify His name.

I’m deeply indebted to Aj. Mark Holt whose comments and suggestions helped me throughout the research and writing of this thesis. Thank you for your patience and continuing support. I would also like to thank Dr. Kimmo Kosonen whose opinions and information have helped me very much throughout the production of this study. My sincere gratitude also goes out to all the teachers and staffs of the Linguistic Department who instructed me through all these years.

I would also like to thank Zhefang Center School and Zaidang Primary School for their cooperation by giving me a great opportunity to participate, observe and interview them for my data collections. The data is definitely valuable information for this study.

Furthermore, I would like to thank my friend, Stanley Tan. He proof-read my thesis for writing stylistics, grammar and offered suggestions for improvement. Indeed, it was a great help to overcome my difficulties of writing in a non-native language.

I’m also grateful to all my translators, Xiao Wei, an English teacher from Zhefang Center School, and my wife. Thank you for your assistance and hard work to help me collect all the information. Working with you has been a pleasure and joyous process.

Lastly, special thanks to SIL International (East Asia Group) for their assistance and all information given to this research. I hope all their educational projects in China will achieve tremendous success in the near future.

Tsuyoshi Midomaru
19 March 2010
Title: An adaptation of the total literacy system for the evaluation of bilingual education among minority nationalities in Southwest China

Researcher: Tsuyoshi Midomaru
Degree: Master of Arts in Linguistics
Payap University, Chiang Mai, Thailand
Advisor: Dr. Kimmo Kosonen
Date of Approval: 19 March 2010
Number of Pages: 110
Keywords: bilingual education, program evaluation, ethnic minorities, China

**ABSTRACT**

UNESCO suggests that bilingual education is one of the ways of establishing a good quality education for ethnic minority students. Bilingual education, here, refers to “the education that uses two or more languages as a medium of instruction.” (UNESCO 2003:17) However, in reality, many bilingual education programs have failed to follow the principle of using two languages as a medium of instruction and ignored the fact that the first language of minority students can be an effective bridge to a national language.

Chinese-Dong bilingual education program in Guizhou Province, China, is selected as a case study in this research. The program is an experimental program in cooperation with the Guizhou government and two non-governmental organizations (NGOs). This study investigates the differences between this program and the other bilingual education programs. It reveals that this bilingual education program is significant because the development of Cognitive/Academic Language Proficiency (CALP) underlies the majority of the Dong literacy subsystems.
In order to compare the typical problems of other bilingual education programs in China, the Chinese-Dehong Dai bilingual education program in Dehong Prefecture, Yunnan Province, is selected in this study. The study reveals that the program continues to face a number of difficulties in the students' CALP development.

Data for this study were collected through library research, observations and interviews. Several libraries, universities and Chinese governmental websites were visited, such as Dehong Prefecture Library and Guizhou University. During the two phases of field research, 24 classes were observed and 19 teachers were interviewed.
ชื่อเรื่อง การประยุกต์ระบบการรู้หนังสืออย่างสมบูรณ์ (Total Literacy System) เพื่อการประเมินผลหลักสูตรการศึกษาโดยระบบสองภาษาในชนกลุ่มน้อยทางภาคตะวันตกเฉียงใต้ของจีน

ผู้จัดทำ นาย ซโยช มโดมาร

หลักสูตร ภาษาศาสตร์ บัณฑิตวิทยาลัย

มหาวิทยาลัยแพทย์ จังหวัดเชียงใหม่ ประเทศไทย

อาจารย์ที่ปรึกษา ภาษาศาสตร์ บัณฑิตวิทยาลัย

ดร. คิมโม โคโซเนน

วันที่จัดพิมพ์ผลงาน 19 มีนาคม 2553

จำนวนหน้า 110

คำสั่งถึง การศึกษาโดยระบบสองภาษา การประเมินผล ชนกลุ่มน้อย ประเทศไทย

บทคัดยอ

ยูเนสโก (UNESCO) กล่าวว่า การศึกษาโดยระบบสองภาษาคือหนทางหนึ่งในการสร้างรากฐานการศึกษาที่ดีและมีประสิทธิภาพสำหรับนักเรียนที่เป็นชนกลุ่มน้อย ในสิ่งนี้ การศึกษาโดยระบบสองภาษาหมายถึง “การศึกษาที่ใช้ภาษาสองภาษาหรือมากกว่าเป็นสื่อในการสอน” (ยูเนสโก 2003:17) อย่างไรก็ตาม ในความเป็นจริงนั้น หลักสูตรการศึกษาด้วยระบบสองภาษาเหล่านี้ได้ประสบความล้มเหลวที่จะดำเนินการตามหลักการของการนำภาษาทั้งสองภาษาใช้เป็นสื่อหลักในการสอน และพิจารณาต่อข้อที่จริงที่ว่าภาษาแม่ของนักเรียนชนกลุ่มน้อยนั้น สามารถเป็นสื่อการเรียนรู้ภาษาประจัญชาติได้อย่างมีประสิทธิภาพ

หลักสูตรการศึกษาโดยระบบสองภาษาของภาษาตัง (Chinese-Dong) ในเฉียงใต้ของประเทศจีน ได้รับการเลือกให้เป็นกรณีศึกษาในการศึกษาจิตวิทยาด้านการสื่อสาร หลักสูตรดังกล่าวเป็นหลักสูตรทดลองในการรวมมือระหว่างภาครัฐในเฉียงใต้ของประเทศจีนและองค์กรเอกชน (NGOs) วิทยาที่มีความมุ่งมั่นในที่ทำการศึกษาขององค์ประกอบต่างๆของหลักสูตรที่ทำให้หลักสูตรการศึกษาต่างต่างจากหลักสูตรการศึกษาโดยระบบสองภาษาอื่นๆ รวมทั้งแสดงให้เห็นถึงสาเหตุที่ทำให้หลักสูตรเดิมนี้มีประสิทธิผล นั้นคือการที่ระบบยกย่องต่างๆส่วนใหญ่ในหลักสูตรการ
เรียนรู้และการพัฒนาความสามารถทางภาษาเชิงวิชาการ/กระบวนการเรียนรู้ (Cognitive/Academic Language Proficiency) (CALP)

นอกจากนี้ วิทยานิพนธ์ฉบับนี้ได้เล็กหลักสูตรการศึกษาโดยระบบสองภาษาของภาษาไทเหนือ (Chinese-Dehong Dai) ในเขตเดหง (Dehong) แสดงถึงการศึกษาที่มีการเปรียบเทียบปัญหาที่พบในหลักสูตรการศึกษาโดยระบบสองภาษาอีกในประเทศจีน ซึ่งการศึกษานี้แสดงถึงปัญหาต่างๆที่หลักสูตรนี้เผชิญในการพัฒนาความสามารถทางภาษาเชิงวิชาการ/กระบวนการเรียนรู้ (CALP) ของนักเรียน

การศึกษาวิจัยนี้ได้ทำการเก็บรวบรวมข้อมูลผ่านทางการค้นคว้าในห้องสมุด การสังเกตการณ์ และการสอบถามผู้เรียน ผู้จัดทำได้ทำการค้นคว้าข้อมูลจากห้องสมุด และแหล่งข้อมูลจากมหาวิทยาลัยหลายแห่ง อาทิเช่น ห้องสมุดกลางแห่งเขตเดหง และมหาวิทยาลัยกุยโจว รวมถึงศึกษาวิจัยของภูริรัฐต่างๆ นอกจากนี้ ได้ทำการวิจัยภาคสนามของหลักสูตรทั้งสองแห่ง โดยการเข้าสังเกตการณ์ในชั้นเรียนถึง 24 คาบ และทำรายงานการสัมภาษณ์ครูจำนวน 19 ท่าน
# TABLE OF CONTENTS

Acknowledgements........................................................................................................... ii

Abstract........................................................................................................................ iii

บทคดยอ........................................................................................................................ v

List of Tables.................................................................................................................. xi

List of Figures................................................................................................................. xv

Abbreviations and Symbols.......................................................................................... xvii

Chapter 1 Introduction................................................................................................. 1

1.1 Research questions.................................................................................................... 2

1.2 Sites......................................................................................................................... 2

1.3 Methodology........................................................................................................... 5

1.4 Benefits.................................................................................................................. 6

1.5 Limitations.............................................................................................................. 6

Chapter 2 Literature Review....................................................................................... 8

2.1 Bilingual education in China................................................................................ 8

    2.1.1 Types of bilingual education in China ......................................................... 11

    2.1.2 Reasons for slowing down of bilingual education in the 1990s................. 13

2.2 Cognitive/Academic Language Proficiency (CALP)............................................. 16

    2.2.1 Threshold hypothesis.................................................................................... 18

    2.2.2 Interdependence hypothesis......................................................................... 20

    2.2.3 L1 first: An (mis-)interpretation of CALP.................................................... 23
2.2.4 Basic principles of CALP development................................. 24
2.3 The total literacy system....................................................... 25
  2.3.1 Three levels........................................................................ 26
  2.3.2 Eleven subsystems.............................................................. 28
  2.3.3 The total literacy system in bilingual education................... 32
Chapter 3 Evaluation model for bilingual education programs........... 36
  3.1 Program evaluation............................................................. 36
    3.1.1 Defensible criteria......................................................... 38
    3.1.2 Evaluation objects......................................................... 40
  3.2 Questionnaire..................................................................... 40
  3.3 Customizing subsystems...................................................... 42
    3.3.1 Ideological subsystem.................................................... 43
    3.3.2 Policy and planning subsystem....................................... 44
    3.3.3 Institution building and organizational subsystem........... 45
    3.3.4 Mobilizational subsystem.............................................. 46
    3.3.5 Professional support subsystem..................................... 47
    3.3.6 Curriculum development and programming development subsystem...... 48
    3.3.7 Media and materials subsystem..................................... 49
    3.3.8 Orientation and training subsystem................................ 49
    3.3.9 Teaching-learning subsystem........................................ 50
    3.3.10 Post-literacy subsystem............................................... 51
    3.3.11 Evaluation subsystem.................................................. 52
  3.4 Scales (analysis and interpretation)...................................... 52
  3.5 Summary.......................................................................... 54
Chapter 4 Chinese-Dehong Dai bilingual education program........... 56
4.1 Background.................................................................56

4.2 General results............................................................59
  4.2.1 Official syllabus in 1989...........................................61

4.3 The literacy system of the Dehong Dai program..............62
  4.3.1 Ideological subsystem.............................................62
  4.3.2 Policy and planning subsystem...............................63
  4.3.3 Institution building and organizational subsystem.......64
  4.3.4 Mobilizational subsystem......................................65
  4.3.5 Professional support subsystem.............................66
  4.3.6 Curriculum development and programming development subsystem.....67
  4.3.7 Media and materials subsystem..............................70
  4.3.8 Orientation and training subsystem.........................71
  4.3.9 Teaching-learning subsystem.................................72
  4.3.10 Post-literacy subsystem......................................73
  4.3.11 Evaluation subsystem.........................................73

4.4 Summary.................................................................74

Chapter 5 Chinese-Dong bilingual education program............77

5.1 Background.............................................................77

5.2 General results........................................................79

5.3 The literacy system of the Dong program......................81
  5.3.1 Ideological subsystem...........................................81
  5.3.2 Policy and planning subsystem...............................83
  5.3.3 Institution building and organizational subsystem.......84
  5.3.4 Mobilizational subsystem......................................85
  5.3.5 Professional support subsystem.............................86
5.3.6 Curriculum development and programming development subsystem...... 88
5.3.7 Media and materials subsystem......................................................91
5.3.8 Orientation and training subsystem..............................................92
5.3.9 Teaching-learning subsystem.......................................................93
5.3.10 Post-literacy subsystem...............................................................94
5.3.11 Evaluation subsystem.................................................................95
5.4 Summary..........................................................................................96

Chapter 6 Conclusion.............................................................................101
6.1 Findings.............................................................................................101
6.1.1 An evaluation model for bilingual education programs...............101
6.1.2 A CALP supportive program and a non-CALP-supportive program..102
6.1.3 Weakness of Chinese governmental bilingual education programs in the institution building and organizational subsystem (a hypothesis).........106
6.1.4 Bilingual education misconceived as minority language classes added to the national curriculum.........................................................108
6.2 Further Studies..................................................................................109

Bibliography..........................................................................................111
Appendix 1 Observation Sheet...............................................................116
Appendix 2 Questionnaires (问卷)..........................................................117
Appendix 3 Questionnaires....................................................................121
Appendix 4 Evaluation Check Sheet........................................................126
LIST OF TABLES

Table 1: Features of selected bilingual education programs..........................5
Table 2: Extracted text from the Constitution of People's Republic of China (The National People's Congress of the People's Republic of China)...........................10
Table 3: Extracted text from the Law of People's Republic of China on Regional National Autonomy (The National People's Congress of the People's Republic of China)..............................................................11
Table 4: Summary of 'language maintenance' bilingual education and 'transitional' bilingual education ..........................................................................................12
Table 5: The pyramid model (Tsung 2009:108).............................................13
Table 6: Reasons for slowing down of Chinese bilingual education in the 1990s (Midomaru 2005).................................................................................................15
Table 7: Features of bilingual education programs that are supportive and not supportive of CALP..............................................................................................25
Table 8: Eleven subsystems adapted into the Chinese context.........................29
Table 9: Desirable features of a program evaluation and the characteristics of the evaluation model used in this study..............................................................38
Table 10: An example of progression plan (Malone 2006:15)..........................39
Table 11: Checklist (ideological subsystem) ..................................................44
Table 12: Checklist (policy and planning subsystem).....................................45
Table 13: Checklist (institution building and organizational subsystem)..........46
Table 14: Checklist (mobilizational subsystem).................................47
Table 15: Checklist (professional support subsystem)..........................48
Table 16: Checklist (curriculum development and programming development subsystem)........................................................................49
Table 17: Checklist (media and materials subsystem)............................49
Table 18: Checklist (orientation and training subsystem)......................50
Table 19: Checklist (teaching-learning subsystem)...............................51
Table 20: Checklist (post-literacy subsystem)......................................52
Table 21: Checklist (evaluation subsystem)..........................................53
Table 22: Summary of the evaluation scales.........................................54
Table 23: Extracted text from the Dehong Prefecture Law (translated by the author)........................................................................59
Table 24: Background information of interviewees...............................60
Table 25: List of observed classes.......................................................60
Table 26: Results of the interviews (ideological subsystem)....................63
Table 27: Results of the interviews (policy and planning subsystem)........64
Table 28: Results of the interviews (mobilizational subsystem)..............66
Table 29: Results of the interviews (professional support subsystem).......67
Table 30: Curriculum suggested by the 1989 syllabus (Dai et al. 2006:234)........68
Table 31: Class schedule of Grade 1 at Zhefang Central School (sketched by the author)........................................................................................................69
Table 32: Results of the interviews (curriculum development and programming development subsystem).........................................................70
Table 33: Results of the interviews (media and materials subsystem).........71
Table 34: Results of the interviews (orientation and training subsystem).......72
Table 35: Results of the interviews (teaching-learning subsystem)............................72
Table 36: Results of the interviews (post-literacy subsystem).................................73
Table 37: Summary of problems in Chinese-Dehong Dai bilingual education program............................................................................................................................75
Table 38: Background information of the interviewees.............................................80
Table 39: List of observations....................................................................................81
Table 40: Extracted text from the Guizhou Provincial National Folk Culture Protection Law (translated by the author).................................................................82
Table 41: Results of the interviews (ideological subsystem)......................................83
Table 42: Results of the interviews (policy and planning subsystem).........................84
Table 43: Results of the interviews (mobilizational subsystem)...............................86
Table 44: Results of the interviews (professional support subsystem)......................87
Table 45: Three phases of the Chinese-Dong bilingual education (n.d. document given by SIL International).................................................................................................89
Table 46: Class schedule of Grade 2 at Zaidang Primary School (sketched by the author).................................................................................................................................90
Table 47: Class schedule of Grade 5 at Zaidang Primary School (sketched by the author).................................................................................................................................90
Table 48: Results of the interviews (curriculum development and program development subsystem)........................................................................................................91
Table 49: Results of the interviews (media and materials subsystem)..........................92
Table 50: Results of the interviews (orientation and training subsystem)..................93
Table 51: Results of the interviews (teaching-learning subsystem)............................94
Table 52: Results of the interviews (post-literacy subsystem)....................................95
Table 53: Summary of the institution building and organizational subsystem of Chinese-Dong bilingual education program in comparison with the Dehong Dai program........................................................................................................................................... 98

Table 54: Summary of the eleven subsystems of Chinese-Dong bilingual education program.................................................................................................................................................. 99

Table 55: Summary of the eleven subsystems of Dehong Dai program and Dong program.................................................................................................................................................. 104
LIST OF FIGURES

Figure 1: Map of Yunnan and Guizhou Provinces (sketched by the author).............. 3

Figure 2: Tai-Kadai language family tree (sketched by the author based on the information from www.ethnologue.com on 28 December 2009)............................. 4

Figure 3: An image of Global Language Proficiency based on Cummins (2001) (illustrated by the author).................................................................................. 16

Figure 4: An image of CALP and BICS based on Cummins (2001) (illustrated by the author)................................................................................................................. 17

Figure 5: Picture of threshold hypothesis (Baker 2006:172)................................. 19

Figure 6: The iceberg image of bilingual children’s language proficiency (Cummins 2000:118)........................................................................................................... 21

Figure 7: Developmental trends of CALP and BICS (Cummins 2001:114).......... 22

Figure 8: A picture of bridge (Malone 2006:12; UNESCO 2007:8)..................... 24

Figure 9: Picture of the total literacy system (Bhola 1994:159)............................ 26

Figure 10: Elementary Education in Papua New Guinea (Waters 1998:411)........ 33

Figure 11: An example of notes from the interviews......................................... 42

Figure 12: An image of the evaluation model...................................................... 55

Figure 13: Location of Dehong Prefecture, Yunnan Province (the map was modified from http://en.wikipedia.org/wiki/Dehong_Dai_and_Jingpo_Autonomous_Prefecture on 27 August 2009)........................................................................................................... 57
Figure 14: Example of Dehong Dai orthography (Story of Tools, typed by the author).......................................................................................................................... 57

Figure 15: The literacy system of Chinese-Dehong Dai bilingual education program.......................................................................................................................... 74

Figure 16: Location of Zaidang, Guizhou Province (the map was modified from http://en.wikipedia.org/wiki/Qiandongnan_Miao_and_Dong_Autonomous_Prefecture on 27 August 2009).......................................................................................................................... 78

Figure 17: The literacy system of Chinese-Dong bilingual education program........97

Figure 18: Evaluation results of the selected bilingual education programs........103
### ABBREVIATIONS AND SYMBOLS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BICS</td>
<td>Basic Interpersonal Communicative Skills</td>
</tr>
<tr>
<td>BLE</td>
<td>Bilingual education</td>
</tr>
<tr>
<td>CALP</td>
<td>Cognitive/Academic Language Proficiency</td>
</tr>
<tr>
<td>GLP</td>
<td>Global Language Proficiency</td>
</tr>
<tr>
<td>L1</td>
<td>First language</td>
</tr>
<tr>
<td>L2</td>
<td>Second language</td>
</tr>
<tr>
<td>LOI</td>
<td>Language of instruction</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>SIL</td>
<td>Summer Institute of Linguistics</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

Although the concept of bilingual education was not new to certain areas in China, the People's Republic of China has promoted bilingual education programs for ethnic minority students since the 1980s. Bilingual education takes place when the minority students study both in their own language and Chinese. The number of bilingual schools decreased in the 1990s despite reports that bilingual education programs helped students to perform better in their exam results. This study suggests that bilingual education programs in China continue to face a number of difficulties in the development of their students' Cognitive/Academic Language Proficiency (CALP).

The concept of CALP was introduced by Cummins in 1980. CALP is an underlying part of human language proficiency which commonly exists over two languages of bilingual speakers. That makes CALP able to develop through either first language (L1) or second language (L2). Cummins (2000, 2001) suggests that the CALP development of bilingual speakers is a key factor in their successful academic achievements. When the CALP is fully developed, bilingual students are not just able to communicate but also to use both L1 and L2 in their academic activities. In other words, an effective bilingual education program must be supportive of the students' CALP development. Cummins' theory is widely accepted by many researchers and educators all over the world (more details will be provided in Chapter 2).

This study uses an evaluation model associated with the concept of the total literacy system. This will examine whether the bilingual education programs in China are supportive of the students' CALP development. Bhola introduced the concept of the total literacy system in 1994. This system consists of three levels and eleven subsystems which indicate various components of a literacy program. He originally meant the system to contribute to the adult literacy programs of UNESCO and related organizations. However, the system also illustrates a wide and comprehensive structure of bilingual education programs as well. This study
adopts the concept of a total literacy system as a framework to evaluate bilingual education programs. Simultaneously, two basic principles of CALP development are integrated into the evaluation processes (Chapter 3).

The Chinese-Dong bilingual education program in Guizhou Province and Chinese-Dehong Dai bilingual education program in Dehong Prefecture, Yunnan Province are used as case studies. The Dong program is an experimental bilingual education program started in 2000. This study aims to discuss how the Dong program differs from the other bilingual education programs since the 1980s. The Dehong Dai program represents the standard bilingual education program. It is used as a comparison to the Dong program (Chapter 4 and Chapter 5).

In the following section, research questions, sites, methodology, benefits, and limitations of this study are introduced.

1.1 Research questions

The research question of this study is: **Does the Chinese-Dong bilingual education program overcome the typical problems of other bilingual education programs in China?**

In order to answer the research question, this study answers the following questions:

(1) What are the typical problems found in most bilingual education programs? To answer this, an introductory case study is made using the Chinese-Dehong Dai bilingual education program.

(2) What are the specific differences between the Chinese-Dong bilingual education program and the Chinese-Dehong Dai bilingual education program in the literacy subsystems?

(3) Is the Chinese-Dong bilingual education program more supportive of the students' CALP development?

1.2 Sites

This study investigates two bilingual education programs in China. One program is the Chinese-Dehong Dai bilingual education program in Dehong Dai-Jinpo Autonomous Prefecture, Yunnan Province. The program has been conducted by the

---

1 Dehong Dai, which is also called Dai Na or Dai Nua, is classified as one dialect of Dai language by the Chinese government. Because of it, Dehong Dai is often confused with other dialects of Dai, such as Xishuangbanna Dai (Dai Lu). However, they have different linguistic figures and education systems. They can not be discussed together.
Dehong government since the 1980s. The other one is the Chinese-Dong bilingual education program in Guizhou Province since 2000. This is a cooperative program between the Guizhou government and two NGOs: Summer Institute of Linguistics (SIL) International and Guizhou University. Both programs are designed for ethnic minority students to study using the national language (Standard Chinese) and their own minority language (Dehong Dai language or Dong language).

Yunnan and Guizhou Provinces are located in the southwest of China. Southwest China generally refers to these two provinces and Sichuan. Most of the discussion in the thesis focuses on this region (see Figure 1).

![Figure 1: Map of Yunnan and Guizhou Provinces (sketched by the author)](image)

These programs are selected in this study for two reasons. Firstly, both languages of Dehong Dai and Dong are classified into Tai-Kadai language family (see Figure 2). Their difficulties in learning Chinese are considered relatively similar.²

² Dehong Dai and Dong use different orthographies. Dehong Dai uses the unique traditional alphabets while Dong uses Chinese Pinyin (Roman alphabets pronunciation guide for Chinese) based alphabets. In the strict sense, Dong students using Chinese Pinyin based alphabets may have an advantage to learn Chinese at the beginning.
Secondly, these programs are operated by different agencies and began in different decades. This study will present differences between a standard governmental program (Dehong Dai program) and an experimental NGO-initiated program (Dong program). The characteristics that make the Dehong Dai program represent a standard bilingual education program and differ from the Dong program are shown in Table 1.
Table 1: Features of selected bilingual education programs

<table>
<thead>
<tr>
<th></th>
<th>Chinese-Dehong Dai BLE program</th>
<th>Chinese-Dong BLE program</th>
<th>(A standard program in China)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target group</strong></td>
<td>Dehong Dai students</td>
<td>Dong students</td>
<td>Ethnic minority students</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>Chinese and Dehong Dai</td>
<td>Chinese and Dong</td>
<td>Chinese and a minority</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>language</td>
</tr>
<tr>
<td><strong>Date started</strong></td>
<td>Early 1980s</td>
<td>2000</td>
<td>Early 1980s</td>
</tr>
<tr>
<td><strong>Sponsoring agency</strong></td>
<td>The Dehong government</td>
<td>Cooperation between the</td>
<td>A provincial or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guizhou government and</td>
<td>prefecture government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>two non-governmental</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>organizations</td>
<td></td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Formal education</td>
<td>Formal education (an</td>
<td>Formal education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>experimental program)</td>
<td></td>
</tr>
</tbody>
</table>

BLE: bilingual education

1.3 Methodology

This study employed three methods of data collection: library research; observations; and interviews.

Library research in this study targeted any sorts of documents, reports, and academic research papers related to the selected programs. For example, in the Dong program, official documents from the government and program reports for stakeholders were used. The program reports included reports from workshops, financial reports and research reports. Email exchanges with the program coordinator were included as well. All these reports were important sources for this study.

Observations used in this study were considered structured observations. The evaluator was present in a classroom observing the following issues: Which languages were used for instruction by the teacher; Which languages were written on the board by the teacher; Which languages were used for students' communication with their teachers and their peers. The results of the observations were counted as quantitative data (which is represented in percentages). Qualitative observations were also made, because the structured observation did not give the answers as to the attitudes of teachers and students involved in the lessons. For example, if it was observed that teachers insist the students use Chinese instead of their local
languages, this meant that students were not encouraged to use both languages. (The observation check sheets are found in Appendix 1).

This study used questionnaires in formal interviews with the local teachers. The questionnaires covers all eleven subsystems of the total literacy system both in direct and indirect ways. They were designed to explore whether the basic principles of CALP development are supported in the program. There are 53 questions in total under three categories. The questionnaires begin with asking background information of the interviewees: age, gender, first language, and so on. (The questionnaires are found in Appendix 2 and 3)

1.4 Benefits

This study aims to evaluate the Chinese-Dong bilingual education program. From 2000 to 2009, the first bilingual curriculum was applied to a local primary school in Guizhou (the observations and interviews were conducted in 2008). Therefore, it was a good time for the program to decide whether the bilingual education should be extended. In order to find appropriate ways to do future evaluation and improve the program, feedback of these research results were distributed to the facilitators of the program.

This study also presents an evaluation model based on Applied Linguistics theories to reflect the quality of bilingual education programs in China. The evaluation model examining all the eleven subsystems of the total literacy system gives a more complete picture of the weaknesses and the strengths of each program. The study also tests an evaluation with external criteria created by CALP theory rather than an evaluation according to the program goals. Since the model focuses on language of instruction in the selected programs, it could encourage the program facilitators in China to use approaches of bilingual education which include two languages of instruction. This model has potential to contribute to the improvement of educational quality among ethnic minority students in China.

1.5 Limitations

Since the researcher had limited connections with the local schools, only a few schools were suggested for the field research. The lack of time and financial support was also a difficulty in this research. Therefore, the field research was conducted at only one school for each program. The Chinese-Dehong Dai bilingual education program is conducted at numerous schools in Dehong Prefecture, therefore it is
difficult to generalize the results from one school to represent a whole program. Efforts were maximized in library research to support the whole study. More research will be conducted in the future in order to provide a more thorough and accurate understanding of the Dehong Dai program.

Another limitation of this study is the researcher's language skills in the minority languages. Since the researcher is not familiar with either Dehong Dai or Dong language, one or two interpreters were used during observations and interviews. During the interviews, when local teachers were asked questions in Chinese, the teachers often answered in their own languages. The interpreters translated the answers to either Chinese or English immediately. However, this study can not capture the full details of information from the interviews and observations due to their language structures and expressions. Therefore, it only discusses certain significant results and historical facts of the programs.
Chapter 2

Literature Review

This chapter consists of three topics. Firstly, it introduces the background of bilingual education in China. In the 1980s, there was a boom in the implementation of bilingual education programs. However, it slowed down in the 1990s. Based on earlier research (Blachford 1997; Lin 1997; Midomaru 2005; Tsung 2009), this study suggests that the bilingual education programs in China continue to face a number of difficulties. It also includes the recent discussions of the concept of bilingual education in China.

Secondly, concept of Cognitive/Academic Language Proficiency (CALP) is introduced. CALP is a collective language ability working in the academic and cognitive field of human communications. It works behind all the basic language skills such as listening, speaking, reading and writing. CALP development is closely related to the language of instruction. It is also known that the students need time and support to become proficient in academic areas (Baker 2006; Cummins 2000, 2001; Thomas and Collier 1997, 2002). As a result of CALP development, the bilingual students fully appear proficient in formal academic learning. In this study, two basic principles from the CALP theory were chosen as the criteria to define whether the selected bilingual education programs are supportive to the CALP development.

Finally, the chapter discusses the total literacy system introduced by Bhola (1994). He claims that the system is a broad and comprehensive outlook of literacy and bilingual education programs. The total literacy system includes eleven subsystems that are parts of working system no matter how big or small the literacy program is. In other words, these subsystems need to be involved in literacy system in order for it to function well.

2.1 Bilingual education in China

Since the foundation of the People's Republic of China in 1949, the government has paid special attention to education for minority nationalities in China. In the
1950s, the government created or revised scripts of minority languages and assessed minority language education in some areas (this became a prototype for bilingual education after the 1980s) (Hansen 1999; Tsung 2009). After a space during the Cultural Revolution (1966-76), China has promoted bilingual education programs for ethnic minority students since the 1980s (Hansen 1999; Lin 1997; Midomaru 2005; Tsung 2009; Zhou 2001).

Bilingual education in China is legally supported by the National Constitution of 1982. It protects the minority people's rights to use and develop their own languages (Article 4) and promotes nationwide use of Standard Chinese (Article 19) (Bradley and Bradley 2001; Zhou 2004). Article 4 states that “all nationalities have the freedom to use and develop their own spoken and written languages.” The 'all nationalities' refers to all the 56 nationalities (official ethnic groups) recognized by the Chinese government. This includes 55 minority nationalities. The constitution does not give any clear definition of what it means by 'use and develop'. However, the local governments' officers and educators understood that the central government protects the minority people's rights to use their languages in education. This is why many provinces and prefectures adopt the policy of using minority languages in formal education. On the other hand, Article 19 discusses educational issues and 'the nationwide use of *Putonghua* (Standard Chinese)'. Under the circumstances, it is clear that the government supports the use of *Putonghua* in education. In these ways, bilingual education is 'a middle way' promoting both indigenous languages and Standard Chinese at the same time. The government adopted the *Law of People's Republic of China on Regional National Autonomy* in 1984. This law committed local governments (province and prefecture level) to bilingual education programs (Article 10, 36) (Zhou 2004).

---

3 Both the Dehong and the Guizhou governments adopt the policy in their provincial/prefecture constitutions.
Table 2: Extracted text from the *Constitution of People's Republic of China* (The National People's Congress of the People's Republic of China)

**Article 4**

All nationalities in the People's Republic of China are equal. The State protects the lawful rights and interests of the minority nationalities and upholds and develops a relationship of equality, unity and mutual assistance among all of China's nationalities. Discrimination against and oppression of any nationality are prohibited; any act which undermines the unity of the nationalities or instigates division is prohibited.

The State assists areas inhabited by minority nationalities in accelerating their economic and cultural development according to the characteristics and needs of the various minority nationalities.

Regional autonomy is practised in areas where people of minority nationalities live in concentrated communities; in these areas organs of self-government are established to exercise the power of autonomy. All national autonomous areas are integral parts of the People's Republic of China.

**All nationalities have the freedom to use and develop their own spoken and written languages** and to preserve or reform their own folkways and customs.

**Article 19**

The State undertakes the development of socialist education and works to raise the scientific and cultural level of the whole nation.

The State establishes and administers schools of various types, universalizes compulsory primary education and promotes secondary, vocational and higher education as well as pre-school education.

The State develops educational facilities in order to eliminate illiteracy and provide political, scientific, technical and professional education for workers, peasants, State functionaries and other working people. It encourages people to become educated through independent study.

The State encourages the collective economic organizations, State enterprises and institutions and other sectors of society to establish educational institutions of various types in accordance with law.

**The State promotes the nationwide use of Putonghua** [common speech based on Beijing pronunciation].
Table 3: Extracted text from the *Law of People's Republic of China on Regional National Autonomy*  
(The National People's Congress of the People's Republic of China)

| Article 10 | The organs of self-government of national autonomous areas shall guarantee the freedom of the nationalities in these areas to use and develop their own spoken and written languages and their freedom to preserve or reform their own folkways and customs. |
| Article 36 | In accordance with the guidelines of the State on education and with the relevant stipulations of the law, the organs of self-government of national autonomous areas shall decide on plans for the development of education in these areas, on the establishment of various kinds of schools at different levels, and on their educational system, forms, curricula, the language used in instruction and enrollment procedures. |

Bahry (2009) points out that the recent educational policies in China shifted to decentralization. He states that “recent policy promoting quality education has reduced central control, encouraging school-based curriculum development” (Bahry 2009:6). His case study of Chinese-Yugur bilingual education program focuses on local curriculum and school-based curriculum. This recent policy provides great opportunity for the local governments and local schools to take the initiative in supporting bilingual education among minority nationalities, including instructions in their own language.

### 2.1.1 Types of bilingual education in China

What type of bilingual education is typical in China? Teng and Weng (2001) summarize the varieties of bilingual education in China. They classified the bilingual education programs generally into two types (see Table 4). One is 'language maintenance' bilingual education. This type of program gives equal emphasis to Chinese and a minority language. For example, the school curriculum allocates the same amount of time for teaching each language in primary and middle schools. Therefore, the purpose of the programs are to cultivate the students' fluency in both languages. However, this type of bilingual education is limited to the following: 1) Nationalities with a long history of independent education systems (Tibetan, Uygur, Kazak); 2) Nationalities with a large population in foreign countries (Korean, Mongolian). Another type of bilingual education is 'transitional' bilingual education. A transitional bilingual education begins with a single minority language in the first grade. The use of Chinese as a medium of instruction gradually increases. The purpose of these programs is to help the minority students to be able to follow the lessons at middle school using only Chinese. This latter type is commonly used for...
most national minorities in China, especially in Guizhou and Yunnan provinces. Since the variety of national minorities are living close to each other, it is not practical to think of establishing different middle schools for each of the minority students. Therefore, this study only discusses transitional bilingual education programs.

Table 4: Summary of 'language maintenance' bilingual education and 'transitional' bilingual education

<table>
<thead>
<tr>
<th></th>
<th>Language maintenance BLE</th>
<th>Transitional BLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage</strong></td>
<td>Primary school and middle school</td>
<td>Primary school only</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>Students would be fluent in both languages</td>
<td>Students can follow lessons at middle school using only Chinese</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>Bilingual with the equal emphasis on both Chinese and a minority language</td>
<td>Moves from a minority language to Chinese</td>
</tr>
<tr>
<td><strong>Target group</strong></td>
<td>Kazakh, Korean, Mongolian, Tibetan, Uygur</td>
<td>Most minority nationalities in China (especially in Guizhou and Yunnan provinces)</td>
</tr>
</tbody>
</table>

Tsung (2009) also studied different types of bilingual education in China. One of these types popular in Southwest China is called the 'pyramid model'. She explains that “[in the 'pyramid model'] the mother tongue is used as the medium of instruction in the first year in primary school and is gradually reduced as the students' level of Han language competency increases” (Tsung 2009:107). Table 5 is the 'pyramid model' timetable supported by the Yunnan Provincial government. This is similar to the transitional bilingual education mentioned above. It is evident that the bilingual education in Southwest is mainly transitional bilingual education.
Table 5: The pyramid model (Tsung 2009:108)

<table>
<thead>
<tr>
<th>Year of the school</th>
<th>Class time allocation of minority languages (percent)</th>
<th>Class time allocation of the Han language (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Six</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Year Five</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Year Four</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Year Three</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Year Two</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Year One</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>100</td>
<td>Conversational</td>
</tr>
</tbody>
</table>

Feng (2007) points out that Chinese-English bilingual education increases in the east coast such as in Beijing, Shanghai, and Guangzhou. He insists that the discussions of bilingual education in China should include bilingual education for majority nationality (Chinese-English bilingual education) as well as bilingual education for minority nationalities (Chinese-minority language bilingual education) (Feng 2007:2-3). However, Chinese-English bilingual education is still very rare in Southwest China. English is taught in primary schools today as a foreign language but it is not used as a language of instruction. Therefore, this study focuses on bilingual education for minority nationalities.

2.1.2 Reasons for slowing down of bilingual education in the 1990s

It is said that about 160,000 schools were conducting bilingual education in the 1980s (Lin 1997: 195). Nevertheless, the number of schools conducting bilingual education decreased in the 1990s. The State Educational Commission reported in 1994 that over 7000 schools among 21 minority nationalities offered bilingual programs (Tsung 2009:111). Lin (1997) systematically studied educational reforms undergone in China since the 1980s. She is one of the researchers who recognized the changes of Chinese bilingual education programs in the 1990s in the early stages. According to her, “in the 1990s there have been reports that in certain regions efforts have slackened, and some minority areas are giving up [the bilingual education] because of the lack of textbooks, teachers and local support.” (Lin 1997:195) The author (Midomaru 2005) calls it a slowing down of bilingual education in the 1990s. For example, Chinese-Hani bilingual education program in Honghe Hani-Yi Autonomous Prefecture, Yunnan Province, was conducted at 58
primary schools in Luchun County in 1984. However, many schools found difficulties such as the lack of qualified teachers, textbooks, and financial support. As a result, the number of bilingual schools in Luchun County started to decrease at the end of the 1980s. Finally, Guangma Primary School, the last school conducting bilingual education in Luchun County, canceled its bilingual courses in 2005.

Chinese scholars argue that the bilingual education programs have performed well. This is based on the evidence of students' exam results and graduation rates. For example, Bai and Che (1995) are Chinese researchers who studied the Hani-Chinese bilingual education in Honghe Prefecture, Yunnan Province. They reported that the average scores of Guangma Primary School, a Chinese-Hani bilingual school, were 44 points for Chinese and 67.8 points for Math in 1986. In comparison, Guidong Primary School, scored only 10.5 points and 61 points respectively for the same examinations. Both schools are from Luchun County (Che 1995). The graduation rates of Guangma Primary School also recorded 100% in 1991 and 1992, which were the top scores in the county. Moreover, one student from Guangma Primary School received the first prize in the Math Olympics in Luchun County in 1994 (Bai and Che 1995). However, Guangma Primary School ended up canceling the program in 2005. Therefore, the exam results and graduation rates were not the reasons why bilingual education was slowing down in the 1990s.

Bilingual education programs in China continue to face a number of difficulties including political and societal issues. Blachford (1997) studied the language and education policies in China. She found major problems in three areas of Chinese bilingual education: policies, research and practices. She insists that there are no specific laws or regulations which guarantee bilingual education programs. That is why in many cases, bilingual education only means a way for minority children to learn Chinese. This prevents the advantages of being bilingual speakers. She summarizes that such Chinese dominant bilingual education programs may lead to the loss of some minority languages. It should be noted that her concern is not only school level practices, but also the Chinese education policies and ideologies behind them. Lin (1997) also points out problems of the bilingual education programs in divergent aspects: the policies, curriculum, textbooks, teaching methods and teacher training. She mentions that the roots of failure in bilingual education in China exist

4 The number of Chinese-Hani bilingual schools decreased rapidly from 58 schools in 1984 to one school in 1995. Yunnan Minority Language Commission (2001:34) states that “the Chinese-Hani bilingual education program in Honghe Prefecture experienced the rise and fall in a decade. It was a difficult change like an explosion of up and down.”

5 The researcher interviewed Bai about his research at Yuxi Normal University in 2003.
not only at the school level but also at the societal level. Thus, she suggests that understanding both the political and social functions of bilingual education is crucial.

In *Slowing Down of Bilingual Education in China: A Case Study of Guangma Primary School* (Midomaru 2005), the author concluded that the number of bilingual education programs in China decreased in the 1990s for various reasons. There were technical difficulties of bilingual education, such as lack of quality teachers and ineffective teaching methods. There were also other social factors, such as Chinese dominating ideologies in ethnic minority societies and the lack of government support. In fact, the problems facing the system of a bilingual education program is not just limited to the classroom activities. They also exist in a much wider and more complicated structure (see Table 6).

<table>
<thead>
<tr>
<th>Table 6: Reasons for slowing down of Chinese bilingual education in the 1990s (Midomaru 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational factors (technical difficulties in school/classroom level)</td>
</tr>
<tr>
<td>- Centralized curriculum</td>
</tr>
<tr>
<td>- Lack of bilingual textbooks</td>
</tr>
<tr>
<td>- Lack of quality teachers</td>
</tr>
<tr>
<td>- Burden for the students</td>
</tr>
<tr>
<td>- Ineffective teaching methods</td>
</tr>
</tbody>
</table>

Tsung (2009) also points out the changes in the 1990s and afterward. She says, “Since the late 1990s, the fast economic development in China has challenged mother tongue instruction in minority schools across all minority areas... In many mother tongue instruction schools students' numbers have fallen, with minority parents voluntarily sending their children to Chinese schools, and language loss has become a hot topical issue” (Tsung 2009:120) Interestingly, she emphasizes the change of the languages of instruction. Here she clearly mentions that: “Since the time demands for Chinese are limited, they are willing to reduce mother tongue instruction... How will minorities maintain their current cultural and linguistic identity if they are under pressure to learn a national and an international language simultaneously?” (2009:198). The balance of the languages of instruction (Chinese and a minority language) is another important issue in bilingual education programs in China today.
Tsung's study suggests that the discussions of the bilingual education programs in China should incorporate a linguistic perspective, as well as the political and social issues.

2.2 Cognitive/Academic Language Proficiency (CALP)

In a bilingual education program, the students learn two languages at the same time. People ask whether bilingual education is just an added burden for the students and how bilingual education can be helpful to the students. A theory on Cognitive/Academic Language Proficiency (CALP) answers those questions by showing how the language proficiency in both languages are linked and learning two languages benefit each other.

It is noticed that the four basic language skills (listening, speaking, reading and writing) in one language cannot be developed independently. For example, speaking skills require improved listening skills. In the same way, the practice of reading skills improves writing skills as well. Oller (1979) suggests that the relevance between the basic language skills is caused by a single underlying factor, which he calls Global Language Proficiency. He explains that the Global Language Proficiency underlies all four basic language skills. When one of the skills is improved, the Global Language Proficiency is also developed. That is why the four basic language skills are simultaneously developed. The concept is summarized in the picture bellow.

Figure 3: An image of Global Language Proficiency based on Cummins (2001) (illustrated by the author)
Cummins (2000, 2001) applies the concept of Global Language Proficiency to language proficiency over two languages (L1: first language and L2: second language) of bilingual speakers. He believes that the improvement of the language skills in L1 and L2 are controlled by a common proficiency. That is why he mentions that “either language can, theoretically, promote the development of the proficiency underlying both languages” (Cummins 2001:130). Cummins conducted a study of bilingual education in Canada. He observed that the immigrant children who seemingly spoke L2 (English) fluently, often failed the national education curriculum for which all classes are conducted in L2. He suggested that there are distinctions between communicative language skills and academic language skills. He named the two dimensions of language proficiency BICS and CALP. BICS (short for Basic Interpersonal Communicative Skills) is a surface part of language proficiency that supports people to communicate in their daily life. The concept of BICS is similar to the four basic language skills in Oller's discussions above. On the other hand, CALP is the underlying part of language proficiency in charge of academic and cognitive activities which are not shown in appearance. The concepts of CALP and BICS can be summarized in the image below (see Figure 4).

![Figure 4: An image of CALP and BICS based on Cummins (2001) (illustrated by the author)](image)

Similar to the discussions of the Global Language Proficiency and basic language skills, CALP can be developed through BICS either in L1 or L2. The developed CALP is also able to improve BICS both in L1 and L2. Therefore, Cummins suggests that this CALP is the true character of the relevance between the language skills of L1 and L2, and developing students' CALP is a key factor of a successful bilingual education program. He says, “Placement of bilingual children in different types of instructional programs should not be based only on 'natural communication' (BICS) tasks. Developmental level of L1 and L2 CALP should also be taken in action” (Cummins 2001:134).
Finding the concept of CALP leads Cummins to two hypotheses: threshold hypothesis and interdependence hypothesis. The following section introduces these hypotheses and related discussions.

2.2.1 Threshold hypothesis

The first hypothesis introduced here is the threshold hypothesis. Baker (2006) illustrates the hypothesis by using the picture of a three-storey house (see Figure 5). The house has two thresholds as a ceiling between each floor. The thresholds are the levels of children’s language competency. There are also two language ladders of L1 and L2 placed on the wall on both sides. In a bilingual education program, students are learning each language like climbing up the ladders. Each floor represents a stage of bilingualism where the students would achieve in the program. The first floor, which is the lowest floor, represents a low level of language competence in both languages. The students in this floor could not climb the language ladders well and stay in the stage of cognitively and academically undeveloped. The second floor, which is in the middle, represents the age-appropriate language competence in one language, though it is not in both languages. The students in this floor develop their CALP as much as other monolingual students are expected to. Finally, the third floor represents balanced bilinguals. The students who have achieved age-appropriate language competence in both languages are cognitively developed (or will reach the higher competency in the future) even more than monolingual students.
Baker (2006) puts the theory in practice to explain the poor achievement situations of ethnic minority children who are studying in a second language only. He stated that “minority language children taught through a second language (e.g. immigrants in the US) sometimes fail to develop sufficient competency in their second language (e.g. English) and fail to benefit from ‘weak’ forms of bilingual education. Their low level of proficiency in English, for example, limits their ability to cope in the curriculum” (Baker 2006:173). The L2 ladder is usually more difficult for ethnic minority children to climb up without any special assistance.

This is similar to the Chinese context. Zhou (2001) compared educational levels and illiteracy levels of all the 56 Chinese nationalities. He recognized that some minority groups, such as Zhuang, may have relatively low illiteracy but at the same time have relatively less people with secondary and college education. He assumed that this is because in these communities many young people are motivated to attend primary
schools but they cannot complete monolingual primary education in Chinese. Therefore, basic literacy is high but graduation results are law. He summarized that “with no bilingual education and without adequate Chinese, some groups of [these] communities have not been able to make good progress beyond primary education” (Zhou 2001:146).

The threshold hypothesis calls for children’s CALP development to be supported by both languages of L1 and L2 in a successful bilingual education program, not by one language. Cummins (2000:175) says that “continued academic development of both languages confers cognitive/linguistic benefits whereas less well-developed academic proficiency in both languages limits children’s ability to benefit cognitively and academically from interaction with their environment through those languages (e.g. in school)”. It is said that in order to get to the top floor of language competence and take full advantage of bilingualism both languages are necessary. His image of this hypothesis may be closer to the image of building a house rather than climbing up the ladders. That means balanced bilingual children’s cognitive development is built in both languages just like building up a house from both sides, otherwise the upper floors are not stable enough to stand on the foundation. Some minority students could still reach the second floor even though their schools only used one language (usually it is L2). However, many of them fail to build their language competence without a strong foundation of CALP.

2.2.2 Interdependence hypothesis

Waters (1998:74), in her book, compares a reading activity to driving a car. To move a car forward or backward, many parts inside of the car need to work together, such as motors, gears, shifts, and so on. It is not as simple as just a driver operating the handle. In the same way, when people read a book, he/she follows alphabets, puts out the phonetic sounds, takes the meaning of each word from his/her stock of vocabularies, and graphically images the event according to the word order in the language. Reading includes not only verbal communication activities but also many non-verbal activities. These include reading from left to right, turning pages, knowing print has meaning, and so on. It is also a cognitive activity which accesses their experience, knowledge and culture to understand the value of the sentence. In this way, parts of reading activities do not depend on which language the action is taken in. Therefore many skills are transferable from L1 to L2 if students learn to

---

6 This idea is originally from Adams (1990) Beginning to read: Thinking and learning about print. Washington D.C.: Department of Education.
read in their L1 first. Similarly, the other basic language skills such as listening, speaking and writing, also include such 'language-free' activities.

Cummins (2000:173) suggests that “academic language proficiency transfers across languages such that students who have developed literacy in their L1 will tend to make stronger progress in acquiring literacy in L2”. The CALP of both L1 and L2 are interdependent and transferable between the languages. In fact, CALP commonly exists behind the two languages in appearance. The theory is summarized in the iceberg image below. Two icebergs, actually which is one huge ice block, are connected under water. Similar to the iceberg image, a bilingual speaker's language competencies of L1 and L2 share the common cognitive and academic proficiencies. Even though the L1 and L2 are very different in the surface structures, they share one common huge body of the cognitive proficiency under the water.

![Image of a iceberg concept]

**Figure 6: The iceberg image of bilingual children's language proficiency (Cummins 2000:118)**

Discussion of the interdependence theory raises a question: What is CALP specifically? In other words, what is transferable between the languages of L1 and L2? The transferable CALP firstly includes non-verbal abilities, such as turning pages in reading, knowing print has meaning, thinking and understanding the meanings. Cummins labels the non-verbal abilities as 'literacy skills' or 'operational knowledge (knowing how)'. Besides, Cummins (2000:178) suggests that ‘cognitive’ can refer to not only ‘non-verbal abilities’ but also ‘verbal cognitive abilities’. The transferable CALP also includes people’s background knowledge or common knowledge of the world, such as cultures and ideas behind the vocabularies that is called conceptual knowledge (knowing that). Similarly, Hamers and Blanc (2000:98-99) present these two independent continua of CALP: 1) the degree of
contextual support available for expressing and receiving meaning; and 2) the degree of cognitive involvement in the verbal activity.

However, the transfer between L1 and L2 is not automatic. The development of CALP takes longer than that of BICS. Cummins (2001:113-114) says, “CALP follows the curve of overall cognitive development which begins to flatten out around mid-adolescence, whereas BICS tends to reach a plateau soon after the age of about five or six” (see Figure 7). It is supported by Thomas and Collier’s (1997, 2002) research on immigrant students in the United States during the 1980s and the 1990s. They confirmed that “the students who arrived between ages 8 and 11, who had received at least 2-5 years of schooling taught through their primary language (L1) in their home country, were the lucky ones who took only 5-7 years [to catch up with the other native L2 students]. On the other hand those who arrived before age 8 [who had little or no schooling in their native language] required 7-10 years or more” (Thomas and Collier 1997:33). They also estimated that 30-40% of the younger ones fail to reach acceptable levels of English reading by the end of their elementary schooling. That means a student’s development of L1 cognitive and academic development (which includes L1 proficiency development) requires at least two to five years schooling in their first language.

![Figure 7: Developmental trends of CALP and BICS (Cummins 2001:114)](image)

In a transitional bilingual education program, it is important not to shift from one language of instruction to another language of instruction too quickly. If so, the students may be able to communicate in both languages, but their CALP will not be developed enough for smooth transfer between L1 and L2. The term of transfer process between L1 and L2 should be considered.
The discussions of both threshold hypothesis and interdependence hypothesis sometimes cause an interpretation that bilingual education should begin with L1 instruction only. The implementation of L2 instructions should wait until the student's L1 is cognitively developed sufficiently. However, Cummins (2000:194) says, “Neither the threshold nor interdependence hypotheses, individually or together, provides support for any specific configuration of L1/L2 instruction within bilingual education” and “[interdependence hypothesis] does not argue that initial instruction in the early grades should be totally through the minority language… In situations where bilingual students may have varying levels of proficiency in their L1 and English on entry to the program, it may be more effective to promote literacy in both L1 and English simultaneously or in close succession, rather than delaying the introduction of English reading instruction”.

The question is why many scholars interpreted that Cummins supports L1 first policy. For example, Baker (2006:173) defines the interdependence hypothesis as when “a child’s second language competence is partly dependent on the level of competence already achieved in the first language.” This statement may cause many people to think that L2 should be taught only after children acquire complete L1 CALP. However, the interdependence hypothesis actually suggests developing L1 not only helps learning L2 but also, developing L2 helps learning L1. Cummins (2000:198) emphasizes that “it appears that both languages must be given the opportunity to continue to develop into the school years… It is certainly not the case that instruction in the majority language should be delayed until a certain ‘threshold’ level of L1 literacy has been attained”.

Cummins, however, does not totally deny the effectiveness of the L1 instruction first. He mentions, “consequently, it was assumed that children who were not proficient in English ought to be educated through both their L1 and English in the initial grades until they had acquired sufficient proficiency to benefit fully from English-only instruction. Implementation of the transitional bilingual programs which are the logical outcome of this assumption necessitated operational procedures for entry into and exit from bilingual programs” (Cummins 2001:123). As he mentions, the L1 first policy is useful in some practical cases, according to the students' language environments. For example, many speakers of non-dominant languages in countries such as China live in remote, poor, and rural areas in environment where education is not as prominent as in the rich Western countries. In
such contexts small children have no exposure to L2 at all, or the exposure is minimal. Therefore, L1-based approaches may be preferred there.

The 'two ways' (L1 to L2 and L2 to L1) idea is similar to the bridging model introduced by Malone (2006). She says, “Bridging classes can go two ways. In some classes, people who are literate in their first language learn to read and write in their second language. In other classes, people who are literate in their second language learn to read and write in their first language.” (Malone 2006:7) She explains that effective bilingual courses, which she calls “bridging” classes, help people build a bridge between the two languages so they can become fluent readers and writers in both languages (see Figure 8).

![Figure 8: A picture of bridge (Malone 2006:12; UNESCO 2007:8)](image)

2.2.4 Basic principles of CALP development

As discussed above, the threshold hypothesis and interdependence hypothesis illustrates that the children’s CALP development is the key for a successful bilingual education program. The two basic principles of CALP development derived from these discussions are: 1) Instruction in both languages; and 2) Long term transfer process.

(1) Instruction in both languages
The students' CALP development functions fully when both languages are used for instruction. It does not mean that the students should learn two languages as different subjects, which just develops the students' BICS of each language. The point is that the instruction should be given in both languages and the students can take advantage of the situation to develop into effective bilingual speakers.

(2) Long term transfer process

CALP development takes longer than BICS. Cummins states that everyday conversational language (BICS) could be acquired in two years while the more complex language abilities (CALP) needed to cope with the curriculum could take five to seven or more years to develop (Baker 2006:174, 185-6). An important factor of effective bilingual education is how long it allows for the transfer process. This transfer process refers to the periods of using both languages for instruction. During this process, students' CALP develops enough to transfer between L1 and L2 fluently.

Table 7 below summarizes the two principles discussed in this section.

<table>
<thead>
<tr>
<th>Language of instruction (LOI)</th>
<th>CALP supportive BLE program</th>
<th>Non-CALP-supportive BLE program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both L1 and L2 are used as LOI</td>
<td>Longer than 5 years</td>
<td>Only one language is used as LOI</td>
</tr>
</tbody>
</table>

BLE: bilingual education

### 2.3 The total literacy system

As another theoretical framework, this study uses the total literacy system introduced by Bhola in 1994. Bhola (1994:156-57) points out that “an effective literacy system is often large both in size and scope,” and “to be effective as literacy initiatives, they all have to have all the necessary parts, that is, they have to have all the necessary subsystems.” Based on this idea, he introduces the total literacy system, which consists of three levels in size and eleven subsystems as scopes. The literacy system is summarized into the picture below.
The two inner circles and the outer circle represent the different levels of the system. They are the classroom, community and national levels. The other circle, which is located between the community and national levels, represents the literacy system itself. The columns under the literacy system which are divided by the ‘X’ represent the eleven subsystems.

It should be noted that the system was not originally designed for a formal bilingual education program. Bhola (1994:10) says, “I wish that the word 'literacy' was not used to cover all kinds of reading – children and adults, inside and outside the school.” Therefore, he defines that “[in his book,] the word literacy is reserved for the teaching of reading to adults in settings outside the school”. That means Bhola discusses the total literacy system only under adult literacy, not bilingual education for children and in school. This study considers it possible that the concept of the total literacy system can be adapted into bilingual education programs. This adaptation is discussed in section 3.3.

2.3.1 Three levels

(1) Classroom level
There is no doubt that the classroom level is the core of bilingual education programs. It is because that most the basic teaching and learning activities take place in the classroom. The two actors in this level are the teacher/s and learner/s (students). The teachers teach languages (inclusive of other subjects in bilingual education programs) to the students. The students participate in the classroom and learn languages from the lessons.

(2) Community level

Of the three different levels of the literacy system, the size of the community level is the most difficult to define. A community is wider than a classroom (or a school), which has walls and doors clearly divided from the outside. However its outer boundary is often invisible and ambiguous, which could be a range of the students' lives and an administrative division of a school, a village, or the local government. Bhola (1994) considers the community level as a collective structure of the actors and events which have any direct (and second-direct) impact on the classroom and the actors in it. That is why the picture of the total literacy system draws the direct (and second-direct for extended family) lines from the actors of community level to the teachers and learners in classroom. The lines represent their direct relationship and influence.

In terms of bilingual education programs, the community level is similarly considered as a collective structure of the actors and events which have any direct impacts to the classroom. For example, a student's home is where he or she tells his parents what he or she learned in class, does his or her homework, and learns languages through oral communications with his or her family members. The student also communicates with other adults in the neighborhood and friends from playground. At the community level, the identity and language use of minority students are reinforced. This is also the level where bilingual education will be either encouraged or discouraged.

The teachers also have their families and neighbors. The teachers may have opportunities to attend a conference or training and meet with professionals of bilingual education from outside the village. The teachers also need encouragement at this level.

(3) National level

The national level is the biggest circle in the picture of the total literacy system. The actors of this level are the national (and regional) government, companies, publishers, donor organizations, NGOs, and so on. They are not directly
face) influencing the actors in the classroom. They influence the program through ways such as making policies, publishing reading materials, and supporting financially. It is also same in a bilingual education program.

The picture of the total literacy system above illustrates the literacy system at national level. That is probably because most of the literacy programs in the world are conducted in one nation (country), not beyond nations. However, Bhola (1994:156) himself mentions “sometimes international specialists would be involved.” The system does not deny the possibility that a program is influenced by the international sector. In cases where certain international actors are influential to the bilingual education program, they are cited at the national level.

2.3.2 Eleven subsystems

Bhola (1994) summarizes the different scopes of the total literacy system into eleven subsystems: ideological subsystem; policy and planning subsystem; institution building and organizational subsystem; mobilizational subsystem; professional support subsystem; curriculum development and programming development subsystem; media and materials subsystem; orientation and training subsystem; teaching-learning subsystem; post-literacy subsystem; and evaluation subsystem. The eleven subsystems cover not only something visible, such as events or productions, but also something invisible such as ideas and structures. Each subsystem works through the actors in all the different levels: classroom, community and nation.

The subsystems are also overlapping each other. Bhola (1994:161) says, “No subsystem is an island. Subsystems are all interconnected within the total literacy system.” For example, printing bilingual textbooks mobilizes the students to study in two languages, and it supports the teachers using two languages in classroom. Therefore, the picture of the literacy system above shows that the eleven subsystems are divided by small crosses, not by clear boundaries.

Table 8 is brief descriptions of each subsystem adapted into the Chinese context.
Table 8: Eleven subsystems adapted into the Chinese context

<table>
<thead>
<tr>
<th>Subsystems</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ideological subsystem</td>
<td>China is a multi-national country. The Chinese government officially recognizes 56 nationalities in the country. Even though the government emphasizes the equality of all nationalities and languages, Chinese language clearly dominates all over the country (Zhou 2004). Bilingual education is often used as a way for promoting Chinese language among minority nationalities (Blachford 1997; Bradley and Bradley 2001; Tsung 2009).</td>
</tr>
<tr>
<td>(2) Policy and planning subsystem</td>
<td>The Chinese constitution protects the language rights of minority nationalities (Bradley and Bradley 2001; Zhou 2004). However, it does not clearly mention if the minority languages should be used in education. Most the provincial and prefecture governments still consider that the central government supports the use of minority languages in education. It is also evident that other laws support the use of minority languages in education, such as the Law of People's Republic of China on Regional National Autonomy (Zhou 2004:77-78). Therefore, some provinces and prefectures adopt the policy of implementing bilingual education in their constitutions and regulation laws, such as the Dehong Prefecture Law (see Section 4.1) and the Guizhou Provincial National Folk Culture Protection Law (see Section 5.3.1).</td>
</tr>
<tr>
<td>(3) Institution building and organizational subsystem</td>
<td>China uses a 'top-down' system for decision-making. The central government makes overall decisions. The local (provincial and autonomous prefecture) governments enact legislation following the central government guidelines. The educational departments of local governments are usually responsible for making decisions on the details of educational issues. The local schools have very little room to make any changes (Bradley and Bradley 2001:79).</td>
</tr>
</tbody>
</table>
(4) Mobilizational subsystem  
One of the most important goals for the minority students and their parents is to go to a middle school and high school, where Chinese is used as the only medium of instruction, except in some areas such as Korean, Mongolian and Uygur (Zhou 2001: 145-46). The ethnic minority students (and their parents) are often motivated to learn in Chinese more than their own language. That is because Chinese is required to receive higher education and find a good job in the future (Tsung 2009:197-98).

(5) Professional support subsystem  
There are many researchers and professors studying bilingual education in universities and research centers, which may include Chinese-English bilingual education as well as Chinese-minority language bilingual education (Feng 2007). Several international organizations, such as SIL International and Save the Children also work in the educational sector. At the provincial level, there are universities providing several language, literature and history courses for ethnic minorities, such as Yunnan Institute of the Nationalities (Hansen 1999).

(6) Curriculum development and programming development subsystem  
The curriculum for formal education is provided by the education department of the local governments according to the Central Government guidelines. The local schools and teachers have to follow the curriculum and make lesson plans (Lin 1997). It is said that the recent educational policy reduced central control and encourages school-based curriculum development (Bahry 2009).

---

7 These two organizations participated in the workshop on Multilingual Education in Ethnic Minority Communities, Bangkok, 10-21 July 2006.

8 According to Hansen (1999:22-23), Yunnan Institute of the Nationalities offers some classes in Xishuangbanna Dai, Dehong Dai, Jingpo, Lisu, Lahu, Yi, and Wa languages.
| (7) Media and materials subsystem | Minority language textbooks for primary and middle school are published in 30 minority languages (Tsung 2009:123). The government and local media also make some efforts to produce TV and radio programs in minority languages (Zhou 2004:89). However, there is a limit to the amount of those materials in terms of quality and quantity. |
| (8) Orientation and training subsystem | The teachers in local schools usually graduated from teachers' college. The college mainly focuses on education using only Chinese as a language of instruction. The teaching methods of bilingual education for minority students are rarely taught. The government and international NGOs coordinate special trainings of bilingual education only when the teachers started teaching in a school for ethnic minority students (Cobby 2007:189). |
| (9) Teaching-learning subsystem | In China, during lessons, teachers give lectures and students passively listen for the bulk of the period. The students also read out textbooks, answer questions, write an essay according to the teachers' instructions. The students practice what they learned through work books at home. |
| (10) Post-literacy subsystem | Provinces and prefectures where the majority of the population are ethnic minorities usually have a minority publishing house. For example, Guizhou Minority Publishing House, Yunnan Minority Publishing House, and Dehong Minority Publishing House publish several volumes of books in minority languages every year. Some provinces or prefectures also spend efforts to publish newspapers in minority languages, but the number of publications is very different according to the areas (Zhou 2004:89). |

---

9 This information was given by a teacher from Zhefang Center School during the interview.

10 This is what the author of this thesis learned through his three years' experience in teaching and observing classes in China.
(11) Evaluation subsystem

In order to go to middle school and high school, the students have to take the United Entrance Exam that is written entirely in Chinese. Students are allocated their schools according to their exam scores. Some students who did not attain a minimum score cannot go to the middle school or high school of their preference (Tsung 2009:173). Some provinces have special treatment for ethnic minority students in the exam (Hansen 1999:24).

2.3.3 The total literacy system in bilingual education

The total literacy system explains that the events and activities in classrooms are not the only matter in a bilingual education program. It is suggested that there are components in community level and national level that are also influential to the students' language learning process. The system summarizes the different scopes of the literacy system in eleven subsystems. The eleven subsystems cover the wide and deep aspects of a bilingual program and help the researchers look over the program without any omissions. However, the system is originally designed for adult literacy programs operating in one language. There should be some issues considered when the system is adopted for the examination of a bilingual education program.

The total literacy system may be adjusted flexibly. Bhola (1994:18) mentions that the total literacy system is an ideal system, so that “not all literacy projects, programmes or campaigns are lucky enough to have all these components.” In other words, there is a chance that all the eleven subsystems do not exist in one program. When some subsystems are missing, the researchers have to examine the program without those subsystems. It is even possible that some subsystems are ignored according to the evaluator's perspectives. For example, Waters (1998:410-412), in her work in Papua New Guinea, discounts the number of subsystems according to her priority on learning events in the program (see Figure 10). She suggests that the other researchers adjust the system according to their understandings and situations.
This study does not change the number of the subsystems, but adapts the total literacy system into bilingual education. The question is how much change is acceptable to the system.

Interestingly, it is found that the total literacy system is already used to examine some literacy programs for children by previous researchers. As it is shown in the Waters' work above (Figure 10), she adapts the system to examine elementary education, which is for children in formal schools. Another example is the work of Hilgendolf, Locnikar and Nichols (1996). They also use the total literacy system to examine literacy programs for children in Papua New Guinea.\(^1\) Moreover, one of these programs that applied the system was where “many of the people were already literate in the language of wider communication”. This program aims to help the minority children to be bilingual.\(^2\)

The components of Bhola's model are mostly common sense in all kinds of education activities in many places. Therefore, many of the subsystems are found in

---

\(^1\) Hilgendolf et al. (1996) evaluate seven literacy programs in Papua New Guinea. Six of them set their target to the minority children.

\(^2\) This is an example of L2 to L1 transfer.
the discussions of bilingual education in China. For example Lin (1997:193, 203) states (words emboldened for emphasis);

Since 1980, bilingual education has been provided in some minority schools as a part of the government’s policy to improve relationships with ethnic minorities in China. Chinese scholars have argued that bilingual education is necessary to advance learning among minority students. However, schools attempting to implement bilingual teaching are faced with many problems -- notably with respect to curriculum, textbook publishing, teacher training and instructional adjustments. Even greater problems lie within society at large, where minorities still suffer discrimination and bias...

Another need is to understand both the political and the broader cultural, economic and social functions of bilingual education. The preservation of minority language and culture can be realised only if the minority groups see the need for such education. The roots of failure in bilingual education, where some forms of it are provided, exist not only at the school level but also at the societal level. Minority people need to feel empowered and to be given the power to judge their conditions and decide on what they want for their children.

Her statement presents the concepts of ideology, policies, motivations, curriculum, textbooks, training, and professional support. Another example is Blachford (1997:162) saying;

[The fact that there have been no specific laws or regulations to guarantee the status and practice of developing bilingualism] has directly resulted in lack of funding for bilingual programs. The problem is also caused by the negative attitude towards the use and development of minority languages by some party officials, and some minority elites... All these policy issues will no doubt affect the nature and the future of bilingual education in China.

She presents the concepts of ideology (attitude), policies, and planning. Hansen (1999) presents an empirical study of bilingual education programs for Naxi students and Xishuangbanna Dai students in Yunnan Province. She mentions institutional issues of bilingual education in China (Hansen 1999:6):

The development of bilingual education is legitimized in the PRC Constitution, which supports the study of minority languages in autonomous regions. However, very often local educators and government officials reject political decisions or proposals about bilingual education because they disagree with the argument that
bilingual education is necessary and useful or because they lack financial support and qualified teachers.

Lastly, Tsung (2009:129) points out an issue of evaluation:

Despite the government's continued support for a mother tongue medium of instruction since 1980, the number of minority students enrolled in these schools has been declining. One problem is that the educational reform did not change the examination system and tertiary institutions have emphasized English examination results.

In these ways, the total literacy system seems to be a useful tool to examine bilingual education programs in China. Of course, all details of Bhola's discussions are not unconditionally rephrased in bilingual education programs. To avoid the conflicts in details, this study uses the system just as a framework to categorize the evaluation objects.
Chapter 3

Evaluation model for bilingual education programs

This chapter presents an evaluation model adapting Bhola's total literacy system for bilingual education programs. This thesis focuses on evaluating the selected bilingual education programs in the aspect of how much they are supportive to the students' CALP development. A checklist with a series of questions is designed based on the total literacy system and the CALP theory. In the checklist, there are eleven categories. Each category is a necessary part for a bilingual education program to be successful. There are two to five questions in each category, which guides the researcher to find out if the selected programs follow the concept of the basic principles of CALP development. At the end, the results of the evaluation are scaled by five levels: promotive; permissive; non-discriminative; tolerative; and prohibitive.

3.1 Program evaluation

In order to define this study as a program evaluation, it is necessary to explore the definition of program evaluation. Definitions of program evaluation have been discussed by many scholars. However, here are some examples of the definitions contributing to this study.

Firstly, a program evaluation determines whether the program is successful or not. Malone (2006) defines a program evaluation as a means for measuring a program against its initial objectives/goals. She suggests that “[a program evaluation] tells us: if the objectives [of the program] are being met and how well they are being met; which parts of the program are working and why they are working; which parts of the program are not working and why they are not working; if the program has actually helped the learners and the community as a whole” (2006:73). According to her statement, a program evaluation is a process of judging the program on whether 'the objectives are being met' (successful) or 'the objectives are not being met' (not successful) at each level. Therefore, her definition focuses on what answers, 'successful' or 'not successful', are brought
by the program evaluation. Similarly, this study aims to determine whether the selected bilingual education programs are successful or not, based on whether the program builds up a CALP supportive program or not.

Secondly, a program evaluation can contribute to the program stakeholders in their decision making and documentations. A program evaluation here is a part of program management. Bhola (1990:9) mentions that “the essential objective of doing professional evaluation is to generate information that can be used in the planning and implementation of programs to improve the quality of life.” He considers that a program evaluation is meant to contribute decision-making processes to the program. In terms of contribution to decision-making, this study, as it is an academic research, does not make any decisions or changes to the programs directly. However, it presents a model for program evaluation based on CALP theory.

The third definition of a program evaluation is that of a formal (defensible) process. Worthen, Sanders and Fitzpatrick (2004:5) define that “[a program evaluation is] the identification, certification, and application of defensible criteria to determine an evaluation object's value (worth or merit) in relation to those criteria.” Their definition is based on technical processes. (Malone and Bhola's definitions focus on the outcomes and purposes of a program evaluation.) The formal process definition emphasizes the importance of identifying and certifying 'defensible criteria' in a program evaluation. The 'defensible criteria' are a set of standards to judge the quality of the program. Because of the defensible criteria, the evaluation results provide a clear reason why 'worth or merit' of the program is chosen. Following the definition, this study first sets up its 'defensible criteria'. Fundamental to these defensible criteria is whether the development of CALP has taken place.

Table 9 below summarizes the discussions in this section.
Table 9: Desirable features of a program evaluation and the characteristics of the evaluation model used in this study

<table>
<thead>
<tr>
<th>Program evaluation (desirable)</th>
<th>Evaluation model used in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Determining whether the program is successful or not</td>
<td>(1) Determining whether the selected bilingual education programs are supportive or not supportive of the students' CALP development</td>
</tr>
<tr>
<td>(2) Contributing to the stakeholders</td>
<td>(2) Proposing a theory-based bilingual education planning to the selected programs</td>
</tr>
<tr>
<td>(3) Identification, certification, and application of 'defensible criteria'</td>
<td>(3) The defensible criteria are whether the development of CALP has take place</td>
</tr>
</tbody>
</table>

3.1.1 Defensible criteria

In our daily life, we conduct many evaluations. For example, when someone chooses to buy a product from several choices, he/she compares prices, quality, designs and brands, before picking up the one that they think is the best. Sometimes, none of it is worth buying. That is also an evaluation. However, a program evaluation needs clearer reasons why the evaluator chooses a product that is deemed as 'worthy', rather than random 'likes or dislikes'. The clearer reasons are given by its 'defensible criteria'. The criteria also must be widely acceptable to all the readers and stakeholders. Therefore, the 'defensible criteria' are recognized as objective credibility for the program evaluation.

Malone's (2006) definition of a program evaluation suggests that the criteria are 'original objectives of the program'. The original objectives refer to expected outcomes of the program before it was planned. They are often associated with the needs of students, parents, community, and the local government. This approach is called an objectives oriented approach. However, since the original objectives can be changed in each program's context, it is questionable if they are defensible in cases where the evaluation needs to compare more than two programs whose original objectives are provided by different stakeholders. Otherwise, when the two programs have the same outcomes, one program which has higher standards (expectations) is evaluated 'not successful' while the other one that has lower standards is evaluated 'successful'. Therefore, the original objectives are not very suitable for the defensible criteria of this study which examines two bilingual education programs in different locations. Actually, the original objectives themselves are one of the objects to be evaluated in this study (see Section 3.3.1).

13 The objectives oriented approach is also introduced in Worthen, Sanders and Fitzpatrick (2004:71-87)
This study understands that the general goal of all bilingual education programs is helping the minority students to study effectively. In order to reach this goal, even a transitional bilingual education should support the development of the students' CALP. That is because the CALP development of students is claimed to be one of the most important indicators of a successful bilingual education program (Baker 2006; Cummins 2000, 2001). Malone (2006) presents a school plan, following the principles of CALP theory (see Table 10). This is an example of a CALP supportive transitional bilingual education program.

### Table 10: An example of progression plan (Malone 2006:15)

<table>
<thead>
<tr>
<th>K1</th>
<th>K2</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop oral L1</td>
<td>Develop oral L1</td>
<td>Develop oral &amp; written L1, oral L2</td>
<td>Develop oral &amp; written L1, oral L2</td>
<td>Develop oral &amp; written L1, oral L2</td>
<td>Develop oral &amp; written L1, oral L2</td>
<td>Develop oral &amp; written L1, oral L2</td>
<td>Develop oral &amp; written L1, oral L2</td>
</tr>
<tr>
<td>L1 as LOI</td>
<td>Introduce written L1</td>
<td>Introduce written L2</td>
<td>Introduce written L2</td>
<td>L1 as LOI for most subjects</td>
<td>L1 as LOI for some subjects</td>
<td>L1 as LOI for some subjects</td>
<td>L1 as LOI for some subjects</td>
</tr>
<tr>
<td>Introduce oral L1</td>
<td>L1 as LOI – all subjects</td>
<td>L1 as LOI – all subjects</td>
<td>L1 as LOI – all subjects</td>
<td>L2, with help from L1, for some subjects</td>
<td>L2, with help from L1, for some subjects</td>
<td>L2, with help from L1, for some subjects</td>
<td>L2, with help from L1, as LOI for some subjects</td>
</tr>
<tr>
<td>100% L1</td>
<td>90% L1</td>
<td>80% L1</td>
<td>70% L1</td>
<td>60% L1</td>
<td>50% L1</td>
<td>40% L1</td>
<td>40% L1</td>
</tr>
<tr>
<td>10% L2</td>
<td>20% L2</td>
<td>30% L2</td>
<td>40% L2</td>
<td>50% L2</td>
<td>60% L2</td>
<td>60% L2</td>
<td></td>
</tr>
</tbody>
</table>


The defensible criteria of this study are the basic principles of CALP development: 1) Instruction in both languages; and 2) Long term transfer process. These basic principles are necessary for effective development of students' CALP in a bilingual education program. They are rooted in CALP theory and are therefore generally applicable to any bilingual program rather than specific to one program. The CALP theory is also proved by many empirical studies and supported by a number of international organizations, such as UNESCO (2005) and the New Zealand Ministry of Education (May et al. 2004). In other words, CALP theory is widely accepted in this field. Therefore, this study uses the basic principles as defensible criteria. It also
evaluates the selected programs according to whether the evaluation object of each program follows the principles or not.

### 3.1.2 Evaluation objects

A list of the evaluation objects for literacy programs is presented by Malone (2006:73-74). These are: program plan; curriculum/teaching method; personnel; training; materials; learner’s progress; program growth; program’s cost effectiveness; and long-term impact of the program on the community. The list shows that the evaluation objects are a combination between two types of objects. One is resources and the other is phenomena. Resources are visible objects, including human resources and materials. On the other hand, phenomena are invisible objects, such as influence and impacts.

Another list of the evaluation objects is found in Baker's (2006:312-316) discussions of key topics in effective bilingual education programs. He first points out that “dual language policies, provision and practices are a keystone of such [effective bilingual] schools.” He, then, lists other key topics in effective bilingual schools: intake of students and language balance; staffing; shared vision, mission and goals among staff; staff professional development and training; leadership; curriculum; supporting ethos and environment; high expectations; and parents. His list is also a combination between resources and phenomena.

In light of Malone and Baker above, this study lists these evaluation objects: Chinese national/regional constitutions and laws related to language and education; school policies; documents and records of the programs; personnel (teachers, students, parents and professionals); training; curriculum; materials (textbooks and exercise books); extended reading materials and multimedia; lessons (contents, teaching languages and methods); displays in classroom; ideologies; motivations; language balance (in and out of classroom); supporting organizations. As it was discussed in the previous chapter, the listed evaluation objects can be categorized into Bhola's eleven subsystems.

### 3.2 Questionnaire

A questionnaire was designed with a list of questions based on the defensible criteria and evaluation objects (see Appendix 2 and 3). The translated Chinese version (Appendix 2) was used in the interviews with the local teachers. The English version

---

14 Malone (2006) uses the term of 'literacy programs', including literacy programs for children and bilingual education programs.
(Appendix 3) was printed for the interpreters' reference. The interview method was chosen because when the teachers were unfamiliar with those questions, it was possible for an interviewer to clarify immediately. This helped the teachers to answer the questions candidly. Any additional information acquired during the interviews was also noted and used as needed for the purposes of the study.

The questionnaire contained 53 questions under three sections: in class, outside the class, and other support. The first 16 questions covered the background of the interviewees, such as age, nationality, teaching grade, speaking languages, and so on. This questionnaire provided adequate information for the interviews to determine the following: 1) which evaluation object supported the use of two languages for instruction, and 2) which evaluation object supported long term transfer process.

The school was asked to pick ten teachers to be interviewed according to the teachers' class schedule but as random as possible. Since one of the selected schools had only nine teachers, all of them were interviewed. One interpreter (who interpreted between English-Dehong Dai or Chinese-Dong) also attended the interviews. A second interpreter, an English teacher in a Dehong Dai school (English-Chinese), also helped to interpret occasionally. During interviews, the researcher read out the questions in Chinese. In order to avoid miscommunication, the teachers also were handed a copy of the questionnaire. The teachers answered either in Chinese or in their own language. When the teachers answered in their language, the interpreter translated to English or Chinese immediately. All conversations in the interviews were recorded by a voice recorder. The researcher and the interpreters also took notes on the answer sheet (see Figure 11).
3.3 Customizing subsystems

As discussed in the previous chapter, Bholo's total literacy system is a useful tool for examining bilingual education programs. However, it still needs to be adapted to...
evaluate a bilingual education program in detail. This involves applying CALP theory as a criterion in the process of evaluating each subsystem of the total literacy system. Each subsystem was examined in a specific way. The evaluation checklist reflects this process (see Appendix 4).

It is noted that the eleven subsystems are interdependent. Though this process categorizes the evaluation objects into each subsystem, it is just for convenience. So, one evaluation object may be influenced by several subsystems.

3.3.1 Ideological subsystem

The ideological subsystem is often invisible as it represents human mind, beliefs, and expectations. Therefore, Bhola (1994) expresses the ideological subsystem as 'the soul of a literacy program' and 'a set of values to use in making choices'. Hilgendolf, Locnikar and Nichols (1996) consider that this ideological subsystem is “the basic (or underlying) purpose of a literacy program.” They explain that the ideologies are cultural and economic ideas. Such ideas are related to the politics of the country, including spiritual goals. In cases where the people (or community) have any religious reasons why they want to (or want the others to) learn literacy skills, the religious ideas are also involved in the ideologies. The questions in this category ask about the underlying purpose and goal of the program, the national goals for literacy, and clearness of the goals.

Bhola (1994:158) also states that “the ideology of a literacy program is not always congruent with the ideology of the nation-state... teachers and others at the grassroots can make ideology come to life at the field level. On the other hand, they can subvert the program's ideology.” This means that ideologies do not only come from national level (top-down), but also from the community level which involves school heads, teachers, parents, and possibly students themselves. The community level actors may have different ideologies from the national-level actors.

This study understands the ideological subsystem in two ways, which are 'the underlying purpose of the bilingual education program' and 'what people think how things should be'. First, this study researched the official documents that declare their purposes of the bilingual education programs to see if they clearly support the basic principles of CALP theory. Secondly, the interviews asked the local teachers questions such as “What languages do you think should be used in class?” and “How long do you think the students should have any special support by using
minority languages?” If the teachers had CALP development supportive ideologies, this would be shown in their answers.

The listed questions in Table 11 were employed for examining this subsystem. Selected bilingual education programs in this research should answer all the questions from the list.

Table 11: Checklist (ideological subsystem)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the program state its underlying purpose of student's CALP development?</td>
<td></td>
</tr>
<tr>
<td>2. What languages do teachers think should be used in class?</td>
<td></td>
</tr>
<tr>
<td>3. How long do the teachers think the students should have any special support by using both languages of L1 and Chinese?</td>
<td></td>
</tr>
<tr>
<td>4. Others</td>
<td></td>
</tr>
</tbody>
</table>

3.3.2 Policy and planning subsystem

Policy and planning subsystem is different from the ideological subsystem. Ideology is behind (underlying) the policy, but policy and planning are outcomes of the ideologies. Bhola (1994:161) says, “The essential objective of a policy and planning system is, of course, to convert literacy ideologies into literacy policies. In turn, these policies must evolve into plans within a particular time-frame, using particular resources.” The policy and planning subsystem moves a program in more direct ways than ideological subsystem does. It is often written or announced officially in constitutions, documents and meeting reports. Therefore, for the most part this study can use the library research on such official documents for this subsystem.

Bhola (1994:161) states that “yet too often the policy subsystem tends to be a weak subsystem. Policies are not always clearly defined; politics take over and planning becomes merely management of crises.” He points out that the clarity of the policy is also an issue in this subsystem. However, it is difficult to say if it is a policy problem or organizational problem. This subsystem also overlaps many other subsystems. That is why the subsystem could affect literacy promotion (mobilization), organization and institutional issues, and publications.

To avoid confusion, this study focuses on the government policies and school policies which are officially announced on paper. It examines whether they clearly cover these two following points: 1) Do they support the use of two languages for instruction?; 2) How long (until which grade) do they support the program to use the
two languages in education? Therefore, the questions in the checklist are also the combinations of the government/school policies and the two points (see Table 12).

### Table 12: Checklist (policy and planning subsystem)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Do the government policies state the use of two languages for instruction?</td>
</tr>
<tr>
<td>2.</td>
<td>Do the school policies state the use of two languages for instruction? (if it is different)</td>
</tr>
<tr>
<td>3.</td>
<td>How long do the government policies support the use of two languages in education?</td>
</tr>
<tr>
<td>4.</td>
<td>How long do the school policies support the use of two languages in education? (if it is different)</td>
</tr>
<tr>
<td>5.</td>
<td>Others</td>
</tr>
</tbody>
</table>

#### 3.3.3 Institution building and organizational subsystem

The institution building and organizational subsystem is one of the most difficult concepts to adapt to this study. That is because there is no such institutional structure that is more or less supportive of two languages of instruction and a long term transfer process. If this study focuses on the attitude of a particular organization, it will be just someone's ideologies and motivations. Therefore, this study considers this subsystem in a different way from the other subsystems. It is viewed as a linkage and consistency between the other subsystems.

This study presents a general overview of the whole program structure through library research and interviews. For example, even though the government tries to promote bilingual education, often the local schools do not understand what they should do in practice. There is obviously a miscommunication between the government and the local schools. It shows weak institutional structure. The quality of the linkage is the matter here.

At the same time, a series of questions pertaining to issues of whether 'there is or there is not' of each subsystem were also asked. That is because if a certain subsystem is missing in a program, the program will lose the linkage between the subsystems. Since bilingual education is often conducted as formal education, it may not be necessary to establish new institutions for the program such as supervising committees and material development committees in the local community. However, it needs to make clear who would take the responsibility of each role such as making decisions, providing professional support, conducting trainings, and so on. Therefore, these questions were asked in interviews: “Do you have any professional support?”; “Do you have the support of any institutions (government offices, universities, publishers, etc)?”; “Do you know any government policies talking
about teaching languages?”; and “Who makes decisions on curriculum, languages used in class, textbooks, and so on?”

The checklist corresponds to the discussions in this section (see Table 13).

**Table 13: Checklist (institution building and organizational subsystem)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consistency of the use of two languages for instruction through the whole system.</td>
</tr>
<tr>
<td>2</td>
<td>Consistency of how long two languages should be used through the whole system.</td>
</tr>
<tr>
<td>3</td>
<td>Does the program have all the 11 subsystems?</td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
</tr>
</tbody>
</table>

### 3.3.4 Mobilizational subsystem

Motivations are often indirect productions of other resources, such as language policies, teaching materials for teachers, bilingual reading materials, and so on. Teachers may be motivated to use two languages because their teaching materials are written in both. The students may be encouraged to read books in two languages when they find books available in both languages. That makes the mobilizational subsystem a wide ranging object and it is often related to the other subsystems. The motivations may also come from the community’s encouraging environment to teach children in two languages such as their reading culture, economic needs, and so on.

The mobilizational subsystem could be both visible (examples such as a teacher actually suggesting to students to read books in both languages) and invisible (somehow teachers and students think it is not right to use L1 in class). Library research would help to find some efforts that the government or local schools have taken to encourage teachers and students to use two languages. That is also something visible. Observations and interviews examine the subsystem in both visible and invisible ways.

Interviews focus on how the program encourages teachers and students to use two languages. These questions were asked: “Are the students allowed to use both languages in class?”; “Do you suggest that students should read books in both languages (minority languages and Chinese)”? More direct questions asked for motivations to learn in the languages: “In what languages are the students interested in studying?”; “Are there any benefits (or motivations) of studying in minority languages?”; “Are there any benefits of studying in Chinese?” Observations were intended to support the answers from the interviews. In the observations, language use of teachers and students, the displays on the walls in classroom were observed.
For example, in China, often there is a sign, saying, “Speak in Standard Chinese.” It means “do not speak a local dialect of Chinese” or “use Standard Chinese correctly.” However, the students may misunderstand it as “do not speak minority languages.” This gives a negative result for the mobilizational subsystem.

The listed questions in Table 14 are a checklist of this subsystem. If any efforts (and obstructs) other than the list are found in the programs, they are counted in the 'others'.

Table 14: Checklist (mobilizational subsystem)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are the students allowed to use both languages in class?</td>
<td></td>
</tr>
<tr>
<td>2. Do the teachers encourage the students to read books in both languages?</td>
<td></td>
</tr>
<tr>
<td>3. Do the teachers find any benefits for the students’ CALP development from learning in both languages?</td>
<td></td>
</tr>
<tr>
<td>4. In which languages are the students interested in learning and how does it change in the long term?</td>
<td></td>
</tr>
<tr>
<td>5. Others</td>
<td></td>
</tr>
</tbody>
</table>

3.3.5 Professional support subsystem

Professional support can be considered in two ways. One is as human resources (professionals) and the other is as knowledge (theories). Bhola (1994:174) considers it as knowledge, saying, “We know today that professional 'knowledge' is needed for all the various subsystems of the total literacy system. Theory and research are necessary for policy and planning, institution building, mobilization, curriculum development, teaching, training, and evaluation.” However, this professional knowledge still needs someone professional who is able to integrate it into the program.

On the other hand, Hilgendolf, Locnikar and Nichols (1996) consider it as human resources. It is presented in the questions that they used in their research projects: “Are other professionals involved in this program? How are they involved?”; “Is it necessary to have a professional network you can contact?”; and “What inputs have other professionals given to your program?”

This study examines the professional-support subsystem in the aspect of whether the professionals (either human resource or knowledge) of the program follow the basic principles of CALP development. These following questions are asked in interviews: “Who provides you with the professional support (professors, government officers)?
How do they support?”; “What do the professionals say about teaching languages?”; and “How long do the professionals say the students should learn in both languages (or using minority language as support)?”

The questions in Table 15 are a checklist of this subsystem. The term 'professionals' includes both human resource and his/her knowledge.

**Table 15: Checklist (professional support subsystem)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What languages do the professionals tell the teachers to use for instruction?</td>
</tr>
<tr>
<td>2.</td>
<td>How long do the professionals tell the teachers to use both languages of L1 and Chinese?</td>
</tr>
<tr>
<td>3.</td>
<td>Others</td>
</tr>
</tbody>
</table>

### 3.3.6 Curriculum development and programming development subsystem

Curriculum development and programming development subsystem put into practice what is decided in the policy and planning subsystem. While the policy and planning subsystem decides the direction of the programs, the curriculum development and programming development subsystem decides more specific processes. Bhola (1994:177) says, “[The curriculum development and programming development subsystem] chooses what is taught and determines the context of the teaching-learning process.”

This study focuses on whether the curriculum of each program supports instruction in two languages and a long term transfer process. Baker (2006:315-316) also indicates that an effective curriculum planning includes “language and literacy development across the curriculum” and “smooth language transitions between grades.” For example, bilingual education in China is often misunderstood as a minority language class being added onto the national curriculum as a separate subject. Therefore L1 is not used in other subjects, such as Chinese, Mathematics and Science. It is not supportive of the CALP development, because such curriculum does not support bilingual education across the curriculum.

This study examines the curriculum through library research and interviews. The library research handles the curriculum itself. The interviews asked the teachers the effects of the curriculum through the question: “How much does the curriculum help the students learning in both languages (or using minority languages as support)?”

The listed questions in Table 16 are a checklist of this subsystem.
Table 16: Checklist (curriculum development and programming development subsystem)

| 1. What languages does the curriculum tell the teachers to use for instruction? |
| 2. How long does the curriculum support using both languages for? |
| 3. How much do the teachers think the curriculum helps the students to learn in both languages? |
| 4. Others |

### 3.3.7 Media and materials subsystem

Bhola (1994:178) says, “[The media and materials subsystem] aims to procure from outside or to produce within the system materials of all kinds for functional literacy programs and for teachers, learners and other facilitators for the pre-literacy, literacy and post-literacy stages of literacy work.” His understanding of media and materials is much wider than textbooks. He adds (1994:179-180), “The media and materials subsystems must work with the media of newspapers, radio and television to support the literacy effort of the country.”

However, the media and materials subsystem has to be differentiated from the post literacy subsystem. In this study, the subsystem focuses on textbooks and other materials used in class (Bhola calls them primer and follow-up books), including extra class readings (books that are provided for homework). It examines those materials in two aspects: what languages are used and until which grades are they provided. The checklist of this subsystem includes a question which asks the teachers' opinions of the textbooks (see Table 17).

Table 17: Checklist (media and materials subsystem)

| 1. In what languages are the textbooks written? |
| 2. In what languages are other class materials written? (if there are) |
| 3. Until which grade are the bilingual textbooks provided? |
| 4. Until which grade are the other bilingual class materials provided? (if there are) |
| 5. How beneficial are the textbooks in helping the students to learn in both languages according to the teachers? |
| 6. Others |

### 3.3.8 Orientation and training subsystem

The orientation and training subsystem is intended for teachers in most cases. Baker (2006:315) says, “Staff professional development can be designed to help all staff effectively serve language minority students. For example, staff development
programs can sensitize teachers to students' language and cultural backgrounds, increase their knowledge of second language acquisition and help develop effective curriculum approaches in teaching language minority students.” Training influences the teachers in the whole program. The teachers in China usually do not know about bilingual education until they are assigned to the schools in minority communities. Thus, it is important whether the training provides (or does not provide) the teachers with the principles of CALP development.

Training is not limited to externally conducted lectures. It also includes individualized self-learning by the teachers themselves. Bhola (1994) says, “The best a teacher of adult literacy can do at the field level in terms of training is to take responsibility for his or her own self-training and continuous growth.”

Library research explored documents and reports recording the teacher training. The interviews also asked questions related to what kind of training the programs have done and if the training follow the principles of CALP theory. These are the questions for interviews: “Since you have worked in the school, what kind of training was arranged for the teachers?”; “What did the training say about teaching languages?”; and “What did they say about how long the students should study in both languages (or using minority language as support)?” The questions in Table 18 are a checklist of this subsystem.

Table 18: Checklist (orientation and training subsystem)

| 1. What languages do the training tell the teachers to use for instruction? |
| 2. According to the training, how much time should teachers use both languages of L1 and Chinese? |
| 3. Others |

3.3.9 Teaching-learning subsystem

The teaching-learning subsystem is the core of a bilingual education program. The other subsystems all create supportive environments to the program, but it is the teachers who decide what they teach in class after all. Moreover, if the students do not appreciate the program and take advantage of it in their learning activities, the program can not be successful.

This subsystem is about teaching methods, lesson plans, teaching languages (oral and written), students' attitude in the class, students' language use, and so on. They are represented in these interview questions: “When you teach, which languages (and how much) do you use?”; “How do you use the languages in different ways
according to the students’ grades?”; “Do the students actually use minority languages in class?”; “How long do you actually give the students special support in minority languages?”; and “If the students ask you a question in a minority language, in what language do you respond?” If they use both Chinese and a minority language until Grade 6, it means the program is supportive to CALP development. Observations are also used to support the answers.

Table 19 is a checklist of this subsystem. The collected data from interviews and observations is summarized in each question.

**Table 19: Checklist (teaching-learning subsystem)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What languages do the teachers use for instruction?</td>
<td></td>
</tr>
<tr>
<td>2. What languages do the students use in class?</td>
<td></td>
</tr>
<tr>
<td>3. How long do the teachers give the students any special support by using both languages?</td>
<td></td>
</tr>
<tr>
<td>4. Others</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3.10 Post-literacy subsystem

The post-literacy subsystem represents the issues of post-literacy literatures for the students’ further studies. Even though the students learn how to write and read in both languages in school, their CALP does not develop effectively unless they have enough opportunities to continue practicing their new skills. Thus, there is a great need for materials to help bridge the gap between basic textbooks and the world of general written matter. It must be noted that learning the skill of reading is differentiated from having enough materials to read and cultivating the reading habit. Without progress towards post-literacy materials, the reading skill is likely to be quickly lost. This is especially if the skill has been only half-acquired because it was presented through a national education system (Wendell 1982). Literature after basic literacy acquisition inspire the students to learn literacy skills and empower them through providing new knowledge.

This study understands the post-literacy subsystem as reading materials and other media beyond the lessons and homework. They are the books in school/community library where the students can read in their free time, including newspaper, magazines, and TV/radio programs which the students watch and listen at home. The study uses library research, interviews and observations in this subsystem. The questions are, “In public or school library in the village (or town), how many books are there for further studies?”, “In what languages are they written?”, and “How
much do the books help the students learning in both languages (or using minority languages as support)?” The questions in Table 20 are a checklist of this subsystem.

Table 20: Checklist (post-literacy subsystem)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>In what languages are the books in school or public libraries written?</td>
</tr>
<tr>
<td>2.</td>
<td>In what languages are other materials, such as newspapers and TV programs written/made? (if there are)</td>
</tr>
<tr>
<td>3.</td>
<td>How much do the teachers think the books help the students learning in both languages?</td>
</tr>
<tr>
<td>4.</td>
<td>Others</td>
</tr>
</tbody>
</table>

3.3.11 Evaluation subsystem

Evaluation is not only a tool to summarize the results of a program. It also provides the information of needs in the community (initial evaluation) and encourages the staff to improve the programs (in service). In these ways, the evaluation subsystem makes the program healthy and effective. At the same time, it also reminds the program staff what the program values as important. Therefore, evaluating which languages of instruction are used in class and the length of the transfer process encourages the local teachers to keep following the principles of the students' CALP development. It is also important in what languages the evaluation is conducted. For example, the students are encouraged to learn minority languages when they have exams in both languages.

Library research examines what kinds of evaluations have been done and whether the students are evaluated in both languages. Interviews also help to know how the teachers evaluate the students and how the teachers themselves are evaluated. As Bhola (1994) shows that teachers are one of the most important evaluators, it is important to find what factors the teachers evaluate in the classroom. The questions are, “Who (students, teachers, supervisors, funders, etc) has evaluated your class and school?”, “Which aspects of the class have been evaluated?”, and “Have there been any evaluation is performed concerning teaching languages?”

The questions from the checklist of this subsystem (see Table 21) simply examine these two points: 1) Does the evaluation concern the languages of instruction?; and 2) In what languages is the evaluation performed?
Table 21: Checklist (evaluation subsystem)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have there been any evaluation is performed concerning the languages for instruction?</td>
</tr>
<tr>
<td>2.</td>
<td>In what languages are the evaluations/exams for the students performed?</td>
</tr>
<tr>
<td>3.</td>
<td>Others</td>
</tr>
</tbody>
</table>

3.4 Scales (analysis and interpretation)

Another issue that should be discussed here is how to measure the collected data.

Baker (2006:285) points out the difficulties and problems of the former evaluations of bilingual education, saying, “A particular problem is that measures of success [in a bilingual education program] tend to be restricted to what is measurable. Quantitative outcomes (e.g. test scores) are used; qualitative evidence has rarely been gathered.” His question of ‘measurable’ data is involved in the differences of quantitative data and qualitative data. The quantitative data is numerical, which are represented in ‘yes-no’ and ‘how many’ questions. They are often directly and visually measurable. On the other hand, the qualitative data is not numerical, which is represented in ‘how well’ questions. Baker's statement insists that the qualitative data in a program evaluation is as important as the quantitative data.

As stated earlier in the chapter, this study seeks to determine whether the selected bilingual education programs are supportive or not supportive of the students’ CALP development. In order to measure the success of the programs, this study needs to answer not only 'yes-no' questions, but also 'how well' questions. Therefore, this study collects both quantitative and qualitative data.

The qualitative data, as well as quantitative data, can be measured by using dimensions to scale the level of 'how well'. For example, in his discussion of ideological subsystem, Bhola (1994:161) says, “It is not absolutely necessary to have a clear ideology to support literacy or even to have only one ideological justification for literacy promotion. All that matters is that literacy work be permitted and promoted.” He considers that the results can be scaled by the two dimensions: 'permitted/promoted' and 'not permitted/not promoted'. Another example is Hilgendorf et al. (1996) using three dimensions: fully implemented in program; partially implemented in program; and not implemented in program. Those are the examples that make qualitative data measurable.

This study expands on the scales used in the examples of Bhola and Hilgendorf et al. This is because bilingual education in China is often institutionalized as formal
education, which means that all the programs are promoted at some levels. The two dimensions and three dimensions appraisal do not give clear differences. Therefore, in this study, each subsystem is scaled by five levels (1-5 points): promotive (5), permissive (4), non-discriminative (3), tolerative (2) and prohibitive (1). The idea of five levels is adopted from Zhou (2004). He uses the scales to identify the levels of national language policies. However, it can be reflected in all the subsystems. That is why some interview questionnaires are set with multiple choices in five levels: strongly supportive/strongly suggested; supportive/suggested; neutral/permitted/a little; not at all; and obstructive. The score of each subsystem and the average of all the scores are presented as the answer of 'how well' the programs support the students' CALP development.

Table 22 is a rubric which was used in this study. It was designed based on the principles outlined in this section.

Table 22: Summary of the evaluation scales

<table>
<thead>
<tr>
<th></th>
<th>Promotive (5)</th>
<th>Permissive (4)</th>
<th>Non-discriminative (3)</th>
<th>Tolerative (2)</th>
<th>Prohibitive (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In which languages?</strong></td>
<td>Both in L1 and Chinese</td>
<td>Both in L1 and Chinese, but one is more than the other</td>
<td>Both languages can be used, but one is only for trifle issues / Not mentioned (positive to using both languages)</td>
<td>Both languages can be used only when it is necessary / Not mentioned (negative to using both languages)</td>
<td>Only L1 or only Chinese</td>
</tr>
<tr>
<td><strong>How long?</strong></td>
<td>More than 5 years / Until Grade 6</td>
<td>3-5 years / Until Grade 3-5</td>
<td>1-2 years / Until Grade 1-2 / Not mentioned (positive to long term)</td>
<td>Less than 1 year / Supplemental / Not mentioned (negative to long term)</td>
<td>None</td>
</tr>
<tr>
<td><strong>How much?</strong></td>
<td>Strongly supportive / Strongly suggested / Very much</td>
<td>Supportive / Suggested / Positive</td>
<td>Neutral / Permitted / A little</td>
<td>Not at all</td>
<td>Obstructive</td>
</tr>
</tbody>
</table>

Zhou (2004) also uses another dimension, 'overt' and 'covert', as an axis of coordinates. However, this study only applies the five scales.
3.5 **Summary**

Figure 12 is an image of the evaluation model that was used in this study. It consisted of three dimensions to determine whether the bilingual education programs are CALP supportive or not. The first dimension is based on two principles of CALP development. The second dimension is from Bhola's eleven subsystems which were used as categories that could be checked through each program. The last dimension refers to the five scales (promotive, permissive, non-discriminative, tolerative, and prohibitive). This allowed the study to evaluate not only supportive or not supportive, but also 'how much' each program is supportive.

![Figure 12: An image of the evaluation model](image-url)
Chapter 4

Chinese-Dehong Dai bilingual education program

This chapter investigates the Chinese-Dehong Dai bilingual education program in Dehong Prefecture, Yunnan Province. The bilingual education program has been conducted by the Dehong government since the 1980s. In this study, it is considered as a typical case of a transitional bilingual education program in China. This chapter, first, introduces a general background and brief history of the program. Later, it illustrates the eleven subsystems of the program, based on library research, observations, and interviews.

4.1 Background

Dehong Prefecture (short for Dehong Dai and Jingpo Autonomous Prefecture) is located in the southwest of Yunnan Province (see Figure 13). It is estimated that over 300,000 Dehong Dai people live in the prefecture. That is the second largest population in the prefecture, following that of Han (Chinese majority) nationality.
Although the Dehong Dai people are classified as a part of the Dai nationality by the Chinese government, they are still clearly identified apart from other Dai members. They have unique linguistic and cultural characteristics. Especially the unique Dehong Dai orthography, which has a long history (see Figure 14).

![Figure 13: Location of Dehong Prefecture, Yunnan Province](http://en.wikipedia.org/wiki/Dehong_Dai_and_Jingpo_Autonomous_Prefecture on 27 August 2009)

![Figure 14: Example of Dehong Dai orthography](Story of Tools, typed by the author)
Dehong Dai people traditionally developed a minority language education system in temples to satisfy their needs for reading Buddhist scriptures. This may be the reason that Dehong Dai people are highly literate today (Cai 2003; Tsung 2009). According to a research in 1996, the ratio of illiterate Dehong Dai people, aged from 12 to 40, was only 5.1 % (Yunnan minority Language Commission 2001:6). That means, more than 90% of Dehong Dai people are literate in either Dehong Dai or Chinese. However, very few young Dehong Dai people now study at temples.

Since the 1980s, the Dehong Prefecture government has promoted adult literacy and bilingual education programs in Dehong Dai communities. For example, between 1984 to 1992, the government conducted 1,925 Dehong Dai literacy classes and implemented bilingual education in 261 schools (out of 352 schools) in Dehong Dai communities. By the end of 1998, the prefecture had registered 191 Dehong Dai language teachers for primary schools, ten teachers for middle schools, and three teachers for technical schools (Zhou and Fang 2004:205). Several literacy textbooks for Dehong Dai speakers were also published. However, despite the literacy movements, very few Dehong Dai students progressed beyond middle school. This was mainly caused by the economic difficulties of the Dehong Dai students. Moreover the linguistic difficulties for the students should be considered as well.

The prefecture government is still promoting bilingual education today. Article 56 of the current Dehong Prefecture Law (2006) clearly states that the primary schools in minority communities should conduct bilingual education (see Table 23). Dehong Yearbook 2007 also records that the issues about bilingual education were still discussed at the All Prefecture Education Reform Entry Conference in July 7, 2006.

---

16 Another statistic conducted by the Dehong Education Bureau says 318 of 445 minority schools (182 schools unofficially) conducted bilingual education in 1996. (Dai et al. 2006:250) Other statistics says; 106 Dehong Dai schools and 33 Jingpo schools out of 875 schools conducted bilingual education (plus, 185 are unofficial) in 1996 (Dai et al. 2006:238,240); 321 schools of 445 minority schools opened bilingual education classes in 1998 (Cai 2003:80), etc.

17 The ratio of who those received high school (and college) education was 0.93% in Dai nationality people in Yunnan Province in 2000. It was 2.74% for Han nationality in the same statistics. (Dao and Hu 2005:79)

18 Dao and Hu (2005) compared the educational level of 25 national minorities in Yunnan Province. They show the ratio of minority students in high education is directly proportional to their economic situations. They summarized that “the poor economic development of national minorities seriously limits the development of their educational standards.” (Dao and Hu 2005:81)
On the other hand, the Dehong government has also considered reducing the size of the bilingual education programs. *Dehong Prefecture Government Document No.(2006)186* suggests that bilingual education for the first three years in primary schools should be promoted in rural minority communities. That means the bilingual education will be reduced from six years (whole primary education) to three years. Likewise, bilingual education will be implemented only in schools in rural areas. The reduction of the program is similar to the case of Chinese-Hani bilingual education program, with regards to the decreasing number of bilingual schools after the 1990s.

### 4.2 General results

The field research was conducted from October 19 to 22 in 2007 at Zhefang Central School. Zhefang is a small county which is about two hours away by bus from Luxi, the capital of Dehong Prefecture. The school was selected because, first, it is located in a typical Dehong Dai community. Second, it is a model school in Zhefang County. The other schools in smaller villages will follow the education system of the model school in a few years. Therefore, this school is like a mirror of the future of small village schools. Many teachers from the school also have experience teaching in a village school. That makes the teachers possibly more sensitive to the difficulties of teaching in the bilingual settings.

This study interviewed ten teachers from Zhefang Central School. Since the recent Chinese policies encouraged young teachers in towns to teach in rural areas, the ratio of teachers from Han nationality is increasing in primary schools in Dehong Prefecture. In the same way, out of all 48 teachers in Zhefang Central School, 30 teachers are Dehong Dai nationality, while the other 18 teachers are Han nationality. That is why the ten teachers interviewed in this study includes six teachers who speak the Dehong Dai language as their first language and four teachers who speak Chinese as their first language. Of the four teachers who speak Chinese as their first language, two teachers are also able to communicate in Dehong Dai. The teachers...
are selected randomly according to their class schedules and the background information of the teachers is summarized in Table 24.

Table 24: Background information of interviewees

<table>
<thead>
<tr>
<th>Subjects No.</th>
<th>Sex</th>
<th>Age</th>
<th>L1</th>
<th>L2</th>
<th>Teaching Grades (before)</th>
<th>Teaching Subjects</th>
<th>Years of teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>27yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G1 (G1-6)</td>
<td>Mt, Ch</td>
<td>8yrs</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>39yrs</td>
<td>DD</td>
<td>Ch, Jp</td>
<td>G5 (G1-6)</td>
<td>Ch, Jp</td>
<td>20yrs</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>35yrs</td>
<td>Ch</td>
<td>PE</td>
<td>G3 (G1-6)</td>
<td>Ch</td>
<td>16yrs</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>33yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G4-6 (G1-6)</td>
<td>Mt, Ch, MI, SS</td>
<td>14yrs</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>26yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G4 (G2-6)</td>
<td>Ch</td>
<td>10yrs</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>34yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G5 (G1-6)</td>
<td>Mt, Ch, MI, Sc</td>
<td>15yrs</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>35yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G5 (G1-6)</td>
<td>Ch</td>
<td>12yrs</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>30yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G5 (G1, G5)</td>
<td>Ch</td>
<td>11yrs</td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>30yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G3-6 (G1-6)</td>
<td>Ch</td>
<td>10yrs</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>39yrs</td>
<td>DD</td>
<td>Ch</td>
<td>G4 (G1-6)</td>
<td>Mt</td>
<td>20yrs</td>
</tr>
</tbody>
</table>


During the field research, seven classes were also observed. The observed classes ranged from Grade 1 to 3 classes to Grade 5 classes. This was intended to help the study to examine age differences. Since the Dehong Dai class was canceled in this school a few years ago, the subjects observed were only Chinese (including Writing classes), Math and English classes. During the classes, languages used by teachers and students were carefully observed. The classes were 45 minutes each. The observed classes are summarized in Table 25.

Table 25: List of observed classes

<table>
<thead>
<tr>
<th>Lesson</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>G5</td>
<td>G5</td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
<td>G3</td>
<td>G1</td>
</tr>
<tr>
<td>Subject</td>
<td>Ch</td>
<td>Ch (Writing)</td>
<td>Mt</td>
<td>Ch</td>
<td>Ch</td>
<td>Eng</td>
<td>Ch</td>
</tr>
</tbody>
</table>
The library research was conducted in Luxi and Kunming, the capital of Yunnan Province. The Dehong Prefecture Public Library in Luxi contains a series of *Dehong Yearbook* and some books recording the history and statistics in the prefecture. Some governmental documents are found on the prefecture government website, such as the *Dehong Prefecture Law* and other official documents dealing with the minority education. There are several books published by Yunnan Nationality Publishing House and Central Nationality Publishing House referring to the Chinese-Dehong Dai bilingual education program. In addition, a few studies, such as Zhou and Fang (2004) and Xiao (1998), are available in English.

The library research also found the records of an official syllabus announced by the Dehong government in 1989 (Dehong Prefecture Education Department 1995; Dai et al. 2006; Zhou and Fang 2004). According to the records, this syllabus takes an important role in the bilingual education program. This syllabus is not offered for public viewing today, because it was meant for local schools only. Through the former research cited above, however, it is still possible to understand what the contents were.

### 4.2.1 Official syllabus in 1989

The official syllabus in 1989 was the very first (so far, it is the only one) source to state the governmental standards for Chinese-Dehong Dai bilingual education in Dehong Prefecture. In fact, the ‘official syllabus (called da4gang l)’ is one of the most important documents in the Chinese education system through which the prefecture government provides local schools with its guidelines on various educational issues. The local schools and teachers have to design their school policies, curriculum and lesson plans according to what the syllabus suggests.

The syllabus in 1989 is recorded by Dehong Prefecture Education Department (1995:264):

> In 1989, the prefecture education department, considering the local conditions, made an 'official syllabus for minority language education' with teaching plans.... The 'syllabus' provides that all the primary schools in minority communities (where more than 60% of the students are minority nationality) which have their own writing systems are required to open bilingual courses, to carry out the bilingual two-tracks education system, and to teach minority languages and Chinese at the same time.

---

The syllabus does not mention the name of 'Dehong Dai language', but 'minority languages' in general. However, 'minority languages' in this context surely includes Dehong Dai language as it is the largest minority language in Dehong Prefecture. Zhou and Fang (2004:206) reports that “in 1989, Dehong’s Department of Education issued an official syllabus for [Dehong] Dai language study for primary schools, a syllabus that requires [Dehong] Dai-Chinese bilingual education in primary schools in [Dehong] Dai communities”. Thus, the syllabus officially announced that the Dehong government launched the Chinese-Dehong Dai bilingual education program in the prefecture. Dai et al. (2006:237) also refers to the official syllabus, saying, “[Adopting the official syllabus] marks that Dehong Dai-Jingpo Prefecture has started forming a complete standard bilingual education system.”

This chapter compares the official syllabus in 1989 and the actual situation at Zhefang Central School. It shows that the official syllabus, to a large extent, is an ideal bilingual education policy for the students' CALP development. However, the local teachers in the program do not apply what is written in the syllabus.

### 4.3 The literacy system of the Dehong Dai program

The collected data is summarized in the eleven subsystems below. The discussions on each subsystem follow the checklist introduced in the previous chapter and Appendix 4. The table of each section shows the results of the interviews.

#### 4.3.1 Ideological subsystem

The purpose of the Chinese-Dehong Dai bilingual education program is stated in the 1989 official syllabus. Dai et al. (2006:237) says, “the syllabus [in 1989] sets the purposes of teaching minority languages in primary schools as: 1) to effectively develop intellectual resources of minority students at the stage of basic education; 2) to effectively improve the quality of primary education for minority nationalities and the standard of minority students' Chinese learning; 3) to meet the needs of the cultural movements in minority people's lives.” The 'intellectual resources' covers the same basic concepts as CALP. In this way, the support of the students' CALP development is evident in the government document. So far as statements of underlying purpose of the program are concerned, the program is ideologically supportive to the students' CALP development.

On the other hand, the local teachers who were interviewed in the field research have different ideologies from those of the official syllabus (see Table 26). The
teachers answered that “only Chinese should be used in class” or, at most, “both languages can be used only when the students do not understand in Chinese”. According to some teachers, most students went to a Chinese kindergarten for two years, and they think that the students have no problem with learning only in Chinese. However, according to the CALP theory, even though the students have acquired communication skills (BICS), it does not mean the students' academic language skills (CALP) are fully developed. The development of CALP takes longer than that of BICS. If only L2 is used for instruction when the students' CALP is not developed, some students are not able to build a good foundation of language proficiency in either L1 or L2. It is dangerous for the teachers to decide not to use minority languages only because the students seem to communicate in Chinese fluently. Therefore, the answers to the first question are scaled as tolerative and prohibitive. To the 'how long' question, two teachers answered “one to two years”, and the others answered “less than one year”. Even one teacher answered, “Any support is not necessary”. Since these answers are all shorter than the five years that are suggested by Cummins, they are scaled negatively (between non-discriminative to prohibitive) in the aspect of the CALP development. One teacher who answered “it depends on the students” is not counted in this chart because it only indicates that the teacher tolerates the use of two languages of instruction occasionally, but does not answer how long he or she thinks those languages should be used.

Table 26: Results of the interviews (ideological subsystem)

<table>
<thead>
<tr>
<th></th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>What languages do teachers think should be used in class?</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>How long do the teachers think the students should have any special support by using both languages of L1 and Chinese?</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

4.3.2 Policy and planning subsystem

According to Dai et al. (2006:237-238), “To avoid the teachers using only minority languages or using only Chinese in class,... the syllabus made a regulation of
teachers' teaching languages [which means language of instruction]: mainly minority languages for Grade 1; both of minority languages and Chinese for Grade 2 and 3; and mainly Chinese for Grade 5 and 6.” The fact that the government made such a regulation of language of instruction is also recorded by Dehong Prefecture Education Department (1995:264). It is evidence that the government wants the teachers to use both minority languages and Chinese for instruction, at least, until Grade 3. In addition, the phrase 'mainly Chinese for Grade 5 and 6' also implies that the government supports the teachers using some minority languages in Grade 5 and 6, even though it should be less than Chinese. With regards to the government policies, the policy and planning subsystem of the program is strongly supportive of the students' CALP development.

Table 27 below shows the results of interviews with the teachers about school policies. Three teachers answered, “The school policies allow the use of both languages.” However, other teachers answered either “they do not mention about language of instruction” or “they suggest to use only Chinese”. One of them even answered, “They strongly command using only Chinese.” Though the teachers do not understand in the same way, the results still indicate that the school policies show different attitudes toward using two languages for instruction from those of the government policies. Similarly, with the 'how long' question, most of the teachers answered 'one to two years' and 'less than one year'. This is much shorter than the government's desire of using both languages until Grade 6.

Table 27: Results of the interviews (policy and planning subsystem)

<table>
<thead>
<tr>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do the school policies state the use of two languages for instruction?</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>How long do the school policies support the use of two languages in education?</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3.3 **Institution building and organizational subsystem**

As discussed in the two subsystems above, the local teachers who were interviewed in this study have different understandings of the policies and ideologies from those of the official syllabus in 1989. Further questions in the interviews found that the teachers misunderstand or sometimes just do not know the government policies. When the teachers were asked about the government policies, out of all ten teachers, only three teachers answered, “the government policies allow/suggest teachers to use both languages as language of instruction,” which is in line with the 1989 syllabus. On the other hand, one other teacher understands that “the government policies suggest that teachers are to use only Chinese in school”. Another one answered, “There is a policy that allows teachers to use both languages in the future, but not now”. These two teachers misunderstand what is suggested in the 1989 syllabus. The other five teachers answered either “The policies do not mention about which languages should be used” or “I do not know any government policies talking about teaching languages.” Those teachers did not know the fact that government policies recommend them to use two languages for instruction. Moreover, they show almost opposite understandings about language of instruction and how long both languages should be used. The institution building and organization subsystem of this program has a serious problem in communication and consistency.

The problem in the institution building and organizational subsystem is related to the fact that some subsystems are missing in the program. Many teachers, in the interview, answered that they never had training or professional support in bilingual education. Since they have no training for the teachers, the teachers do not have any opportunity to know the government policies. Since there is nobody to guide them on the importance of using two languages for instruction, the teachers do not think the students should have support in both languages for the long term. This study suggests that the institution building and organizational subsystem is the crucial problem in the slowing down of bilingual education programs in the 1990s.

4.3.4 **Mobilizational subsystem**

According to the interview results (see Table 28), the teachers do not allow the students to use both languages in class. Only one teacher answered that it is allowed but the students are not supposed to use minority languages in class. The teachers believe that the students are not motivated to learn in two languages at all. Most of the teachers also do not encourage the students to read books in both languages,
although four teachers explained that is because there are no books written in minority languages in the school. These first two questions show that the teachers are negative influences towards the students' CALP development in the mobilizational subsystem. Most of the teachers also could not think of the benefits of learning in both languages. Only three teachers understand that the minority language may help the students' Chinese learning. The last question shows the students' interests in learning both languages. According to the teachers, the students are interested in learning Chinese only. In conclusion, the mobilizational subsystem of this program is negatively supportive to the students' CALP development.

Table 28: Results of the interviews (mobilizational subsystem)

<table>
<thead>
<tr>
<th>Question</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the students allowed to use both languages in class?</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Do the teachers encourage the students to read books in both languages?</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Do the teachers find any benefits for the students' CALP development from learning in both languages?</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>In which languages are the students interested in learning and how does it change in the long term?</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

4.3.5 Professional support subsystem

Seven teachers answered either “There is not any professional support” or “I am not clear about who provides professional support.” These answers are not counted in this subsystem, but they are considered in the discussions under the institution building and organizational subsystem. That is because absent of professional support is part of the institution building and organizational subsystem.
There were three remaining teachers who answered the questions about professional support (see Table 29). According to two of the teachers, the government provides professional support. The third teacher could not mention who provides it specifically but referred to an official meeting conducted by the government. One of the three teachers answered that during the government training, they allowed the usage of both languages and suggested that students should learn in both languages for two to three years. On the other hand, the other two answered that the government suggested the teachers use only Chinese in class and suggested the students learn in both languages only in the first year. One teacher added that she is actually not sure what they suggest because she could not attend their meetings. Therefore, her answers are scaled 'tolerative' to the CALP development, because it affected her decisions negatively. The others are scaled according to the rubric suggested in the previous chapter.

Table 29: Results of the interviews (professional support subsystem)

<table>
<thead>
<tr>
<th>What languages do the professionals tell the teachers to use for instruction?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long do the professionals tell the teachers to use both languages of L1 and Chinese?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.6 Curriculum development and programming development subsystem

The curriculum should be designed corresponding to the policy subsystem. The 1989 official syllabus suggests that the bilingual schools have both languages as subjects until Grade 6. An example of the suggested time schedule is presented in Table 30 below.
Table 30: Curriculum suggested by the 1989 syllabus (Dai et al. 2006:234)

<table>
<thead>
<tr>
<th></th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
<th>G5</th>
<th>G6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semester 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1st 9weeks</td>
<td>2nd 9weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dai Language</td>
<td>16 (hrs)</td>
<td>16</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chinese and Dai Oral Language</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese Language</td>
<td>Pinyin</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

However, Zhefang Central School canceled Dehong Dai language classes a few years ago. Table 31 is an example of the updated class schedule in the school. It does not have any Dehong Dai language class.
Table 31: Class schedule of Grade 1 at Zhefang Central School (sketched by the author)

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chinese</td>
<td>Math</td>
<td>Chinese</td>
<td>Math</td>
<td>Chinese</td>
</tr>
<tr>
<td>2</td>
<td>Moral</td>
<td>Chinese</td>
<td>Local Geography</td>
<td>Chinese</td>
<td>Local Geography</td>
</tr>
<tr>
<td></td>
<td>Exercise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Physical Education</td>
<td>Music</td>
<td>Physical Education</td>
<td>Art</td>
<td>Math</td>
</tr>
<tr>
<td>4</td>
<td>Math</td>
<td>Chinese</td>
<td>Math</td>
<td>Chinese</td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td>Lunch Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Chinese</td>
<td>Math</td>
<td>Health</td>
<td>Chinese</td>
<td>Math</td>
</tr>
<tr>
<td></td>
<td>Meditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Math</td>
<td>Chinese</td>
<td>Home Room</td>
<td>Moral</td>
<td>Art</td>
</tr>
<tr>
<td>7</td>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
<td>After Class Activities</td>
</tr>
</tbody>
</table>

Even though the curriculum does not have any minority language class as a subject, it is still possible to use both minority languages and Chinese for instruction in the other subjects. In fact, some teachers answered that the curriculum positively supports the students learning in both languages (see Table 32). What is more critical is when the school does not have Dehong Dai classes any more and many teachers think that the bilingual education program is canceled as well. Five teachers in the interviews answered that the curriculum does not help the students to learn in both languages at all. The teachers understood that no Dehong Dai class is equal to no bilingual education. The fact implies that the bilingual education in China often means just opening the class of minority languages as a subject under the national curriculum. Until they pay enough attention to the language of instruction, they can not be supportive to the students’ CALP development.
Table 32: Results of the interviews (curriculum development and programming development subsystem)

<table>
<thead>
<tr>
<th>How much do the teachers think the curriculum helps the students to learn in both languages?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.7 Media and materials subsystem

The prefecture government published *Minority Languages-Chinese Vocabularies Translation Handbook* for the bilingual education programs in the prefecture. However it did not work as well as the government expected.

Dai et al. (2006) describe the *Minority Languages-Chinese Vocabularies Translation Handbook*. The handbook puts four-line notes on every character or vocabulary item from the national textbooks: the first line is Chinese pinyin (pronunciation guide for Chinese characters); the second line is Chinese characters; the third line is in a minority language (translation of the Chinese characters above); and the fourth line is Chinese pinyin (pronunciation guide for the minority language). Such handbooks were prepared in three languages, Dehong Dai, Jingpo, and Zaiwa. They were published corresponding to the number of volumes of national textbooks for Grades 1 to 5 (Dai et al. 2006:238).

This handbook is a supplementary book for the national textbooks written in only Chinese. It was used as a dictionary or a phrase book when the students learn from the national textbooks. However, according to their explanation, it contains the vocabulary used in the national textbooks for Grades 1 to 5. This means the national textbooks, which the handbook is based on, were edited when the primary education was for five years. However, today's national curriculum is for six years. Therefore, the curriculum was totally changed when the years of primary education were changed, and the handbook no longer corresponds with the current curriculum.

Dehong Prefecture Education Department (1995:265) also has a record of the handbook and adds some explanations of how to use it;

> Teachers who understand minority languages can use the first three lines [of the handbook] in class. On the other hand, teachers who do not understand minority languages can use the first,
second and fourth lines. If the teachers pronounce the fourth line in Chinese pinyin, the students would understand.

One benefit of this handbook is that it gives pronunciation guides for teachers who do not understand minority languages. It suits the situation in the prefecture today since there are more teachers of Han nationality teaching in rural areas and even several teachers of minority nationalities cannot read their own languages. Still the problem is that it is out of date.

All the ten teachers answered that they do not use the handbook anymore. Textbooks that the teachers use in class are all written in Chinese, so that all teachers evaluated “the textbooks do not help students to learn in both languages at all” (see Table 33).

Table 33: Results of the interviews (media and materials subsystem)

<table>
<thead>
<tr>
<th>How beneficial are the textbooks in helping the students to learn in both languages according to the teachers?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is assumed that the handbook was cut off when the curriculum changed to the new six years curriculum because it was a supplementary book for the older curriculum. The school may not have canceled the bilingual education program intentionally. However, no textbooks written in minority languages are available. Local teachers may misunderstand that the government policies and ideologies suggest them to use only Chinese for language of instruction. To build a CALP development supportive bilingual education program, it is necessary to provide textbooks available in both Dehong Dai and Chinese languages, or at least, update the 'handbook' for the current curriculum.

4.3.8 Orientation and training subsystem

According to the teachers, the school and the government provide teacher training. Some teachers said that they trained themselves through self-learning textbooks that were provided by the government.

---

20 Cai (2003:82-83) also points out the gap between the handbook for five years and national curriculum for six years.
The interview results about training are presented in Table 34 below. It shows quite divergent understandings of the teachers. Some teachers answered that the training allows them to use both languages and suggested they use the languages until Grade 6. However, others said the trainers strongly suggested using only Chinese in class.

Table 34: Results of the interviews (orientation and training subsystem)

<table>
<thead>
<tr>
<th></th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>What languages does the training tell the teachers to use for instruction?</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>According to the training, how much time should teachers use both languages of L1 and Chinese?</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

4.3.9 Teaching-learning subsystem

The interview results show that most of the teachers and students use only Chinese in class. The teachers also barely give the students any support by using both languages (see Table 35).

Table 35: Results of the interviews (teaching-learning subsystem)

<table>
<thead>
<tr>
<th></th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>What languages do the teachers use for instruction?</td>
<td></td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What languages do the students use in class?</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long do the teachers give the students any special support by using both languages?</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Observations in classroom prove the interview results. They found that one teacher used Dehong Dai language in class only once when the students could not
understand a Chinese word. However, it is not just because the teachers think the teaching methods of using only Chinese is the best for the students. The study assumes that the negative results in this subsystem are closely related to the other factors of the program, such as Chinese only textbooks, Chinese dominating curriculum, and so on.

4.3.10 Post-literacy subsystem

The researcher visited the school library in Zhefang Center School and Dehong Prefecture Library in Luxi. The school library contains about 5000 books. Some are written in Chinese and a few are written in English. There is no book in Dehong Dai language in the library. The public library in Luxi contains about 100 titles written in Dehong Dai language. They seem to be too difficult for the students to read because they are about medicine, philosophy and traditional literature.

The teachers also find it difficult for the students to get help from the books to learn in both languages. Most of the teachers answered that the books in the library do not help students learn in both languages at all (see Table 36).

Table 36: Results of the interviews (post-literacy subsystem)

<table>
<thead>
<tr>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How much do the teachers think the books help the students learning in both languages?</strong></td>
<td></td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

4.3.11 Evaluation subsystem

According to the teachers, the evaluation concerning two language instruction was never done in the school. The classes are occasionally observed by other teachers and the government officers, but they pay attention to whether the teachers use Standard Chinese accurately or not.

All exams in Zhefang Center School are written in Chinese. One teacher said there used to be exams in Dehong Dai language for the Dehong Dai language class before but there is none today. Dai et al. (2006:240) mentions that the government stipulated that the minority language component was worth 30% of the entrance
examinations to the middle school. However, interviews and library research could not find any evidence that the regulation still exists today.

4.4 Summary

As discussed in this chapter, the official syllabus in 1989 provides the regulations of Chinese-Dehong Dai bilingual education program. The syllabus is an ideal policy that supports the students' CALP development. The syllabus clearly states the support of using two languages as mediums of instruction for the whole primary education. Thus, the syllabus satisfies both principles of CALP development: 1) Instruction in both languages; and 2) Long term transfer process.

However, one serious problem of the program lies in institution building and organizational subsystem. In the program, the teachers often misunderstand or just do not know the government policies. The program plan is ideologically and politically ideal to support CALP development. However, when the ideologies and policies do not come down to the local level, the program cannot effectively develop the students' CALP.

The graph below is calculated according to the checklist introduced in the previous chapter with the information from library research and observation and averages of the interview results. (This graph is further explained in Section 5.4.)

![Graph: The literacy system of Chinese-Dehong Dai bilingual education program]

Figure 15: The literacy system of Chinese-Dehong Dai bilingual education program

Total average: 2.33
Since the total average is lower than 3, it can be concluded that Chinese-Dehong Dai bilingual education program is not a CALP supportive program. More importantly, the graph shows the strengths and weaknesses of the program. The policy and planning subsystem is clearly higher than the other subsystems. That is because the official syllabus in 1989 is ideally supportive to the students' CALP development. On the other hand, the inconsistency between subsystems cause the institutional and organizational subsystem to fare poorly. In the same way, the lack of bilingual textbooks makes the media and materials subsystem score lowly. Another low score is the teaching-learning subsystem. Many teachers have formed the wrong impression that the bilingual education program was canceled already. This is due to the other unsupportive subsystems which imply that the government wants only Chinese as a medium of instruction.

The problems found in the Dehong Dai program are also summarized in Table 37.

<table>
<thead>
<tr>
<th>Subsystems</th>
<th>The Dehong Dai program</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ideological subsystem</td>
<td>The government set its purpose as development of the students' CALP. However, many teachers do not think two languages should be used in class.</td>
</tr>
<tr>
<td>(2) Policy and planning subsystem</td>
<td>The government strongly recommends the local schools implement the use of two languages for instruction. However, the school policy does not positively support the use of two languages for a long term.</td>
</tr>
</tbody>
</table>
| (3) Institution building and organizational subsystem | - Gap of ideologies and policies between the government and the school/teachers.  
- Lack of professional support and training specialized in bilingual education for ethnic minority students. |
| (4) Mobilizational subsystem        | - The students are not encouraged to use two languages in their learning activities.  
- Most of the teachers could not think of how learning two languages benefits the students' CALP development.  
- According to the teachers, the students are interested in learning in only one language through the whole curriculum. |
| (5) Professional support subsystem | - The professionals do not mention or support the use of two languages for instruction.  
- Many teachers answered that there is no professional support in the program. |
| (6) Curriculum development and programming development subsystem | - The government recommends a curriculum which uses two languages until Grade 6. However, the school canceled the Dehong Dai classes a few years ago.  
- Bilingual education often means adding extra minority languages class to the national curriculum. CALP development requires the use of two languages for instruction through the whole curriculum. |
| (7) Media and materials subsystem | There is no bilingual textbook available today. A supplementary book, *Translation Handbook*, is out of date and does not meet the needs of today's six years curriculum. |
| (8) Orientation and training subsystem | The teachers’ understanding of the outcomes of training is inconsistent. |
| (9) Teaching-learning subsystem | The teachers and students use only Chinese in class. The teachers barely give the students any support due to the use of only one language. |
| (10) Post-literacy subsystem | - There are some books written in Dehong Dai language in the public library, Luxi. However, they are too difficult for the students.  
- The teachers found it difficult for the students to get help from the books to learn in both languages. |
| (11) Evaluation subsystem | - Evaluation of two language instruction has never been done.  
- The students are evaluated by exams written only in Chinese. |
Chapter 5

Chinese-Dong bilingual education program

This chapter compares Chinese-Dong bilingual education program in Guizhou Province with the Dehong Dai program. It, first, introduces a general background of the Dong language and its bilingual education program. Later, it investigates whether the literacy subsystems of the Dong program support the principles of CALP development.

5.1 Background

According to the national census in 2000, the population of Dong minority nationality is estimated at 2,960,000. That is the twelfth largest population out of all 56 nationalities. It is also estimated that around 1,630,000 Dong people live in Guizhou Province. That means more than half of all Dong population live in Guizhou Province (Ou and Yi 2002:16-17). The Dong population is especially concentrated in the southeast part of the province, near to the borders of Guangxi Province and Hunan Province. The field research was conducted in Zaidang. It is a typical Dong village located in that area. Compared with Zhefang in the first case study, Zaidang is smaller in size and more remote.21

21 Zaidang has no direct bus from other towns of Rongjiang County, while Zhefang has a direct bus from Luxi, the capital city of Dehong Province.
The Chinese-Dong bilingual education program has conducted a nine years pilot project at Zaidang Primary School since 2000. The first two years of the pilot project applied only to the preschool, which lasts for two years. At this stage, only Dong language classes were introduced. After this, the Chinese-Dong bilingual education in the primary school was fully implemented from 2002. The first batch of students from the project finished the curriculum in 2009. Therefore, this is a good time to conduct an evaluation to assess whether the pilot project was successful and decide if the project should be extended.

In 2002, the Zaidang pilot project impressed other Dong community leaders and it was extended to five other schools in Dong communities. However, the five schools only applied the Dong classes for preschools. Later in this chapter, it is pointed out that the government officials and educators in Guizhou Province often (mis)understand bilingual education as simply teaching minority language for two years in preschool and reverts to the normal national curriculum in primary school. That is why the program was extended to the other schools incompletely.

22 In remote areas where the communities cannot build a kindergarten, primary schools often provide one or two years preschool education for five to six years old children. However, preschool is not the main focus of this study.
One significant feature of the Chinese-Dong bilingual education program is that it is a cooperative program with SIL International (an international NGO) and the Guizhou University Southwest Minority Language and Culture Research Institute (formerly, named Social Science Research Institute). These two organizations supported the program from the very beginning through site selection, financing, printing textbooks and reading materials, and organizing teacher trainings. The works of these two organizations are recorded in the Rongjiang Minority Culture and Art Research Office (2004:181-184) and Pan (2004:190-191). In comparing the Dong program with the Dehong Dai program conducted by the government, this study compares an experimental NGOs initiated program with a standard government bilingual education program.

5.2 General results

The field research was conducted at Zaidang Primary School from June 24 to 30, 2008. The school used to be situated in two locations in Zaidang (one was in the upper village and the other was in the lower village). Hence, the pilot project was originally conducted in two locations. However, the school was later combined in one location, and that is where the field research was conducted.

In the field research, all nine teachers working in the school were interviewed. The nine interviewed teachers are all Dong nationality and speak Dong language as their native tongue. The interview was conducted in Chinese with one Chinese-Dong interpreter. The background information of the teachers is summarized in Table 38 below.
Table 38: Background information of the interviewees

<table>
<thead>
<tr>
<th>Subjects No.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Age</td>
<td>50yrs</td>
<td>28yrs</td>
<td>28yrs</td>
<td>31yrs</td>
<td>38yrs</td>
<td>28yrs</td>
<td>54yrs</td>
<td>32yrs</td>
<td>26yrs</td>
</tr>
<tr>
<td>L1</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
<td>Dng</td>
</tr>
<tr>
<td>L2</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
<td>Ch</td>
</tr>
<tr>
<td>Teaching Grades (before)</td>
<td>G1 (G1-6)</td>
<td>G5 (G3-6)</td>
<td>G4 (G1-5)</td>
<td>G6 (G3-6)</td>
<td>G6 (G1-6)</td>
<td>G4-6</td>
<td>G1-2 (G1-4)</td>
<td>G3 (G1-6)</td>
<td>G2-3 (G1-3)</td>
</tr>
<tr>
<td>Teaching subjects</td>
<td>Mt, Ch, Sc, PE, Art</td>
<td>Ch, Sc</td>
<td>Mt, Ch, Mt, Ch, Sc, PE, Mc</td>
<td>Mt, Ch, Dng, Sc</td>
<td>Mt, Ch, Dng, PE, Mc</td>
<td>Mt, Ch, SS, PE, Mc, Art</td>
<td>Ch, Dng</td>
<td>Mt, Ch, Dng, Mt, Ch, Dng, Mc, Art</td>
<td>Mt, Ch, Dng</td>
</tr>
<tr>
<td>Years of teaching</td>
<td>29yrs</td>
<td>4yrs</td>
<td>9yrs</td>
<td>&gt;10yrs</td>
<td>15yrs</td>
<td>7yrs</td>
<td>23yrs</td>
<td>12yrs</td>
<td>2yrs</td>
</tr>
</tbody>
</table>


This study also observed 17 classes (including one preschool class). To examine the age differences, the observed classes are twelve classes of lower grades (Grade 1 to 3 and preschool) and five classes of upper grades (Grade 5 to 6). The field research was conducted during the week before the final examinations. That was why many classes observed were reviewing lessons of what they learned over the semester. Subjects of the classes are Math, Chinese, and Dong (see Table 39).
The library research was conducted in Guiyang, the capital of Guizhou Province, a week before the field research. A book edited by Guizhou Minority Language Office (2004) recorded almost all the bilingual education programs conducted in Guizhou Province today. This book also contains related governmental documents from the prefecture government. Two of these important documents announced in 2002 were: *Guizhou Educational Document No.(2002)16*; and *Guizhou Ethnic and Religious Document No.(2002)49*. In addition, the *Guizhou Pro vincial National Folk Culture Protection Law* (2002) also plays an important part in the bilingual programs. An English research paper by Geary and Pan (2003) is considered as an important source in this study, since the authors were involved with the program planning for a long time. Other information was in unpublished and published papers from SIL International, such as Geary (2005, n.d.) and Cobbey (2007).

5.3 **The literacy system of the Dong program**

The collected data is summarized in the eleven subsystems below. The discussions in each subsystem follow the checklist (see Chapter 3 and Appendix 4).

5.3.1 **Ideological subsystem**

Bilingual education programs in Guizhou Province today are legally based on Article 30 of the *Guizhou Pro vincial National Folk Culture Protection Law* (2002). It states that the educational institutions in minority communities can use their minority

---

languages and carry out bilingual education. However, this law does not give any further details, such as the meaning and the purpose of bilingual education (see Table 40). On the other hand, two official documents announced in the same year implied the purpose of their bilingual education programs. The Guizhou Educational Document No.(2002)16 suggests that bilingual education helps the students who are already able to communicate in minority languages to accomplish the Chinese curriculum smoothly. The Guizhou Ethnic and Religious Document No.(2002)49 also points out that bilingual education could provide advantages to minority students because it develops the students’ intelligence through their first language. Both documents are supportive of the concept of using two languages to boost minority students’ academic success. That implies the ideological subsystem of the program supports the principles of CALP development. However, those two documents are not legally binding to the programs, as the titles of those documents are literary translated as 'suggestions' or 'opinions'. In these ways, the government policies for the Chinese-Dong bilingual education program do not legally set the expectations for the students' CALP development. However, they are still positively influential to the program ideologically because of the ‘suggestions’ provided.

Table 40: Extracted text from the Guizhou Provincial National Folk Culture Protection Law (translated by the author)

<table>
<thead>
<tr>
<th>Article 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary and secondary schools should integrate excellent national folk culture into the contents of quality education.</td>
</tr>
<tr>
<td>Educational institutions in minority communities can use minority languages and carry out bilingual education.</td>
</tr>
<tr>
<td>Qualified schools of higher education can design their own curriculum for national folk culture to develop their students into experts on the folk culture.</td>
</tr>
</tbody>
</table>

On the other hand, the results of the interviews with the local teachers clearly show their ideological support to the students’ CALP development (see Table 41). Out of nine teachers, seven teachers agreed that they should teach minority students in both languages. However, one of the seven stated that the practice should be limited only to the younger students. To the 'how long' question, two teachers answered that they should teach in both languages until Grade 6. The other teachers also answered that they should teach in both languages for two years at least. Those answers for both questions are all scaled higher than non-discriminative, since they ideologically follow the principles of CALP theory: 1) instructions in both languages and 2) a
long term transfer. Only two teachers who answered they should give instructions only in Chinese are scaled as prohibitive in the first question.

Table 41: Results of the interviews (ideological subsystem)

<table>
<thead>
<tr>
<th>What languages do teachers think should be used in class?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long do the teachers think the students should have any special support by using both languages of L1 and Chinese?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Dehong Dai program in the first case study has an ideological problem because many local teachers do not think two languages should be used in class. However, the local teachers in Dong program are positively supportive of the use of two languages. The results of the interviews are evident that the Dong program solved a problem in the ideological subsystem.

5.3.2 Policy and planning subsystem

The Guizhou Provincial National Folk Culture Protection Law (2002) announced that the government allows the schools to conduct bilingual education (see Table 40 above). However, the law does not state either which languages should be used in classroom as medium of instruction or how long these languages should be used. The other two official documents in 2002 suggest that bilingual education should be carried out in the preschools in minority communities. It is assumed that the government implies their support for Dong education to be conducted only for two years in preschool and switch to the national Chinese-only curriculum in primary school. This was a reason why the five schools in Dong communities applied only Dong classes in preschool in the name of bilingual education. However, the students’ CALP development needs more than five years. Two years in preschool is definitely too short for the CALP development. Therefore, the program has some political weaknesses, especially in the ‘long term’ part. On the other hand, those government policies do not explicitly obstruct bilingual education in primary school. The policies can still have positive effects on the bilingual education program. In
fact, the Zaidang Primary School continues to use Dong language in the primary education.

The policies and planning at the local level are supportive to bilingual education with a longer-term transfer. Geary and Pan (2003:285) state that the Zaidang pilot project planned to use two languages until Grade 6. The teachers also answered that the school policies support using both languages, at least, for two years in primary school. Therefore all the answers in the interviews are scaled higher than non-discriminative (see Table 42).

Table 42: Results of the interviews (policy and planning subsystem)

<table>
<thead>
<tr>
<th>Do the school policies state the use of two languages for instruction?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| How long do the school policies support the use of two languages in education? |
|------------------------------------------------|-----------|------------|--------------------|------------|-------------|
| 6                                                   | 2         | 1          |                    |            |             |

5.3.3 Institution building and organizational subsystem

As mentioned above, two non-governmental organizations (SIL International and Guizhou University) jointly conduct the program with the Guizhou (and Rongjiang Prefecture) government. Geary (2005) also states that the two organizations are involved in the five extended preschools in other Dong communities. In the interviews, many teachers mentioned that these organizations support them in teacher training, professional support, and evaluation. These effective supports strengthen all eleven subsystems and make the institution building and organizational subsystem of the program supportive to the CALP development.

The teachers thought that all eleven subsystems exist in their school program, except the seven teachers who could not think of anyone who provided professional support to them. That is similar to Zhefang. They do not sense the professional support. However, the other two teachers were able to provide specific names of professionals from the organizations. The library research also identified some people and organizations supporting the program with professional knowledge of
bilingual education (Geary and Pan 2003). Therefore, this study concludes that the Dong program possesses all eleven subsystems.

For consistency over the whole literacy system, the Dehong Dai program is weak since the government and the local teachers are obviously different in their understandings of the CALP development. However, the literacy system of the Dong program is much more consistent. As discussed in the ideological subsystem and the policy and planning subsystem, there are slight differences between the understandings of the government and the local teachers in the Dong program as well. For example, the government does not clearly state which languages should be used for instruction (permissive), but the local teachers understand that they should use both languages (promotive). However, these differences are still in the same direction (promotive and permissive are both positive). Therefore, the whole system consistently supports the students' CALP development.

5.3.4 Mobilizational subsystem

According to Table 43 below, the teachers allowed the students to use both minority language and Chinese in class, except for one teacher who answered that it is only allowed for younger students. Six teachers also encouraged the students to read books in both languages. However, three teachers suggested the students should read only Chinese books (two of them said so only because there are no Dong books available in the library). These answers to the first two questions show that most of the teachers try to motivate the students to learn in two languages. On the other hand, not many teachers could find the benefits of learning in both languages for the students' CALP development. Most teachers consider that learning in Chinese is more important for the students than learning in minority languages. They answered that the minority languages can just help the students to learn Chinese. However, CALP theory insists that the students’ CALP develop through either minority languages or Chinese, and it is more effective when both languages are used (see Section 2.2). The score is relatively lower on the third question because the teachers and students are not motivated to learn in both languages for the students’ CALP development. Only one teacher answered that the students can develop their writing skills through learning in minority languages. This answer is scaled as permissive, since he understands that the language skills are developed through either minority language or Chinese. The last question shows the students’ interests in learning both languages based on the teachers' answers.
Table 43: Results of the interviews (mobilizational subsystem)

<table>
<thead>
<tr>
<th>Question</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the students allowed to use both languages in class?</td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do the teachers encourage the students to read books in both languages?</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do the teachers find any benefits for the students' CALP development from learning in both languages?</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In which languages are the students interested in learning and how does it change in the long term?</td>
<td>5</td>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The interview results are evident that the Dong program is more supportive in the mobilizational subsystem than the Dehong Dai program. One particular problem of the Dehong Dai program is that the students are not encouraged to use both languages in their learning activities. According to the results of the first two questions above, the Dong teachers try to encourage students to use both languages. Therefore, it is concluded that this is not a problem in the Dong program. As a result, the students are more positively interested to learn in both languages through the whole primary education. Although, there is a risk of not continuing if neither the teachers nor the students perceive the benefits of long-term bilingual study.

5.3.5 Professional support subsystem

Only two teachers could answer the questions under the professional support subsystem. Seven teachers who could not think of anyone that provides professional support are not counted in the results here, because the absence of professional support is an issue of institution building and organizational subsystem. The two teachers stated that professional support is provided by the Education Department (of Guizhou Province) and SIL International.
The Provincial Education Department conducted a study conference for bilingual education in April 2004 and invited officers and researchers from local education sectors, universities and publication houses. In the conference, the concept of the *Guizhou Provincial National Folk Culture Protection Law* was reconfirmed. The need to promote and encourage the bilingual education program in Guizhou Province was also reinforced.

However, the conference did not mention either what languages of instruction should be used in class or how long the languages should be used. In view of this, it is not clear as to why teachers still think that the professionals strongly suggest the use of both languages for instruction until Grade 6 in Table 44. One teacher explained that his answer is based on the suggestions by SIL International. SIL International fills the gap between the government and the local schools in the professional support subsystem.

<table>
<thead>
<tr>
<th>Table 44: Results of the interviews (professional support subsystem)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What languages do the professionals tell the teachers to use for instruction?</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>How long do the professionals tell the teachers to use both languages of L1 and Chinese?</td>
</tr>
</tbody>
</table>

Geary and Pan (2003:185-187), who themselves represent professionals in the program, refer to Cummins’ discussions as the academic foundation of the program. They say, “Thus, we have reason to expect that academic knowledge and skills will be transferred from Kam [Dong] to Chinese…. findings from bilingual education studies in other contexts are strongly supportive of the hypothesis that children in Zaidang will benefit significantly in their studies of Chinese from first studying their own Kam [Dong] language.” Although their discussion tends to focus on the transfer from Dong to Chinese, it still implies the CALP development underlying the learning processes. The professional support of the program matches exactly with CALP theory.
5.3.6 Curriculum development and programming development subsystem

Geary and Pan (2003:285) state that “in the second semester (in a two-semester year) of Grade 1 of the pilot project, spoken Chinese is introduced, and this takes about 40% of the language timetable for that semester. During Grade 2, written Chinese will be introduced, although 50% of all classes will continue to be conducted in Kam [Dong]. From Grade 3 onwards, after basic literacy in Kam [Dong] has been secured, the majority of classes are conducted using Chinese, retaining around 15% in the language timetable for study of Kam [Dong].” It is important that the curriculum clearly mentions that all subjects for Grade 1 and 2 are conducted in both Dong language and Chinese. That means the curriculum positively supports the use of two languages for instruction. On the other hand, the curriculum implies that only Chinese should be used for instruction in the classes for older than Grade 3, except the Dong language classes. If the curriculum limits the use of two languages to only two years, it may have negative impacts on the program. This prevents it from following the principle of long term transfer process. However, the curriculum is evaluated positively in this study. That is because the curriculum tries to let the students have opportunities to use Dong languages through Dong language classes until Grade 6. It helps the students to develop their CALP through both languages. The curriculum of the program is also summarized in Table 45 below.
Table 45: Three phases of the Chinese-Dong bilingual education (n.d. document given by SIL International)

<table>
<thead>
<tr>
<th>P1</th>
<th>Phase 1: Preschool in Dong.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dong literacy, Math, Music, Art, PE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P2</th>
<th>Phase 2: Learning Oral Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

| Phase 3: Bilingual Education: Dong-Han [Chinese] |
| Classes in: Chinese, Dong, Math, Morals, Science, Music, Art |
| - Music, Morals and Dong are mainly taught through Dong |
| - Math (Grade 1): Dong |
| - Math (Grade 2-6): Chinese and Dong |
| - Chinese and PE are taught through Chinese |
| - All other subjects are taught through Dong and increasingly Chinese |

PE: Physical Education

From Table 46 and Table 47, it is evident that the curriculum of Zaidang Primary school follows the curriculum recommended by Geary and Pan (2003). Both Grade 2 and Grade 5 allocate three to six hours for Dong language and related subjects.
### Table 46: Class schedule of Grade 2 at Zaidang Primary School (sketched by the author)

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chinese</td>
<td>Dong (Writing)</td>
<td>Dong (Writing)</td>
<td>Chinese</td>
<td>Math</td>
</tr>
<tr>
<td></td>
<td>Exercise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Math</td>
<td>Chinese</td>
<td>Math</td>
<td>Art</td>
<td>Dong (Writing)</td>
</tr>
<tr>
<td>3</td>
<td>Chinese</td>
<td>Chinese</td>
<td>Dong (Writing)</td>
<td>Chinese</td>
<td>Math</td>
</tr>
<tr>
<td></td>
<td>Lunch Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Art</td>
<td>Math</td>
<td>Math</td>
<td>Chinese</td>
<td>Dong Music</td>
</tr>
<tr>
<td></td>
<td>Meditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Work</td>
<td>Moral</td>
<td>Chinese</td>
<td>Physical Education</td>
<td>Home Room</td>
</tr>
<tr>
<td>6</td>
<td>Chinese</td>
<td></td>
<td>Dong</td>
<td>After Class Activities</td>
<td></td>
</tr>
</tbody>
</table>

### Table 47: Class schedule of Grade 5 at Zaidang Primary School (sketched by the author)

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chinese</td>
<td>Math</td>
<td>Math</td>
<td>Math</td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Exercise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Math</td>
<td>Chinese</td>
<td>Chinese</td>
<td>Chinese</td>
<td>Math</td>
</tr>
<tr>
<td>3</td>
<td>Chinese</td>
<td>Chinese</td>
<td>Dong</td>
<td>Science</td>
<td>Dong</td>
</tr>
<tr>
<td></td>
<td>Lunch Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Art</td>
<td>Physical</td>
<td>Chinese</td>
<td>Physical</td>
<td>Math</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td></td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Work</td>
<td>Music</td>
<td>Math</td>
<td>Social Studies</td>
<td>Home Room</td>
</tr>
<tr>
<td>6</td>
<td>Math</td>
<td>Chinese</td>
<td></td>
<td>Dong</td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, according to the interview results, the teachers seem to have two different attitudes to the curriculum (see Table 48). One group finds that the curriculum is supportive of students’ learning in both languages. They are scaled as promotive and permissive. The other group finds that the curriculum does not
support the use of two languages at all. They are scaled as tolerative. It is assumed that the difference is caused by the teachers’ different ideas of who makes decisions on the curriculum. Some teachers answered “the government” and other teachers said “SIL International”. Some teachers added that “the government (or SIL International) just gives suggestions, but the school (or the teachers themselves) makes decisions on the curriculum in the end.” The program is a cooperative program between the government and SIL International. Hence, the curriculum proposed by both organizations should be the same. However, in reality, the local school teachers have no chance to communicate directly with the people from the government. This caused the teachers to form the wrong impression from the textbooks and other teaching materials. It appears to them that the government curriculum is different from what SIL International tells them. That is because the national textbooks provided by the government are written only in Chinese. For example, one of the teachers who gave a tolerative answer mentioned that the government makes decisions on the curriculum. This gap in communication between the local teachers and the government is a complex problem. It exists in many educational programs in China today.

Table 48: Results of the interviews (curriculum development and program development subsystem)

<table>
<thead>
<tr>
<th>How much do the teachers think the curriculum helps the students to learn in both languages?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.7 Media and materials subsystem

The pilot project printed textbooks in Dong language. According to Geary (2005), over 30 textbooks written in Dong language, including reading materials, were printed for the pilot project by 2005. There were plans to print more books for Grade 4 to 6 later on. In the bookshelves in Guizhou University, there are some textbooks which are translated from the national textbooks in Chinese and other textbooks which are originally developed for the project. They are all written in Dong language. The teachers in the interview also mentioned that they have separate

---

24 The other one who gave a tolerative answer mentioned that the teachers themselves make decisions on the curriculum. She is also the only one who answered the teachers should use only Chinese in class for the ideological question.
textbooks for most subjects in both Dong language and Chinese. The project chose not to print the new bilingual (using two languages in one book) textbooks. The bilingual classes must use both Chinese textbooks and Dong textbooks. However, since the government provides the students with Chinese textbooks for free, this method of printing two languages separately helps to cut costs for the program.

On the other hand, during the observation, it was found that the Dong textbooks were seldom used in classes, except in the Dong language classes. According to the teachers, in the interviews, the Dong textbooks are still used occasionally. However, when a program uses such textbooks, it is possible that only one textbook is mainly used in class. One teacher who teaches upper grades answered that the Dong textbooks are no longer used in his classes. In addition, as Pan (2004) mentions, editing the Dong textbooks is still an issue to be discussed. The national curriculum is changed after every few years, so the Chinese textbooks must also be revised. It requires a lot of effort to revise the Dong textbooks every few years just for one school. At this moment the teachers found positive support from the textbooks for the students’ CALP development, so that the answers are scaled promotive, permissive, and non-discriminative (see Table 49). Some teachers added that the students could find help from the Dong textbooks when they study at home, although they are not used in class.

Table 49: Results of the interviews (media and materials subsystem)

<table>
<thead>
<tr>
<th></th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>How beneficial are the textbooks in</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>helping the students to learn in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>both languages according to the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>teachers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.8 Orientation and training subsystem

Four week-long teacher training seminars for the seven potential bilingual teachers from Zaidang Primary School was convened in March and August 2000. According to Geary (2005), the first training spent most of the time in developing the teachers’ Dong literacy skills. However, the second training, which was organized by SIL International and Guizhou University, focused on teaching methods. According to
the Rongjiang Minority Culture and Art Research Office (2004), teacher training continued to be conducted during every summer and winter break in 2001 and 2002. Most of the teachers, in the interviews, answered that the teacher training promoted, or at least allowed, them to use both languages for instruction until Grade 6 (see Table 50). A few answers are scaled as non-discriminative and tolerant. The answers are given by the teachers who are relatively new to the school. It is supposed that the new teachers did not join the teacher training from 2000 to 2002. It may be a good opportunity to have another training session for the teachers and reinforce the principles of CALP theory once again.

Table 50: Results of the interviews (orientation and training subsystem)

<table>
<thead>
<tr>
<th></th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>What languages does the training tell the teachers to use for instruction?</td>
<td>3</td>
<td>5</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>According to the training, how much time should teachers use both languages of L1 and Chinese?</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.9 Teaching-learning subsystem

In the interviews, three teachers answered that they actually use both Dong language and Chinese equally in class. These results are considered fully supportive to the principle of instructions in two languages. Two other teachers answered that they use Chinese more than Dong language and three teachers answered that they use Dong only a little. These five teachers positively support the CALP development because they at least use both languages in class. On the other hand, interestingly, most teachers answered that the students use Chinese more often than Dong language in class. It appears that the students communicate better in Chinese than in their first language. This is despite the fact that their Chinese communication skills are undeveloped. This is a misconception. It is caused by the school culture in which the teachers mainly give lectures to the students and the students can only speak out when the teachers ask them questions. The teachers ask questions which are usually written on the Chinese textbooks so the questions are automatically in Chinese. The
students answer in Chinese because the questions are asked in Chinese. In this way, the students in class apparently use Chinese more often than Dong language. However, this does not mean that the students are comfortable communicating in Chinese only.25

Results of the interviews are summarized in Table 51 below. The first two questions are already discussed. They are scaled higher than non-discriminative, except for one prohibitive. Since the teachers and students use at least both languages in some amount in class, the students' CALP can be developed through both languages. For the third question, the teachers also show their positive attitude to the long term transfer. Six teachers answered that they actually give the students some special support by using both languages until Grade 6.

<table>
<thead>
<tr>
<th>Table 51: Results of the interviews (teaching-learning subsystem)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>What languages do the teachers use for instruction?</td>
</tr>
<tr>
<td>Promotive Permissive Non-discriminative Tolerative Prohibitive</td>
</tr>
<tr>
<td>3 2 3 1</td>
</tr>
<tr>
<td>What languages do the students use in class?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>7 2</td>
</tr>
<tr>
<td>How long do the teachers give the students any special support by using both languages?</td>
</tr>
<tr>
<td>6 1 2</td>
</tr>
</tbody>
</table>

5.3.10 Post-literacy subsystem

The teachers mentioned that there are about 300 books of outside curriculum reading materials on a bookshelf in the school. Some teachers call it a library, but others teachers stated that no public or school library existed in the village. Some teachers also mentioned that few Dong books are available on the bookshelf. However, when the researcher checked the bookshelf, none of the books were in Dong. All 300 books were in Chinese. According to Geary (2005), 1000 stories, including 260

---

25 The researcher observed that the students mainly communicate with their peers in Dong language when they were outside of class. It is assumed that the students are more comfortable communicating in Dong language with their friends at least.
extra-curricular stories, in Dong language were about to print in 2005. However, the
books were still not available for the students in Zaidang Primary School in 2008.
Other teachers mentioned the Dong newspaper. The newspaper is published every
two months by SIL International and Guizhou University especially for the students
of Zaidang Primary School. The contents are folk tales, songs, and some puzzles in
which the students may be interested. The newspaper is distributed to every student
in school. Geary (2005) also mentions the fact that a VCD was produced in
November 2001 showing Zaidang Preschool children performing.

Table 52 below contains the results of the conducted interview. A majority of the
teachers show positive attitude towards the use of post-literacy in providing students
with leaning opportunities in both languages. The teachers seem to attach great value
to the newspaper and the VCD. However, it is hoped that more reading materials
will be published soon.

Table 52: Results of the interviews (post-literacy subsystem)

<table>
<thead>
<tr>
<th>How much do the teachers think the books help the students learning in both languages?</th>
<th>Promotive</th>
<th>Permissive</th>
<th>Non-discriminative</th>
<th>Tolerative</th>
<th>Prohibitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

5.3.11 Evaluation subsystem

During the interviews, the teachers stated that the government, SIL International, and
teachers from other schools evaluated their classes and their language of instruction.
Some teachers mentioned that the evaluators were supportive of the class using both
languages. Another teacher mentioned that the government officials support learning
only in Chinese, but they did not object to using Dong language in class. These
statements can be scaled as permissive, because the evaluations target the language
of instruction and allowed the teachers to use both languages. The other school
teachers who observed the classes may be the teachers from the five extended
schools. That means they also had positive impressions of the pilot project, since the
program was extended to these schools.

With regards to which languages the students are being evaluated in, the entrance
exams to middle schools and high schools are all conducted in Chinese. Pan
(2004:193) also mentions that the pilot project itself is evaluated according to how much the students improve in Chinese. This is not supportive of the use of two languages. If the program could establish an evaluation system where the minority students were evaluated in both minority languages and Chinese, the students in the program may be more motivated to practice both languages. It would encourage the students to develop their CALP more effectively. In the study conference for bilingual education by the Provincial Education Department in 2004, there were no records of discussions on the ways of evaluation. It is recommended that this issue be discussed in the near future.

In the pilot project, the students took the exam in Dong language for the Dong language classes. However, the other subjects use only Chinese. It was found that one teacher, during the observations, gave some instructions in Dong language when the students asked questions about the Chinese exam. At this moment, it depends on the teachers whether such support in both languages is given to the students during an evaluation.

5.4 Summary

Similar to the first case study, the information from library research and the interview results are scaled by 1 to 5, and the average of each subsystem is calculated. The scores are summarized in the graph below.
Compared to the first case, this program scores higher in all the eleven subsystems. The total average of all the subsystems is over 4.00 (permissive). This study concludes that the literacy system of Chinese-Dong bilingual education program is supportive to the students’ CALP development.

In the previous chapter, the literacy system of the Dehong Dai program is shaped like a misshapen circle because of the lack of communications between the government and the local teachers (see Section 4.4). On the other hand, the Dong program achieves a good score throughout the whole system and is shaped mostly like a balanced circle. As discussed in this chapter, it is an advantage of the experimental cooperation with non-governmental organizations. The Chinese-Dong bilingual education program is a joint program with the government and two non-governmental organizations. Such cooperation makes the program significantly strong in its institutional and organizational subsystem. Table 53 below shows that the Dong program avoids some problems found in the Dehong Dai institution building and organizational subsystem.
Table 53: Summary of the institution building and organizational subsystem of Chinese-Dong bilingual education program in comparison with the Dehong Dai program

<table>
<thead>
<tr>
<th>Subsystems</th>
<th>The Dehong Dai program</th>
<th>The Dong program</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Institution building and organizational subsystem</td>
<td>- Gap of ideologies and policies between the government and the school/teachers.</td>
<td>- The program has all eleven subsystems and is strong in the institution building and organizational subsystem.</td>
</tr>
<tr>
<td></td>
<td>- Lack of professional support and training specialized in bilingual education for ethnic minority students.</td>
<td>- The whole literacy system of Dong program is much more consistent than Dehong Dai program.</td>
</tr>
</tbody>
</table>

The institution building and organizational subsystem clearly has an impact on other subsystems. For example, even though the government policies for the Dong program do not set clear goals for the students’ CALP development, the ideological subsystem still achieves a good score. This is because of the supportive attitudes of the local teachers. Moreover, the two organizations also provide an effective support in many aspects of the program and make impacts on each subsystem in more direct ways. For example, SIL International and Guizhou University convened several teacher training programs (orientation and training subsystem) and edited Dong textbooks (media and material subsystem). These works met the needs of some crucial issues in each subsystem.

On the other hand, it is also shown that the local school teachers often misunderstand the government attitude. Even though the Dong program presents a great consistency over the whole program, answers from the local teachers often fell into two categories. This was also more obvious when the teachers were asked about the government's attitude towards the program, such as curriculum development (see Section 5.3.6). Since the program could solve many problems which are found in another program, this subtle difference became more remarkable. In other words, the problem of the institution building and organizational subsystem surfaces easily in Chinese bilingual education programs. There is a risk that the Dong program will also fail in this subsystem without continuous communication and support in the future. This could be a crucial reason why most bilingual programs since the 1980s, inclusive of the Dehong Dai program in the first case, have slowed down today.

Other results of the Dong program are summarized in Table 54 below.
Table 54: Summary of the eleven subsystems of Chinese-Dong bilingual education program

<table>
<thead>
<tr>
<th>Subsystems</th>
<th>The Dong program</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ideological subsystem</td>
<td>- The government policies for the program do not clearly set the purpose on the students’ CALP development.</td>
</tr>
<tr>
<td></td>
<td>- The local teachers show their ideological support to students’ CALP development clearly.</td>
</tr>
<tr>
<td>(2) Policy and planning subsystem</td>
<td>- The policies and planning in the local level are supportive to bilingual education with long term transfer.</td>
</tr>
<tr>
<td></td>
<td>- However, the government policies of the program have some weaknesses especially in the ‘long term’ part. The program might need more effort in the policy and planning subsystem.</td>
</tr>
<tr>
<td>(3) Institution building and organizational subsystem</td>
<td>- The program has all eleven subsystems and is strong in the institution building and organizational subsystem.</td>
</tr>
<tr>
<td></td>
<td>- The whole literacy system of the Dong program is much more consistent than the Dehong Dai program.</td>
</tr>
<tr>
<td>(4) Mobilizational subsystem</td>
<td>The teachers allowed the students to use both minority languages and Chinese, They also encourage the students to read books in both languages. However not many teachers could articulate the benefits of learning in both languages for the students’ CALP development.</td>
</tr>
<tr>
<td>(5) Professional support subsystem</td>
<td>- The teachers think that the professionals strongly recommend the use of both languages until Grade 6.</td>
</tr>
<tr>
<td></td>
<td>- The professional support of the program matches exactly with the CALP theory and the concept of CALP development.</td>
</tr>
<tr>
<td></td>
<td>- However, many teachers were not aware of the professional support available.</td>
</tr>
<tr>
<td>(6) Curriculum development and programming development subsystem</td>
<td>- The curriculum is positively supportive to the principle of instructions in both languages. It tries to let the students have opportunities to use Dong in Dong language classes until Grade 6.</td>
</tr>
<tr>
<td></td>
<td>- The teachers seem to split into two different groups about attitudes toward the curriculum.</td>
</tr>
</tbody>
</table>
| (7) Media and materials subsystem | - The pilot project prepared the textbooks in Dong language for their bilingual education.  
- During the observation, it was found that the Dong textbooks are rarely used in classes. |
| (8) Orientation and training subsystem | - Teacher training was convened by the government and SIL.  
- The teacher training suggested that the teachers should use both languages until Grade 6. |
| (9) Teaching-learning subsystem | - The teachers are positively supportive to the principle because they at least use both languages in class.  
- The teachers also show their positive attitude to long term transfer.  
- However, the communication context in class (lectures/books/questions) lead students to use Chinese more than Dong. |
| (10) Post-literacy subsystem | - The Dong newspaper is published every two months and a VCD was produced in November 2001.  
- The teachers mostly show positive feedback to the post-literacy which provides students with learning in both languages.  
- However the books in the school library are all in Chinese. |
| (11) Evaluation subsystem | - The evaluation subsystem can be scaled permissive.  
- In Guizhou Province the entrance exams to middle and high schools are all conducted in Chinese.  
- In the pilot project, the students take exams in Dong at least for Dong language classes. |
This study examined to what extent the selected bilingual education programs in China support the students' CALP development. It revealed that the Chinese-Dehong Dai bilingual education program faces a number of difficulties. On the other hand, the Chinese-Dong bilingual education program was better equipped to deal with some of the issues found in the Dehong Dai program. This chapter summarizes the discussions and answers the research questions. Finally, a few suggestions are made for further studies in this field.

6.1 Findings

Findings of this thesis are summarized in the four sections below.

6.1.1 An evaluation model for bilingual education programs

Before the research questions of this study are answered, the evaluation model used in this study should be examined. This evaluation model for bilingual education programs is associated with a recent Applied Linguistics theory (the CALP theory) and a model of program management (Bhola's total literacy system). An initial concern in this study was how to apply the CALP theory into the practical evaluation processes. The solution was to focus on the two basic principles of CALP development: 1) Instruction in two languages; and 2) Long term transfer process between two languages. Adapting the total literacy system into the evaluation is another unique part of this study. Although the system was originally designed for adult literacy programs, the set of eleven subsystems of the total literacy system is a useful tool to illustrate the characteristics of the selected bilingual education programs.

During the field research, there were a number of obstacles that were found in the application of the model. For example, many local teachers could not understand what is professional support or who provides such support. It
probably means that the concepts of some subsystems are sometimes unfamiliar to the local teachers. Therefore, when other evaluations are conducted in other contexts, some additional explanations or alternative questions may be needed. This was also a problem with the interviewer's language skills. Four languages were used as media in this research: English, Chinese, Dehong Dai, and Dong. English was used between the interviewer and the English-Dehong Dai interpreters. Chinese was used between the interviewer and the interviewed teachers. It was also used between the interviewer and the Chinese-Dong interpreter. Dehong Dai and Dong languages were used between the interpreters and the interviewees. As shown, there were many different channels in communication. It made the interviews difficult especially because the interviewer is unfamiliar with both Dehong Dai and Dong languages. The communication was limited even with the help of the interpreters. Moreover, the interviewer experienced difficulties conducting the oral interviews in Chinese due to his intermediate proficiency level. Therefore, it is suggested that the evaluation model should be used by a person who has relevant and sufficient language skills.

Another difficulty of this study is that this study treats the institution building and organizational subsystem in a different way from the other subsystems. That is because the whole program structure itself does not directly impact what languages of instruction are used in classes or how long a transfer process is considered in the program. This study defined the institution building and organizational subsystem as: 1) the links between other subsystems; and 2) the consistency over the whole program. However, this definition fits any other healthy program, not only CALP development supportive programs. Therefore, to identify the CALP supportive characteristics in the subsystem, different understandings of the institution building and organizational subsystem may be suggested in future studies.

6.1.2 A CALP supportive program and a non-CALP-supportive program

According to the evaluation results (see Figures 15 and 17, in Sections 4.4 and 5.4), the Chinese-Dehong Dai bilingual education program scored 2.33 on average while the Chinese-Dong bilingual education program scored 4.07 on average. The scores represent to what extent the programs are supportive to the students' CALP development: 5 = promotive, 4 = permissive, 3 = non-discriminative, 2 = tolerative, and 1 = prohibitive. If the score between a supportive program and a not-supportive program is set to 3 (= non-discriminative), the evaluation results concluded that Chinese-Dehong Dai bilingual education program is not supportive to the students' CALP development while Chinese-Dong bilingual education program is supportive.
Figure 18 below compares the results of the two programs.

The institution building and organizational subsystem is most significant in the comparison of these two case studies (2.66 points difference). The Dehong Dai program lacks professional support and training specialized for bilingual education. The program also has a problem in the consistency between the understandings of the government and local teachers. On the other hand, the Dong program is equipped with all eleven subsystems. The government and local teachers showed relatively similar understandings on the ideologies and policies of the program. The media and materials subsystem is another significant subsystem in the graph above (2.43 points difference). The Dehong Dai program no longer uses bilingual textbooks. An old supplementary Dong textbook, *Translation Handbook*, is also out of date and does not meet the needs of the current curriculum. The Dong program is provided with textbooks in Dong language for bilingual education. In these ways, this study proved that the Dong program is better equipped to deal with some of the issues found in the Dehong Dai program.

On the other hand, the policy and planning subsystem had comparably similar results between both cases, although the Dong program was expected to be much higher. This is because the Dehong Dai program is strong in this subsystem, but it does not match with the other subsystems. At the same time, the policies in the Dong program are weak in terms of how much time is supposed to be spent on both languages. It also appears that bilingual education is often understood only as Dong
classes in the preschool, whereas it should take more than five years according to the CALP theory. Two years in preschool is definitely too short. More political efforts for the Dong program are required.

Table 55 compares the eleven subsystems of the two programs.

<table>
<thead>
<tr>
<th>Subsystems</th>
<th>The Dehong Dai program</th>
<th>The Dong program</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ideological subsystem</td>
<td>The government set its purpose as development of the students' CALP. However, many teachers do not think two languages should be used in class.</td>
<td>- The government policies for the program do not clearly set the purpose on the students' CALP development. - The local teachers show their ideological support to students’ CALP development more clearly.</td>
</tr>
<tr>
<td>(2) Policy and planning subsystem</td>
<td>The government strongly recommends the local schools implement the use of two languages for instruction. However, the school policies do not positively support the use of two languages for a long term.</td>
<td>- The policies and planning in the local level are more supportive to bilingual education with long term transfer. - However, the government policies of the program have some weaknesses especially in the 'long term’ part. The program might need more effort in the policy and planning subsystem.</td>
</tr>
<tr>
<td>(3) Institution building and organizational subsystem</td>
<td>- Gap of ideologies and policies between the government and the school/teachers. - Lack of professional support and training specialized in bilingual education for ethnic minority students.</td>
<td>- The program has all eleven subsystems and is strong in the institution building and organizational subsystem. - The whole literacy system of the Dong program is much more consistent than the Dehong Dai program.</td>
</tr>
</tbody>
</table>
| (4) Mobilizational subsystem | - The students are not encouraged to use two languages in their learning activities.  
- Most of the teachers could not think of how learning two languages benefits the students' CALP development.  
- According to the teachers, the students are interested in learning in only one language through the whole curriculum. | The teachers allowed the students to use both minority languages and Chinese. They also encourage the students to read books in both languages. However, not many teachers could articulate the benefits of learning in both languages for the students' CALP development. |
| (5) Professional support subsystem | - The professionals do not mention or support the use of two languages for instruction.  
- Many teachers answered that there is no professional support in the program. | - The teachers think that the professionals strongly recommend the use of both languages until Grade 6.  
- The professional support of the program matches exactly with the CALP theory and the concept of CALP development.  
- However, many teachers were not aware of the professional support available. |
| (6) Curriculum development and programming development subsystem | - The government recommends a curriculum which uses two languages until Grade 6. However, the school canceled the Dehong Dai classes a few years ago.  
- Bilingual education often means adding extra minority languages class to the national curriculum.  
- CALP development requires the use of two languages for instruction through the whole curriculum. | - The curriculum is positively supportive to the principle of instructions in both languages. It tries to let the students have opportunities to use Dong in Dong language classes until Grade 6.  
- The teachers seem to split into two different groups about attitudes toward the curriculum. |
| (7) Media and materials subsystem | There is no bilingual textbook available today. A supplementary book, *Translation Handbook*, is out of date and does not meet the needs of today's six years curriculum. | - The pilot project prepared the textbooks in Dong language for their bilingual education.  
- During the observation, it was found that the Dong textbooks are rarely used in classes. |
(8) Orientation and training subsystem

The teachers' understanding of the outcomes of training is inconsistent.
- Teacher training was convened by the government and SIL.
- The teacher training suggested that the teachers should use both languages until Grade 6.

(9) Teaching-learning subsystem

The teachers and students use only Chinese in class. The teachers barely give the students any support due to the use of only one language.
- The teachers are positively supportive to the principle because they at least use both languages in class.
- The teachers also show their positive attitude to long term transfer.
- However, the communication context in class (lectures/books/questions) lead students to use Chinese more than Dong.

(10) Post-literacy subsystem

- There are some books written in Dehong Dai language in the public library, Luxi. However, they are too difficult for the students.
- The teachers found it difficult for the students to get help from the books to learn in both languages.
- The Dong newspaper is published every two months and a VCD was produced in November 2001.
- The teachers mostly show positive feedback to the post-literacy which provides students with learning in both languages.
- However the books in the school library are all in Chinese.

(11) Evaluation subsystem

- Evaluation of two language instruction has never been done.
- The students are evaluated by exams written only in Chinese.
- The evaluation subsystem can be scaled permissive.
- In Guizhou Province the entrance exams to middle and high schools are all conducted in Chinese.
- In the pilot project, the students take exams in Dong at least for Dong language classes.

6.1.3 Weakness of Chinese governmental bilingual education programs in the institution building and organizational subsystem (a hypothesis)

Another aspect of this study demonstrates a comparison between a governmental bilingual education program since the 1980s and an experimental NGO-initiated
program. The Dehong Dai program represents the former and the Dong program represents the latter.

As discussed above, the most significant difference between the selected programs is in the institution building and organizational subsystem. The Dehong Dai program is strongly supported by the government policies. However, it is not appreciated by the local teachers at Zhefang Central School. The teachers are either unaware or in disagreement with the government policies regarding the use of minority languages in class.

We need to ask the question, “what caused such an information gap?” It seems that there was miscommunication between the local leaders and local teachers. Many teachers in the Dehong Dai program were unsure about who provide them with curriculum, professional support, and training for bilingual education. It is assumed that the local teachers have too few opportunities to discuss the special education for their minority students with local leaders.

Secondly, the local leaders also may not really understand the benefits of bilingual education. China uses a 'top-down' decision making system. The local policies and laws usually just follow the national ones. In some cases, the local leaders neglect the principles of using two languages instruction for a long term. If this is so, it is not possible for them to provide effective support to the local schools. This obstructs the development of the minority students' CALP.

It is evident that lack of support, such as textbooks and training, was also influential in the Dehong Dai program. The teachers had the impression that the government is unsupportive of the use of minority languages in class. That was because their bilingual textbooks were too old and not useful for the current curriculum and there was no teacher training specialized in bilingual education. The teachers either do not have any minority language materials that they can use in classroom or may not know how to use minority languages in their classes. Dehong Dai classes in the school were canceled without any official announcement from the government. In this way, the evaluation results show that the program is missing the links between the subsystems and consistency over the whole program. This study proposes a hypothesis that the weakness in the institution building and organizational subsystem is one of the main factors which caused the slowing down of bilingual education in the 1990s. In order to confirm the hypothesis, more cases need to be examined in the future.
On the other hand, the Dong program is strong in the institution building and organizational subsystem. That is because the whole program is more consistent than the Dehong Dai program. During the research, it was found that SIL International provided support in many aspects of the program, such as editing and printing textbooks, and providing teacher training. Cooperation of an NGO helped the Dong program built a consistent structure. The results show the possibility of building a CALP supportive bilingual education program in China with an NGOs' cooperation and their flexible support. At the same time, it is recommended that the government organize dialogue sessions with the local school teachers to discuss the policies of instructional languages. This is to ensure that the teachers do not have the wrong impression that the government requires the teachers to use only Chinese in class.

6.1.4 Bilingual education misconceived as minority language classes added to the national curriculum

In this study, it was mentioned a few times that bilingual education in China often means just having minority language classes as an added subject. Tsung (2009) points out that this tendency is often shown in transitional bilingual education programs. She mentions that “the constraints teachers encountered in bilingualism are increased by the centralized syllabus while curriculum with bilingual programs are seen as a means of phasing students into Putonghua, and the first language is usually phased out in Year 3. Therefore, it is not treated as an educational learning in its own right... the 'pyramid model' [transitional] policy for minority students in Yunnan, which uses first language to be eventually eclipsed, could be considered a form of transitional integration” (2009:176). Both programs examined in this study adopt the approach of transitional bilingual education. The Dehong Dai local teachers thought that the bilingual education program was canceled when the Dehong Dai language classes were canceled. This is despite the fact that the government did not announce either canceling the bilingual education program or the use of two languages for instruction. That is because, for the teachers, bilingual education means two separate subjects of minority language and Chinese. Lack of bilingual textbooks and communication between the government and local teachers enhanced such misunderstanding of bilingual education. The Dong program has a similar tendency. The government policy in the Dong program implies their support only for the minority language classes in preschool. As a result, the five extended schools only applied Dong language classes for preschool but kept the national Chinese-only curriculum for primary school.
The CALP theory suggests that the students' CALP is developed through two languages of instruction. The use of two languages for instruction should not depend on which subjects are taught. Perceiving bilingual education programs as separate language subjects, i.e. Dong or Chinese, could even cause a burden to the students. This is because the language which they learned would not be used in other classes so the students could not take advantage of their bilingualism at all.

In order to avoid the problem being discussed, two solutions are recommended. First, government policies should clearly state their support of using two languages of instruction for the entire primary education. The Dong program needs to be improved in this field. Secondly, the policies should be spread to the local schools and teachers through teacher training and the other outside support. This is a recommendation for the Dehong Dai program. This study recommends that all the bilingual education programs in China should follow these two solutions in order to achieve the principles of CALP development.

### 6.2 Further Studies

This study emphasized the building of an evaluation model based on CALP theory and the total literacy system. However, the model was assessed at only two locations while this study actually needs a larger number of cases to be examined. Therefore, more research is expected in the future. This is especially since the Dehong Dai program is replicated in numerous schools within the province. It is also proposed that the research be expanded to include other bilingual education programs in the rest of China. This will test the hypothesis stated earlier. In order to expand the number of research subjects, the research can be done by mailing the questionnaires to the local schools as well, instead of relying purely on field research. In this case, the questions should be chosen carefully to avoid any doubts or confusion.

The study itself is an evaluation of bilingual education programs. However, it could be more beneficial to studies in other aspects of bilingual education programs, such as language use, language attitudes, and so on. This evaluation model identifies CALP supportive and non-supportive programs. The two types of programs can be compared in terms of exam results, graduation rates, language use, and language attitudes. The derived results could reveal how 'CALP supportive' programs influence actual students' learning activities and achievement. The research associated with sociolinguistics may find differences in the students' language use and language attitudes between CALP supportive and non-supportive programs. It
may also be a boost to the retention of minority languages through bilingual education programs.
BIBLIOGRAPHY


[Cai, Rongnan. 2003. Overview of Dehong Dai school education development. 50 years of new Dehong Dai society, ed. by Dehong Prefecture CPPCC Culture and History Commission, 75-83. Kunming: Yunnan Nationalities...


Institute of Linguistics.
Wendell, Margaret M. 1982. Bootstrap literature: Preliterate societies do it
[Yunnan Minority Language Commission (ed.) 2001. Modern research studies of
Yunnan minority languages. Kunming: Yunnan Nationalities Publishing
House.] 云南省少数民族语言工作委员会编：《云南民族语言文字现状调查研
究》，云南民族出版社 2001 年版。
Zhou, Minglang. 2001. The Politics of bilingual education and educational levels in
ethnic minority communities in China. International Journal of Bilingual
inequality in practice. Language policy in the People's Republic of China:
Theory and practice since 1949, ed. by Minglang Zhou, 71-95.
vernacular writing systems. Language policy in the People's Republic of
APPENDIX 1

OBSERVATION SHEET

Day:______ Class:______ Observer's name:______________

1. Teacher L1 _____% Chinese _____%
2. Students with teacher L1 _____% Chinese _____%
3. Students with children L1 _____% Chinese _____%
4. (outside the class) Teacher with other teachers L1 _____% Chinese _____%
5. Textbooks L1 _____% Chinese _____%
6. Exercise books L1 _____% Chinese _____%
7. Classroom posters and displayed works L1 _____% Chinese _____%
8. Other findings
APPENDIX 2

QUESTIONNAIRES (问卷)

你好。我的名字是御堂丸刚。我们的工作是与泰国西北大学（清迈）研究少数民族语言。我们想知道更多有关在中国少数民族之间的语言教育系统。今天我们希望你帮助我们。这些问题并不困难：问题是你自己和你的学生们的语言学习。你不必害怕。根据你的想法来回答。如果有一些你感到非常不方便回答的问题，那好，你没有必要回答。这将需要约 30-45 分钟，但如果你有什么其它事情要做的话，也没关系。你可以帮助我们吗？（是/否）

1. 您贵姓？
2. 你多大年纪？
3. 你的学历是什么？
4. 你在哪里出生（区和省）？
5. 你在哪里长大的？
6. 你的母语是什么？
7. 你能不能讲其它语言？
   a) （如果有的话）有什么语言？
8. 所有的语言中，哪一种你说的最好？
   a) ……第二个最好的？
   b) ……第三个最好的？
9. 什么语言你既会读也会写？
10. 你教书多久了？
11. 你在学校教（过）什么科目？
12. 你教（过）几年级？
13. 你的班级有少数民族学生吗？
   a) （如果有的话）他们是什么族的？
14. 你有多少个少数民族学生？［几乎所有的、一半以上、大约一半、不到一半、或几乎一点］
15. 少数民族学生说什么语言？
a) （两种以上）所有语言中，少数民族学生在家里说哪一种语言（或说最好）？

16. 其他学生能讲少数民族语言吗？

在课堂

17. 上课的时候，你用什么语言？

   a) （两个以上）每一种语言你用多长时间？[几乎所有的时间、一半以上的、其中大约一半、不到一半、或几乎一点]

18. （如果你教两个以上的年级）你会根据学生的年级使用不同的语言吗？

   a) （如果有的话）有什么不同呢？

19. 学生用什么语言更感兴趣学习？[用汉语、用少数民族语言、用两种、或不知道]

20. （如果你教两个以上的年级）根据学生的年级使用不同的语言更感兴趣学习吗？

   a) （如果有的话）有什么不同呢？

21. 你认为在课堂上应该用什么语言吗？[用汉语、用少数民族语言、用两种语言、或其它]

22. 学生允许在课堂上使用少数民族语言吗？

23. 学生在课堂上实际使用少数民族语言吗？

24. 如果有一个学生用少数民族语言问你一个问题，你会用什么语言回答？[用汉语、用少数民族语言、用两种语言、或其它]

25. （当学生入学前没有足够的汉语知识时）你认为学生应该受到一些特殊照顾比如用少数民族语言上一些课吗？

   a) （如果有的话）你认为多久学生应该有这样的照顾用少数民族语言？

26. 你实际上给了学生多久的照顾？

外课堂

27. 谁把你的班级和学校评价？（学生、教师、督导、资助者等）

28. 课程的什么的部分被评价？

29. 这些书籍多大程度上帮助学生用两种语言学习（或使用少数民族语言作为支持）？[极大帮助，一些帮助，几乎一点，根本没有，或妨碍]

   a) 怎么做？

30. 在村（或镇）里的公共图书馆或学校图书馆里，有多少书籍供给继续学习？

   a) 它们是用什么语言编写的？
31. 这些书籍多大程度上帮助学生用两种语言学习（或使用少数民族语言作为支持）？［极大帮助，一些帮助，几乎一点，根本没有，或妨害］
   a) 为什么？
32. 你建议学生阅读都少数民族语言的书籍还是汉语的书籍吗？
   a) （如果有的话）请你举例你建议的书籍。
33. 你期望学生在他们日常的生活中使用多少少数民族语言和汉语？［只有汉语、大多是汉语、大约一半、大部分的少数民族语言、或只有少数民族语言］
34. 用少数民族语言学习有哪些益处（或好处）？
35. 用汉语学习有哪些益处？
36. 你在你的班级用什么教科书？
   a) 它们是用什么语言编写的？［只有汉语、大多是汉语、大约一半、大部分的少数民族语言、或只有少数民族语言］
37. 教科书多大程度上帮助学生用两种语言学习（或使用少数民族语言作为支持）？［极大帮助，一些帮助，几乎一点，根本没有，或妨害］
   a) 为什么？
38. 是否有任何其他教材帮助学生学习？（电视，电台等）
   a) 他们提供什么语言的？［只有汉语、大多是汉语、大约一半、大部分的少数民族语言、或只有少数民族语言］
39. 谁对课程内容、在课堂上使用的语言、教科书等做决定？
40. 他们对教学语言怎么说？［正面建议使用两种语言，允许使用两种语言，不提，建议只使用一种语言，强烈建议使用一种语言，或其它］
41. 他们说多久学生应该用两种语言学习（或使用少数民族语言作为支持）？
42. 课程多大程度上帮助学生用两种语言学习（或使用少数民族语言作为支持）？［极大帮助，一些帮助，几乎一点，根本没有，或妨害］
43. 既然你工作在学校，为老师安排的培训有什么样的？（什么时候？多久？谁安排？）
44. 培训对教学语言有什么建议？［正面建议使用两种语言，允许使用两种语言，不提，建议只使用一种语言，强烈建议使用一种语言，或其它］
45. 他们说多久学生应该用两种语言学习（或使用少数民族语言作为支持）？
46. 你有什么专家（教授、政府担当官等）的建议吗？
   a) （如果有的话）谁为你提供专业建议？他们如何支持？
47. 专家对教学语言怎么说？［正面建议使用两种语言，允许使用两种语言，不提，建议只使用一种语言，强烈建议使用一种语言，或其它］ 

48. 他们说多久学生应该用两种语言学习（或使用少数民族语言作为支持）？ 

49. 你有什么机构（政府部门，大学，出版社等）的支持吗？ 
   a) （如果有的话）它们是什么？ 

50. 那些机构多大程度上帮助学生用两种语言学习（或使用少数民族语言作为支持）？［极大帮助，一些帮助，几乎一点，根本没有，或妨害］ 
   a) 为什么？ 

51. 你知不知道一些关于教学语言的政府政策？ 
   a) （如果有的话）他们对教学语言怎么说？［正面建议使用两种语言，允许使用两种语言，不提，建议只使用一种语言，强烈建议使用一种语言，或其它］ 
   b) 他们说多久学生应该用两种语言学习（或使用少数民族语言作为支持）？ 

52. 你的学校关于教学语言的政策怎么说？［正面建议使用两种语言，允许使用两种语言，不提，建议只使用一种语言，强烈建议使用一种语言，或其它］ 

53. 你们说多久学生应该用两种语言学习（或使用少数民族语言作为支持）？
Hello. My name is Tsuyoshi Midomaru. We work with Payap University in Chiang Mai studying minority languages. We want to know more about the language education system of different Chinese ethnic minorities. We would like you to help us today. These questions are not difficult; they are questions about yourself and your students’ language learning. You do not need to be afraid. You can answer according to what you think. If there is a question that you don’t feel comfortable answering, that’s OK, you do not have to answer. It will take about 30-45 minutes, but if something comes up, do not feel like you have to stay. Is this something you could help us with? (Yes/No)

1. What is your name?
2. How old are you?
3. Up to what level of education did you complete?
4. Where were you born (district and province)?
5. Where did you grow up?
6. What language did you speak first?
7. Can you speak any other languages?
   a) (if yes) What languages?
8. Of all languages, which language do you speak best?
   a) …Second best?
   b) …Third best?
9. What languages can you read and write?
10. How long have you been teaching in the school?
11. What subjects do you teach (or have you taught) in the school?
12. Which grades do you teach (or have you taught)?
13. Do you have any ethnic minority students in your class?
   
a) (if yes) Which ethnic minority groups do they come from?

14. How many minority students are there? [almost all, more than half, about half, less than half, or almost nobody]

15. What languages do the minority students speak?
   
a) (if more than two) Of all languages, which language do the minority students speak at home (or best)?

16. Can other students speak the minority language(s)?

In class

17. When you teach, what languages do you use?
   
a) (if more than two) How much do you use each language? [almost all the time, more than half, about half, less than half, or only a little]

18. (if you teach more than two grades) Do you use the languages in different ways according to the students’ grades?
   
a) (if yes) How different?

19. In what languages are the students interested in studying?

20. Is it different according to the students' grades?
   
a) (if yes) How different?

21. What languages do you think should be used in class? [Chinese, a minority language, both languages, or others]

22. Are the students allowed to use minority languages in class?

23. Do the students actually use minority languages in class?

24. If the students ask you a question in a minority language, in what language do you respond? [Chinese, a minority language, both languages, or others]

25. (When the students come to school without enough Chinese experiences) Do you think the students should have any special support by using minority languages?
   
a) (if yes) How long do you think the students should have such a support in minority languages?
26. How long do you actually give the students special support in minority languages?

Outside the class

27. Who (students, teachers, supervisors, funders, etc) has evaluated your class and school?

28. What parts of the class have been evaluated?

29. Have there been any evaluation is performed concerning teaching languages (what languages are used in class)?
   a) How?

30. In public or school library in the village (or town), how many books are there for further studies?
   a) In what languages are they written? [only Chinese, mostly Chinese, about half, mostly minority languages, or only minority languages]

31. How much do the books help the students learning in both languages (or using minority languages as support)? [very much, positive, a little, not at all, or obstructive]
   a) Why do you think so?

32. Do you suggest the students read books in both languages (minority languages and Chinese)?
   a) (if yes) Could you name some of the books you have recommended?

33. How much do you expect the students to use minority languages and Chinese in their daily life? [only Chinese, mostly Chinese, about half, mostly minority languages, or only minority languages]

34. Are there any benefits (or motivations) of studying in minority languages?

35. Are there any benefits of studying in Chinese?

Materials, curriculum, and other support

36. What textbooks do you use in your classes?
   a) In what languages are they written? [only Chinese, mostly Chinese, about half, mostly minority languages, or only minority languages]
37. How much do the textbooks help the students learning in both languages (or using minority languages as support)? [very much, positive, a little, not at all, or obstructive]
   a) Why do you think so?

38. Are there any other materials that help students study? (TV, radio, and so on)
   a) In what languages are they provided? [only Chinese, mostly Chinese, about half, mostly minority languages, or only minority languages]

39. Who makes decisions on curriculum, languages used in class, textbooks, and so on?

40. What do they say about teaching languages? [positively suggest using both languages, allow using both languages, do not mention, suggest using only one language, strongly command using only one language, or others]

41. How long do they say the students should learn in both languages (or using minority languages as support)?

42. How much does the curriculum help the students learning in both languages (or using minority languages as support)? [very much, positive, a little, not at all, or obstructive]

43. Since you have worked in the school, what kind of training was arranged for the teachers? (When? How long? Who arranged?)

44. What did the training say about teaching languages? [positively suggest using both languages, allow using both languages, do not mention, suggest using only one language, strongly command using only one language, or others]

45. What did they say about how long the students should study in both languages (or using minority language as support)?

46. Do you have any professional support (professors, government officers)?
   a) (if yes) Who provides you with the professional support? How do they support?

47. What do the professionals say about teaching languages? [positively suggest using both languages, allow using both languages, do not mention, suggest using only one language, strongly command using only one language, or others]

48. How long do they say the students should learn in both languages (or using minority language as support)?
49. Do you have any institutions (government offices, universities, publishers, etc) to support?
   a) (if yes) What are they?

50. How much do the institutions help the students learning in both languages (or using minority languages as support)? [very much, positive, a little, not at all, or obstructive]
   a) Why do you think so?

51. Do you know any government policies talking about teaching languages?
   a) (if yes) What do they say about teaching languages? [positively suggest using both languages, allow using both languages, do not mention, suggest using only one language, strongly command using only one language, or others]
   b) How long do they say the students should learn in both languages (or using minority language as support)?

52. What do the school policies say about teaching languages? [positively suggest using both languages, allow using both languages, do not mention, suggest using only one language, strongly command using only one language, or others]

53. How long do they say the students should learn in both languages (or using minority language as support)?
APPENDIX 4

EVALUATION CHECK SHEET
<table>
<thead>
<tr>
<th>Subsystem</th>
<th>Policy and Planning</th>
<th>Others</th>
<th>Ideological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum development and program development</td>
<td>Clearly stated on paper</td>
<td>Tolerative (2)</td>
<td>Clearly stated on paper</td>
</tr>
<tr>
<td>Institution building/organizational</td>
<td>Not written on paper</td>
<td>Non-discriminative (3)</td>
<td>Implied on paper</td>
</tr>
<tr>
<td>Policy and planning</td>
<td>Clearly stated on paper</td>
<td>Promotive (5)</td>
<td>Promotive (5)</td>
</tr>
<tr>
<td>Ideological support</td>
<td>Positive attitude (2)</td>
<td>Non-discriminative (5)</td>
<td>Implied on paper</td>
</tr>
</tbody>
</table>

**Questions:**
1. Do the government policies state the use of two languages for instruction? (2) Policy and Planning subsystem
2. Do the school policies state the use of two languages for instruction? (if it is different)
3. How long do the teachers think the students should have any special support by using both languages of L1 and Chinese?
4. Others
5. When languages do teachers think should be used in class?
6. What languages do teachers think should be used only in class?
<table>
<thead>
<tr>
<th>Subsystem/checklist</th>
<th>Consistency of how long two languages should be used throughout the whole system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>No</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>None</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>1-2 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>3-5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsystem/checklist</th>
<th>How long do the school policies support the use of two languages in education? (if different)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>No</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>None</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>1-2 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>3-5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsystem/checklist</th>
<th>How long do the government policies support the use of two languages in education?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>No</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>None</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>1-2 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
<tr>
<td>3-5 years</td>
<td>Mostly consistent, but slightly different between subsystems and actors.</td>
</tr>
</tbody>
</table>

3. Does the program have all the seven subsystems?

Yes
<p>| 1. | Are the students allowed to use both languages in class? | Yes. They can use both languages. | Yes. Both languages are used depending on the context. | Prohibitive (1) |
| 2. | Do the teachers encourage the students to read books in both languages? | Yes, but they are expected to use one language more than the other. | No, because students prefer learning in one language. | Tolerative (2) |
| 3. | Do the teachers find any benefits for the students' CALP development from learning in both languages? | Yes, but they are expected to use one language more than the other. | No, because learning in two languages causes more problems. | Non-discriminative (3) |
| 4. | In which languages are the students interested in learning and how does it change in the long term? | More interest in one language than the other. | More interest in one language changes to more interest in the other. | Promotive (5) |
| 5. | Professional support subsystem | | | |</p>
<table>
<thead>
<tr>
<th>Subsystem/checklist</th>
<th>Observation</th>
<th>Not at all</th>
<th>A little</th>
<th>Positive</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language?</td>
<td>None</td>
<td>(long term)</td>
<td>Less than 1 year / not written</td>
<td>1-2 years / not written</td>
<td>More than 5 years (whole school)</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>(negative)</td>
<td>more than the other</td>
<td>Chinese, but one is only used</td>
<td>More than 5 years (whole school)</td>
</tr>
<tr>
<td></td>
<td>Only L1 or only Chinese</td>
<td>Both languages can be used, but one is only used for specific issues / not mentioned (positive)</td>
<td>Both in L1 and Chinese</td>
<td>Both in L1 and Chinese</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>(long term)</td>
<td>Less than 1 year / not written</td>
<td>1-2 years / not written</td>
<td>More than 5 years (whole school)</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>(negative)</td>
<td>more than the other</td>
<td>Chinese, but one is only used</td>
<td>More than 5 years (whole school)</td>
</tr>
<tr>
<td></td>
<td>Only L1 or only Chinese</td>
<td>Both languages can be used, but one is only used for specific issues / not mentioned (positive)</td>
<td>Both in L1 and Chinese</td>
<td>Both in L1 and Chinese</td>
<td></td>
</tr>
</tbody>
</table>

1. What languages do the teachers use for instruction?
2. How long do the professionals tell the teachers to use both languages of L1 and Chinese?
3. How long does the curriculum support using both languages for?
4. How much do the teachers think the curriculum helps the students to learn in both languages?
<table>
<thead>
<tr>
<th>1. In what languages are the textbooks provided?</th>
<th>Neither</th>
<th>Some</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In what languages are the other class materials written?</td>
<td>Neither</td>
<td>Some</td>
<td>Very much</td>
</tr>
<tr>
<td>3. Until which grade are the bilingual textbooks provided?</td>
<td>Until Grade 6</td>
<td>Until Grade 6</td>
<td>Until Grade 6</td>
</tr>
<tr>
<td>4. Until which grade are the other bilingual class materials provided?</td>
<td>Until Grade 6</td>
<td>Until Grade 6</td>
<td>Until Grade 6</td>
</tr>
<tr>
<td>5. How beneficial are the textbooks in helping the students in both languages according to the teachers?</td>
<td>Not at all</td>
<td>A little</td>
<td>Very much</td>
</tr>
<tr>
<td>6. Others</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. How long do the teachers give the students any special support by using both languages?

2. What languages do the students use in class?

1. What languages do the teachers use for instruction?

- (9) Teaching-learning subsystem
- (8) Orientation and training subsystem

*Promotive (5) *
*Permissive (4) *
*Non-discriminative (3) *
*Tolerative (2) *
*Only L1 or only Chinese *

Chinese

Both languages can be used when it is necessary
Both languages can be used

Less than 1 year
1-2 years
3-5 years
More than 5 years

None

Less than 1 year
1-2 years
3-5 years
More than 5 years

Both in L1 and Chinese
Both in L1 and
Both in L1 and Chinese
Both in L1 and

MA LING PYU 2010

Curriculum development and program development
Institution building/organizational Policy and planning Ideological Evaluation Post-literacy Teaching-learning Orientation/training Media and materials Professional support Mobilizational Dehong Dai program

1
3
5

<table>
<thead>
<tr>
<th>Subsystem/checklist</th>
<th>1. Post-literacy subsystem</th>
<th>2. In what languages are the textbooks in schools and public libraries written?</th>
<th>3. In what languages are the materials written/made? (if there are)</th>
<th>4. Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Chinese Only in L1 and Chinese, but one is more than the other.</td>
<td>Chinese Both in L1 and Chinese.</td>
<td>Both in L1 and Chinese, but one has more than the other.</td>
<td>Non-discriminative (3)</td>
</tr>
<tr>
<td>2.</td>
<td>Chinese Only in L1 or only Chinese. These are very available. The teachers think is a concern.</td>
<td>Both in L1 and Chinese, but one is only available.</td>
<td>Both in L1 and Chinese, but one has more than the other.</td>
<td>Promotive (5)</td>
</tr>
<tr>
<td>3.</td>
<td>Not performed. (but the teachers think it is a concern)</td>
<td>Not performed. (but some evaluators are concerned)</td>
<td>Not performed. (but some evaluators are concerned)</td>
<td>Tolerative (2)</td>
</tr>
<tr>
<td>3. Others</td>
<td>Subsystem/checklist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibitive (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerative (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-discriminative (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissive (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotive (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RESUME

Name: Tsuyoshi Midomaru

Date of Birth: 26 August 1980

Place of Birth: Hiroshima, Japan

Institutions Attended:

2005-2010  Payap University, Chiang Mai, Thailand
           M.A. in Linguistics
2003-2005  Ritsumeikan University, Kyoto, Japan
           M.A. in International Relations
1999-2003  Hiroshima University, Hiroshima, Japan
           B.A. in Integrated of Arts and Science

Academic Papers Presented:


Contact Details:

Foreign Affairs Office
Shanghai Institute of Foreign Trade, Shanghai, China
Tel: 86-13817375430, Email: mido@shift.edu.cn