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Deaf Education in Early Childhood:

Bilingual approaches in Mainland China from 1996-2004

by

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A Thesis submitted as a requirement for
The Degree of Doctor of Education
University of Durham, U.K.
School of Education

January 2009

Abstract

This study investigates Sign Bilingual Education experimental projects introduced by Non Governmental Organizations for deaf children in their early childhood in six sites in five cities in Mainland China from 1996 to 2004. It focuses on the ways in which those involved – above all those in the NGOs – discussed and debated the principles and issues on the one hand and the practices and intended outcomes on the other.

Three guiding research questions were formulated after the study of existing related literature: 1) What were the perspectives and claims of the advocators and the opponents of Chinese Sign Bilingual Education (SBE)? 2) What was the reality of the models of SBE seen through the eyes of those responsible? 3) What were the characteristics of the models?

Ethnographic methods were used in all six experimental sites including interviews, classrooms observations, and archive studies, during a period from autumn 2003 to summer 2008. Data were analysed using a continuous question and comparison method to establish themes and issues which were common to the many participants and different experiments and sites in this China Case.

The findings are presented in a taxonomy format on the basis of what the Sign Bilingual Education insiders perceived and presented. This taxonomy covers 1) the aims, the perspectives, the claims and the common propositions of Chinese Sign Bilingual Education organizers; 2) the characteristics of Chinese Sign Bilingual Education models; 3) the common claims of successful outcomes of the Sign Bilingual Education models; 4) the two types of Sign Bilingual Education models: Two-plus-two model for rural area and Two-plus-four model for urban area.

The data suggest Sign Bilingual Education models in mainland China in the period under consideration, are rights-oriented models, developmental models, and tools for the reform of deaf education. A 'Two-plus-four model' has been developed which is referred to as a strong bilingual/ weak bicultural Sign Bilingual Education model.

Acknowledgements

In reflecting upon this study, I have come to realize that, though I am the researcher, it would not have been possible without the support, help and encouragement from many people. I take the opportunity to express my sincere and deep gratitude to those people who have made this thesis a reality.

I am indebted to the anonymous key informants in Mainland China. They are "teacher" and not "subjects and respondents" of the researcher. Their *emic* views are the main source of the data. I have to say I have learned a lot about their work, feelings, and perspectives.

Gratitude should be paid to Professor Zhang Ningsheng of Liao Ning Normal University and Professor Xu Jiacheng of the Beijing Union University. Without their help, I can not have proper field relationships. I can not enter the gates of the Sign Bilingual Education experimental sites. I can not meet the key informants. I can not read the related literature from their libraries. I can not study this China Case.

Special gratitude should be paid to Professor Michael Byram who has undertaken the pains of supervising the researcher who learns swimming through swimming and who suffered from writers' block. It was my good fortune to have

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Professor Byram as my supervisor. Professor Byram has taken a heavy workload of supervising the research. I am deeply appreciative of his inspiring and patient supervision – my messy drafts.

Thanks also go to my sons Langa and Samson who are the members of my support group.

The notion of doing a Doctor of Education at an age over forty and at the expense of losing many working hours to earn my living was due to the support from my wife, Maria Muikam. I must thank my wife for her understanding and support of my study over a long period of time. She has made innumerable sacrifices so that I might pursue my study. Without her support, this thesis would not become a reality.

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List of Abbreviations:

ADPFRC	Anhui Disabled People's Federation Rehabilitation Centre
ASL	American sign language
BE	Bilingual Education
BSL	British sign language
CJSE	Chinese Journal of Special Education
CNCD	China National Council for the Deaf
CSL	Chinese signed language
DPF	Disabled Person's Federation
DPSES	Dali Prefecture Special Education School
DT	deaf teacher
EU	European Union
HSD	Hefei School for the Deaf
HT	hearing teacher
INGO	International Non-Governmental Organization
JMSE	Journal of Modern Special Education
L1	first language
L2	second language
MCE	manually coded English
MCC	manually coded Chinese
N-CSL	natural Chinese signed language
NGO	nongovernmental organization
NATU-SL	natural signed language
NJSD	Nanjing School for the deaf

PRC   Peoples' Republic of China

SCUK   Save the Children UK

SBE   sign bilingual education

SBB   sign bilingual bicultural

SSC   sign supported Chinese

SSE   sign supported English

TC   Total communication approach for the deaf education

TJ-1-SD   Tianjin Number One School for the Deaf

TJHSRTC   Tianjin Hearing and Speech Rehabilitation Training Centre

UNESCO   United Nations Education, Scientific and Cultural Organization

UNICEF   United Nations Children's Fund

YRSDC   Yunnan Rehabilitation School for Deaf Children

Note:

i) Interviews and unpublished documentary sources are coded in the text when referenced. The decoding system is not available in this volume.

ii) The statements and phrases cited from the books, journal articles, reports and dissertation written by Chinese experts, scholars are translated into English by the writer of this thesis.

iii) The articles published in CJSE and JMSE are written in Chinese. The CJSE requires the authors to translate (by themselves) the abstract of their articles into English. Hence, I use the italic font type to indicate the direct quotation from the abstract. If some information or notion, which is not shown in the abstract, deserves quotation, I shall do the translation from Chinese into English. In this situation, I use the normal font.

Glossary of Terms

For the purpose of building a common understanding in the present study, the following terms are defined as follows:

ASL: the major language used by deaf people in North America. ASL is an independent, fully developed language. It has its own grammar. (Fromkin, et al, 2001:18).

Code switching: In this study, it is an outcome of language contact. It is a switch from one language to another without integration into the first language (Ann, 2001:57). It is a situation involving contact between a sign language and a spoken language (not a situation involving contact between two sign languages) (Lucas, 2006: 355). In SBE settings, the hearing adults seem to move between Signed Supported English / Signed Supported Chinese and Spoken English/ spoken Hanyu quite frequently in the SBE classes (Knight & Swanwick, 2002:72). It is defined as occurring across the borders of a sentence (Ann, 2001:57).

Coding mixing: It is also an outcome of language contact. It is defined as occurring within a sentence (Lucas & Valli, 1992:34).

＜CSL＞ It is a dictionary of Grammatical Sign Language in Mainland China

Deaf and deaf: The primary users of "primary sign languages" (see the explanation in next page) are what is called Deaf-where the capital denotes participation in Deaf culture, not degree of hearing loss (Stokoe, 1987;34). In other words, the use of "Deaf" with a capital "D" will be used to refer to persons with a hearing loss who are members of a community sharing a common sign language, a common cultural heritage, common life experiences and a common sense of identity. The use of "deaf" with a lower case "d" will be use to refer to those persons who identify themselves or are identified as having a hearing loss.)   (Brennan and Brien, 2000).

Grammatical signed language: It is Signed supported Chinese. It is an *emic* term used by Chinese informants.

Hanyu: It is the majority language of Han people. It is a synonym of Mandarin.

Hearing Disabled, Hard of Hearing and Deaf:
They are three distinct terms in PRC. Hard of Hearing and Deaf are the subset of Hearing Disabled before May 2006.

Hearing impaired persons is the synonym of hearing disabled persons (people) in PRC.

Natural sign language: The major language used by deaf people. Natural Sign Language (NATU-SL) is an independent, true language. It has its own a lexicon and grammar. It is a synonym of Primary sign languages.

Primary sign languages: It is a terms suggested by Kendon, an anthropologist. Primary sign languages are languages used as the first, main, or only language by members of a social group (Stokoe,1987:32)

Signed English: It is a kind of manually coded English (Baker-Shenk: 1987:197). It is a manual English system developed by a team led by Bornstein, H., Saulnier, K., Hamilton,L. and Miller, R. at Gallaudet College in the early 1970s. It is made up of two kinds of signs: sign words and sign markers. Each sign word represents a separate entry in a standard English dictionary. In 1987, there were 3100 sign words and 14 sign markers (Bornstein, 1987:204). The syntax and semantics of Signed English are approximately the same as that of ordinary English (Fromkin, 1992:17; Fromkin, et al, 2001:18).

Signed language: It is a hyperonomy. It includes natural sign language used by deaf community and grammatical sign language.

Sign supported English: is described as spoken English is supported by signs in context borrowed from the lexicon of BSL (Knight & Swanwick,2002:72) it can be categorised as code-mixing.

Preface

0.1   Personal statement

This case study from China originates from my curiosity and from my experience. In the early 1990s, I stayed in North America for several years. There, I had chance to see how educators helped special education needs students. I read my first book related to special education and participated in activities for special education organized by local school boards and community. I appreciated what the educators have done very much.

In the late 1990s, I met some scholars and Special Education Section officials from mainland China in Hong Kong.   The connection with them helped me make more friends with headmasters of special schools and more scholars in the field of special education in PRC. I had chance to visit many special schools in mainland. Without language barrier, I could get along with friends in mainland naturally and easily.

In the early 2000s, I started my Ed D program. The course "Intercultural Studies" that I took for the Ed D program was very interesting.   I learnt about bilingual education, second language learning theories, sign bilingual education and Baker's model, etc with interest.   As a consequence of all this, in Feb 2003,

I selected my study on deaf education in PRC for my thesis. I intended to explore the relation between mode of communication and academic achievement in deaf education At that time, I knew the first Sign Bilingual experimental program conducted in Nanjing in 1996 because of my review of literature, but I did not know whether any Sign Bilingual experimental program existed or not in early 2000s.

In discussions with my supervisor I realised that my existing expertise in quantitative research and statistical measurement was not fully appropriate to the task since it was necessary first to understand the situation, to identify crucial variables before any research focusing on cause and effect could be carried out. The Ed D is a course of study in which I hoped to learn new ways of doing research even though this meant a change from my previous expertise as a teacher of mathematics and a background in science and statistics. The thesis is therefore both an account of my research methods, data and findings but also of my own learning in ethnographic methods; it tells the story of my research as well as presenting my research in the conventional way.

One aspect of thesis writing was relatively new to me due to my previous work as a mathematician: the process of reviewing and analysing the literature. It

became clear that the first function is to provide historical background and contemporary context to the present study. Second, the function is to obtain ideas, insights, perspectives, disagreements, models, theories, hypothesis (theoretical underpinnings) and debate (key event) from the literature. The third function is to scrutinize previous research studies on Chinese SBE to find what have been done before. Fourth, it helps to refine research questions. Fifth, methods can be identified through the review such as typology and taxonomy suggesting a way to classify and to analyze a lot of data. Sixth, sometimes literature can be used as secondary sources of data as Strauss & Corbin (1990:52; 1998:51) state.

It was an ongoing feature. I updated my literature review every six months. In December of 2008, I conducted my last literature review. Ten new texts were available in December of 2008. Also in that month, a key research study appeared. The research study by a scholar was published just before the submission of my thesis. As a result, I had to rewrite the subsection of research studies of Chinese SBE of this chapter. Analyzing the literature was cyclical: the data collection /data analysis and the research questions are interrelated and interacted on each other.

0.2   Delimitation and Limitation of the study

In retrospect I realised that one of my weaknesses was that I do not have a command of sign language and therefore my access to deaf people – teachers for example – meant that there are limitations to my findings. Ideally I would have liked to have an interpreter but this was not possible for practical reasons – there are few interpreters available and this would have been a major extra cost even had I found one – but I did try to converse with deaf teachers whenever possible through writing or with the informal help of people who on some occasions could interpret for me.

Delimitation

Before presenting this study, it is better to do some delimitation. First, this study aims to analyse the SBE rather than to evaluate it. It does not make sense to evaluate a phenomenon before the adequate understanding of that event. Second, this study does not presume that western theories or models are applicable. No hypothesis can be tested in the current situation. I do study some SBE models from the literature, but, SBE models from western countries are only tools for analysis in this study. The SBE models may have been modified due to the specific Chinese context. Third, this study is not an

advocate of SBE. Neither the proponents nor the opponents of SBE may find political propaganda in the study. Fourth, this study is not intended to cover every aspect of SBE in China. I would like to but I cannot do that. It depends on the quality and quantity of data collected. For instance, I tried to collect data about the outcomes of SBE experimental classes but the data are not available in Tianjin class and Dali class. Fifth, this study aims to study the SBE from NGOs' perspectives rather than from Deaf people's perspectives.

The stakeholders of the SBE experimental projects are the administrators of NGOs and the Chinese experts invited by the NGOs as consultants of these projects. Most but not all of them are hearing people but deaf scholars' publications on relevant issues are included alongside those of hearing people. I also scrutinized diaries and articles written by the Liu Ming (Hefei deaf teacher), Zhou Shufen (Dali deaf teacher), Liao Yanping, (Kunming deaf teacher), Shili (deaf administrator working for Save the Children, Hefei office) and also Jiang Yun and Mei Fusheng (deaf consultants). I also interviewed the deaf teachers working for these SBE experimental projects by "pencil and paper talks" and using informal sign interpreters whenever I had chance. It should be treated with caution that my collected data from Deaf people

perspectives are much less rich. (I hold the view that in this China case, NGOs' perspectives not one hundred percent equal to Deaf people perspectives though their perspectives may be close as will be explained in more detail in Chapter 3). I hope other researchers may conduct a study of SBE in PRC from Deaf perspective in the future.

Limitation

The first limitation is the heterogeneous grade level of the deaf students. The deaf students from five experimental classes were pre-schoolers but the deaf students of Dali were school grade one students. This is because Dali is a minority (Bai) region and does not have kindergartens and preschoolers. Their youngest students are school Grade One students.

The second limitation is the heterogeneous types of data in this study. Some are descriptive research data based on contemporary observations etc (Hefei city, Tianjin city and Kunming city). The analysis of the Nanjing SBE experimental class was a historical research in nature. I could not meet the teachers, the students when I visited there in 2003. Some teachers and

students had gone. I could only ask the deputy principal - Madam Zhu and a teacher about the past.

The periods of the experiments were different. The duration of the pre-schoolers-SBE experimental class in Nanjing was March 1996 to 1998. Instead of starting a new experimental class for the pre-schoolers every year, Nanjing school for the deaf arranged this cohort of students who joined the SBE experiment in 1996, promoted to school Grade One, then Grade Two and then Grade Three, by adopting SBE methods again and again the experiment was completed in 1997. I met the cohort of students when I visited Nanjing in September, 2003. The duration of the grade-one-SBE experimental class in Dali was Oct., 2002 to Dec., 2004. Wherever it was practically possible to do, I would select a) the recent classes; b) all the classes starting at the comparatively closer time; c) all descriptive cases.

The third limitation is the heterogeneous methods of data collection. In Kunming city and Tianjin city, I conducted the study by reading the archives, by classroom observation, by interviewing the informants and by semi-structured group interviews to understand their perspectives and present situation. I tried to collect data from many different sources and to scrutinize

data by triangulation. However, in some experimental projects, I could not triangulate the collected data due to the problem of availability. For example, in Nanjing, I relied on archives and artifact mainly but when I visited other 5 sites in 2003-2004, the experiments are going on. I could observe the experimental classes.

0.3 Background and Context of study

This study was started in Feb., 2003 with an open design. The actual design of this study was shaped during the process of study. Originally, I sketched my study as follows:

Working Title (Research Question): Does the mode of communication affect achievement in literacy and numeracy in Deaf Education?

Sub questions: Is the level of literacy and numeracy of Primary-three deaf students satisfied in the:

a) Schools for the deaf that adopt oral approach;

b) Schools for the deaf that adopt total communication approach;

c) mainstreamed schools;

d) Sign Bilingual experimental programmes (if any).

According to my plan, 15 schools for the deaf and 15 mainstreamed schools for the deaf would be short-listed. Questionnaires would be mailed to the schools.

After I met Chinese special education experts, educators and scholars in Beijing, People's Republic of China (PRC) in September, 2003, I established a pleasant form of rapport with them. Quickly, I was invited to attend *the First Bilingual Education Research Meeting* in PRC in 2003. Knowing that I had good chance to negotiate *entry* difficulties, I revised my study with modified research questions which will be introduced later. I modified my study partly because the mode of communication is a key issue in the field of deaf education and the sign bilingual education is a current and critical approach and partly because practically it is difficult - traveling 23,000 kilometers by plane - but still possible to visit the sign bilingual experimental classes in many cities in PRC to proceed this study.

0.4 The Aims of the study

The aims of this China Case study are to understand the education for deaf people in PRC in the period in question with particular reference to Sign Bilingual Education (SBE). The study is to produce a description and analysis of SBE and its evolution in the PRC from 1996 to 2004 because this has not yet been done at the

onset of this present study (2003) and the study will be a useful contribution to our knowledge of education for deaf people in PRC.

The main focus is on the ways in which those involved and responsible for SBE discussed the principles and issues on the one hand and on the other hand conceptualised the methods and intended outcomes on the other. The main focus is on the people responsible for projects rather than the teachers and pupils involved on a daily basis. As already said, the limitations of the thesis include in particular that the perspectives of deaf people in the projects could not be investigated in detail, although the views of deaf people involved in the general debate are included.

The findings of the study will provide the basis for a better understanding of the aims, the perspectives and claims, the types, and the characteristics of the Chinese SBE. Are there any common propositions among the SBE organizers? To what extent the Chinese SBE are similar to the north and west European models? I will try to understand how the local people feel and think and go to their sites in search of reality.

These aims will be met by analyzing the European SBE models in the literature, and by carrying out a descriptive empirical research which is structured by research questions.

0.5   Research Questions

In the initial stage of the study, the research questions were stated broadly. They were adumbrated questions as follows:

1) What is happening after the bilingual experimental classes for deaf people were set up in PRC from 1996 to 2004?

2) What kind of SBE is in PRC?

3) What are the outcomes of the SBE models?

Through reviewing the literature continuously and working in the field and based on the results from initial data collection, I have identified what is to be described and have selected available sources of information and have obtained pertinent data from sources deemed to be reliable gradually. Using this approach, research questions are extended and modified and deleted at the end of Chapter Two.

Chapter One   Introduction

1.1   Key issue of Deaf Education in Mainland China: the mode of communication

Qiyin school- the first School for the deaf in China was established in Peng Lai county, Shandong Province in 1887 by an American Pastor C.R. Mills and his wife Annetta Mills. Five years later, the Blessed Virgin Mary School for the deaf (BVMSD) was established in 1892 in Shanghai by French Sisters. "First-step Text for Deafness", the text-book for the deaf children written by Mrs. Mills in 1907 reveals that deaf children were taught to read and write mainly by oral approach, using "tools" such as Latin alphabets, the phonetic symbol system designed by Alexander Melville Bell, visible speech symbols, and were supplemented by "tools" such as pictures, drawing and Lyon's finger spelling, (Pei, 1996: 208; Dai & Song, 1999:218; Zhang, 2002:269). Finger spelling method was also used by BVMSD frequently (Zhang, 2002:210; Qian, 1995:39).   Chen Da (1999:147 -149), an old student of that school, claimed that students of BVMSD in 1937 learned and used French finger spelling as a medium of instruction inside their classrooms and also as communication tools outside classrooms.   In the last decade of 19th century, there was no further development of deaf education until the successful overthrow of the Qing Dynasty and the establishment of the Republic of China in 1911. From

1914 to 1937 (the beginning of the anti-Japanese war), 23 schools for the deaf were organized. Only one of them - Peking School for the deaf - was public owned. From 1937 to 1949 (the establishment of the People's Republic of China - PRC), interestingly, 32 schools for the deaf were established, almost all of them were privately owned and 70% of them were led by deaf principals, and the mode of communication of those schools changed. Sign language systems, which prevailed over oral language system and finger spelling, became the main mode of communication (Dai & Song, 1999:219).

From 1949 to August, 1954, no change has been brought about in the situation. In the whole country, 64.71% of schools for the deaf adopted manual approach; 15.68% of schools for the deaf used both manual approach and oral approach, 7.85% of schools for the deaf stressed on lip reading but still kept the usage of Lyon's finger spelling (Ye, 1990:168). During this period Chinese educators went to Moscow and were influenced by Russian educators. This brought a disability model and oralist culture which became prevalent until the 1980s and even beyond. In 1953, Hong Xueli, a deaf Chinese oralist, was appointed as the Section head of Blind and Deaf, of Department of Education of Central Government. In August 1954, the Education Department of Central Government of

PRC held a National Representatives meeting from schools for the deaf. An oral approach was proposed as a new direction for deaf education in PRC during the meeting. Four schools for the deaf from Beijing, Shanghai and Harbin were appointed as oral education experimental classes. In 1956, a meeting was held in Beijing by the Education Department again. Representatives of the oral education experimental classes reported their works to Central Government. After learning some experience from the experimental classes, Education Department of Central Government promulgated 1) a ten-year-deaf- education system; and 2) a curriculum for the deaf students. From 1956 to 1996, the oral approach has been adopted and implemented seriously, and developed in the whole country gradually. It started the oralist era of PRC. An oralism model with distinct Chinese style emerged.

Since 1957, a lot of political unrest happened, up to 1992, when the Chinese leaders endorsed the Social Market Economy and Open-door policy in their Party Congress. Businessmen from western countries visited PRC again, and scholars went to PRC for academic activities. The Sign Bilingual Bicultural (SBB) approach for deaf education was introduced to PRC in 1995 by a Chinese nongovernmental organization (NGO) and British scholars (Callaway, 2000: 258).

In the meantime, Ying Wa Fishermen Association of Hong Kong and Chinese special education educators organized a deaf education reform experiment program in 1998. The principles of the Fishermen Association are oral method. The Fishermen Association had raised 1.6 million Hong Kong dollars to sponsor this program. Five schools for the deaf in Guangzhou, Shanghai, Beijing, Nanjing and Wuhan cities were selected as the experiment sites to improve the quality of deaf education (Li Zhong-han, 2000:8; Zhan Lei-lei, 2000:12).

Then, in spring 2007, the new curriculum for deaf people (provisional) in China has been implemented (Da, 2007:8; Wang & Zhao, 2008:4-7). There is a subtle change. The Ministry of Education of China does not require mainly the use of oral form Hanyu stipulated previously anymore. From 1993, the well known stipulation was:

> Using **Hanyu** as a medium of instruction in the classroom is a **guiding principle**; Hanyu Shouzhiyu method (Chinese Manual Alphabet finger spelling), Chinese Sign Language (CSL), and written form of Hanyu may **play supporting role** for teaching and learning based on the need of subjects teaching.
>
> (State Education Commission of China, 1993 cited in To, 2001)

From 2007, new opportunities arose to use Natural Chinese Signed Language and there was a possibility of change (Da, 2007:9; Li, 2007:37). It is one of the

main purposes of this thesis to analyse the presence of Natural Chinese Signed

Language in some new approaches to education for deaf children introduced by

NGOs in China before the change of 2007.

1.2   Significance of the study

The estimated number of deaf people varies due to different definitions of

deafness and different time. (It is notice that different Chinese scholars use

different terms of deafness. The terms may be synonym or hyponymy such as

hearing disabled children and hearing disabled students, hearing impaired persons

and people with hearing and speech impairment). It is not possible to establish the

subtle difference of these terms in the related literature because the authors do not

make sufficient references to each other's views and so I use different terms

adopted by different authors accordingly. Xu Yun (1994:165) deduces there were

seventeen million and seventy hundred thousand people with hearing and speech

impairment in PRC in the early 1990s.   Zhang Ningsheng (2002:16) estimates that

the number of hearing disabled children aged 0 to 14 is 0.3%.   Ye, Liyan (1990:1)

estimates that the number of deaf people to the total population in PRC is also

0.3% i.e. three million.   Li Huiling (1993:1) who is an official of Beijing

Education Bureau estimates there were one million and one hundred sixty

thousands hearing disabled children (age 0 to 14) in PRC. He states that the number of hearing disabled children increases by twenty to forty thousand every year. Pei Yongseng, (1995:8) a special education expert, suggests there were four hundred and forty two thousands hearing disabled children aged 0 to 6, Eight hundred and fifty two thousands hearing disabled students aged 7 to 15 and three hundred and ninety two thousands hearing disabled young adults aged 16 to 18 in PRC in 1987.

In April 2006, there was a nationwide survey of disabled people conducted by China Statistics Bureau. The sampling technique that was used in this survey is a stratified random sample. Chinese population (estimated 1309 million at April 2006) was divided into 734 counties, 2980 villages and then simple random samples were drawn from each of the subpopulation. The survey lasted for two months. The sample size was two million five hundred and thirty thousands persons. The result of the survey shows there are eighty two million nine hundred and sixty thousands disabled persons and twenty million hearing impaired persons in mainland China (China Disabled Person Association, 2006a:5; Ibid, 2006b).

Therefore even a few findings from this study will benefit hundred thousand of hearing disabled students. New Chinese model(s) of SBE will be proposed as an

alternative method that caters for the special education needs of the sub-groups of disabled students in PRC in the future.

Furthermore, it is evident from these statistics and from the changes which will be described in more detail in later chapters that developments in China are very rapid and are "previously inaccessible to investigation", what Yin (2003:42) calls 'a revelatory case'. China offers a case which is particularly interesting as the analysis of change – here with the focus on the impact of NGOs – can be of interest to the wider academic public and thereby contribute to a body of knowledge. For it may be possible to discover Chinese model(s) of Sign Bilingual Education that differs from European SBE models after the study of all the SBE experimental classes in PRC operating in the period of September, 1996 to August, 2004. In addition, the Sign Bilingual Education is "claimed to produce superior language, academic, and social growth in deaf children… however, proponents have failed to provide any empirical evidence…" (Marschark and Hauser, 2008:14). It may be possible to learn more about SBE from this present study.

1.3 Definition of terms

A.   Deaf and deaf

The use of "Deaf" with a capital "D" will be used to refer to persons with a hearing loss who are members of a community sharing a common sign language, a common cultural heritage, common life experiences and a common sense of identity. The use of "deaf" with a lower case "d" will be use to refer to those persons who identify themselves or are identified as having a hearing loss.) (Brennan & Brien, 2000) (Refer to Glossary).

B.   *deaf* and 'Hard of hearing'

'Hard of hearing' refer to those persons whose degree of hearing loss is greater than 40dB and smaller than 70dB before May, 2006.

Classification	Grade	Hearing Loss
Deaf	1st grade *deaf*	> 91 dB
	2nd grade *deaf*	71-90 dB
Hard of Hearing	1st grade hard of hearing	56-70 dB
	2nd grade hard of hearing	41-55 dB

Source: Office of the Nationwide Sampling Survey for the Disabled (1987)

Table 1.1 China National Standard of Hearing Disabled

This table shows Hearing Disabled, Hard of Hearing and Deaf are three distinct terms in PRC. Hard of Hearing and Deaf are the subset of Hearing Disabled before May 2006. Hereafter in this paper, I will use the same terms

defined by PRC State Council (*Zhonghua Renmin Gongheguo Guowuyuan*). (PRC State Council is the administrative authority of PRC. There are Ministries and Commissions in the Council such as Ministry of Education, Ministry of Foreign Affairs, National Population and Family Planning Commission, etc. There are also Bureaus and Administrations under the State Council, such as National Statistics Bureau, State Forestry Administration, etc. Today, it is chaired by Premier Wen Jia-bao.)

One should note that "Hard of Hearing" has just been diminished due to the change of definition in May 2006.

Classification	Grade	Hearing Loss
Deaf	1st grade *deaf*	> 91 dB
	2nd grade *deaf*	81-90 dB
Deaf	3rd grade *deaf*	61-80 dB
	4th grade *deaf*	41-60 dB

Source: Office of the Nationwide Sampling Survey for the Disabled (2006)

Table 1.2 China National Standard of Hearing Disabled (2006)

The classification of hearing loss in this way could be somewhat unusual from some western points of views. If one knows how the hearing loss was measured and how average decibel loss was calculated, the figures will be more useful. However it is part of the approach taken here not to be Western-centred but

to identify the *emic* view from the NGOs which conducted Sign Bilingual Education experimental projects in PRC.

I keep the tables here for the purpose of documentation. Without knowing the change of definitions of China national standard, readers may feel confused when they read this thesis.

1.4 The Chapter Arrangements

To achieve the aims set out in the preface, this study will be organized in three parts as follows:

Part I includes three chapters introducing the contexts, the background, the related literature especially the Chinese SBE models and the methodology applied in this study. Chapter One has included a description of the context of study and its significance, and defined some key terms. It also shows the chapter arrangements of this study. Chapter Two reviews the related literature. This chapter has multiple functions. It provides background, contemporary context and obtains ideas, insights, perspectives, disagreements, discusses the theoretical underpinnings – the linguistic Interdependence hypothesis, the European SBE models, Bakers' model and scrutinizes previous research studies on Chinese SBE. A final version of research questions will be listed at the end of Chapter Two. Chapter Three is a

methodological chapter and includes the origins and rationale of the chosen

methodology. It states the characteristics of the methodology of this study, such as

the role of theory/model plays in this study, the selection of cases, the *emic* view

rather than the *etic* view. It accounts for how the data were collected, classified,

sorted, and triangulated initially; it also explains the procedures of data analysis.

Part II consists of Chapter Four and Chapter Five. In Chapter Four, data were

conceptualized, coded, grouped, sorted and categorized by a key event- debate of

SBE. Chapter Four shows how one form of data were compared and contrast with

other form of data and how one source of data were compared and contrast with

other source of data. The qualitative data were also compared and contrast with

related literature continuously. In this Chapter, data collected by different methods

were also compared with another. Through these kinds of continuously and

repeatedly comparing and questioning, through the sensitizing effect by doing

literature review, findings emerge gradually. In Chapter Five, I push the analysis

further a little bit by changing different lens. By further comprehending and

synthesizing some unused data, I discover more findings through merging, sifting,

weeding and aggregating the data. The features of Chinese SBE and related issues

are identified. The common claims of the outcomes of the SBE projects are also identified.

Part III encompasses Chapter Six. The findings from Part II have provided suggested answers to most of the research questions. All the findings are summarized in this chapter. Conclusions are reached and Implications are made.

Chapter Two   Analysis of Relevant Literature and Clarification of Research Questions

2.1   Bilingual Education – an overview

Bilingualism and diglossia are two common social phenomena. Bilingual Education refers to the use of two languages as media of instruction in classrooms. In human society, bilingual education programs have been designed for majority students such as elite bilingual education (De Mejia, 2002), and French immersion (Swain & Lapkin, 1981; Genesee, 1998). In these cases the major concern is to enhance the linguistic competences of students in a second or foreign language. For example in China, the concern to develop the competence of students' of the Han majority foreign languages led in 2001, the Ministry Education of PRC to urge the universities to teach 5 to 10% of their courses 'bilingually' i.e. using English, within three years (Zhang Baolin, 2004:49; Pan Jiazhen, 2007). The aims are to enhance the English level of all graduates. These kinds of bilingual education are not for ethnic minorities, and I do not have space to develop an overview of research in this area.

Other approaches to bilingual education programs have also been designed for linguistic minority students. I focus on this type of bilingual education because it is more relevant to the education of deaf people.

Reviewing the literature on bilingual education, it is obvious to see the linkage between Bilingual Education to the context of immigration, civil rights, equality of opportunity, modernization, and internationalization in many countries such as the US, Canada, Australia, China. For example, a dual language school - the Coral Way Elementary School in Florida for the Cuban immigrants, the French Immersion schools in Quebec for Anglophone children, the late partial immersion school-the Benowa State High School in Queensland Australia, the New Huangpu Experimental School in Shanghai for urban students in middle childhood (Wang, 2003:217-235). So, Bilingual Education is a cover term of many varieties.

This cover term can be classified by many different concepts (See Mackey, 1972:413). One way to distinguish bilingual education is by societal aims. A weak form of education for bilingualism is the Transitional BE and a strong form (also known as enrichment form) is the Maintenance BE (Fishman, 1976; Baker, 1996: 175). The Table 2.1 below shows the difference of the linguistic aims and societal aims and educational goals for some BE programs.

Strong forms of bilingualism are those which lead to maintenance and enrichment for students from a majority and those from a minority. For minority students it is the outcomes which are important since it is the maintenance of

minority languages which is essential to minority bilingual education. It is therefore the 4th program in Baker's typology which is most desirable in this case, rather than the 1st program and the 6th program. The 4th program might be used as a basis of thinking about education for deaf children as members of a minority.

Table 2.1   Types of Bilingual Education Program

Program	Type of child	Language of the classroom	Societal & Educational Aim	Aim in Language outcome	Form of Bilingual Education
Transitional	Language Minority	Moves from Minority to Majority language	Assimilation/ Subtractive	Mono-Lingualism	Weak
Mainstream with FL teaching	Language Majority	Majority language with L2/FL lessons	Limited Enrichment	Limited Bilingualism	Weak
Immersion	Language Majority	Bilingual with initial emphasis on L2	Pluralism & Enrichment. Additive	Bilingualism & Biliteracy	Strong
Maintenance/ Heritage Language	Language Minority	Bilingual with emphasis on L1	Maintenance, Pluralism & Enrichment. Additive	Bilingualism & Biliteracy	Strong
Two Way Dual Language	Mixed language Minority & majority	Minority & majority	Maintenance, Pluralism & Enrichment. Additive	Bilingualism & Biliteracy	Strong
Mainstream Bilingual	Language Majority	Two Majority Languages Pluralism	Maintenance, & Biliteracy & Enrichment. Additive	Bilingualism	Strong

Sources: (Baker, 2006: 215; Garcia, 1997: 410).

Legend: L2= second language; L1= first language; FL= foreign language

However attitudes to maintenance and assimilation change as the case of the USA shows. Around 1830s, Cherokee, a tribe of Red Indian established 21 bilingual primary schools using Cherokee and English as media of instruction for their children. As a consequence eventually, 90% of Cherokee could read and write

in their own language. Their English literacy was also even better than the white

people living in Texas and Arkansas (Crawford, 1999 cited in Cai, 2003:165). In

New Mexico and California, there were both English and Spanish schools; in

Louisiana, French language public schools.

However, in the late nineteenth century, US education started the task of

assimilating ethnic minority students. USA had English-only instruction laws by

the end of 19th century (Cai, 2003:165). Conventional wisdom and research studies

justified the notion of assimilation in these periods. From approximately the 1920s

to the 1960s, people believed bilingualism had a detrimental effect on thinking.

Saer, D. in 1923 gathered a sample of 1400 children aged 7 to 14 from bilingual

and monolingual backgrounds. He found the gap of intelligence (in terms of IQ)

between monolinguals and bilinguals. Saer drew the conclusion that bilinguals

were mentally confused and at a disadvantage in thinking (Saer, 1923 cited in

Baker, 2006:144). Bilingual Education for the minorities seemed to be shown to be

detrimental and was not pursued.

In a landmark study, Peal and Lambert (1962, cited in Baker, 2006:148)

conducted a study with 110 children aged 10 years old sampling from middle class

in French schools in Montreal of Canada. The bilinguals outperformed significantly

the monolinguals, and as a consequence the notion of bilingual education

flourished again gradually. Bilingual education returned in 1960s. In 1968, US

president Johnson signed the Bilingual Education Act. In 1971, Massachusetts was the first state to mandate Bilingual Education and by the 1980s, due to the fact that nearly 23 million US residents and 4.5 million school-aged children did not speak English at home, many Americans believed Bilingual Education was an alternative to "sink or swim" practices in which these limited-English-proficiency (LEP) minority children were placed in English-only classes. Ambert & Melendez (1985:xiii) point out the fact that,

> without BE programs these children lose one or two years in the acquisition of content knowledge while struggling to learn English…their opportunities for an education equal to that of English-speaking children are serious curtailed.

However, after Reagen became US president, anti-bilingualism returned. In 1998, California voters approved Proposition 227 to reject bilingual education programs in public schools. In 2000, Arizona voters passed a similar Proposition 203. Seeing the victory in two states, one opponent of BE states, *"we can end BE nationwide in the near future"* (Taylor, 2000). However, the opponent lost a battle in Colorado in 2002.

From the Bilingual Education Act to Proposition 227 and Proposition 203, we can see the bilingual education became a political issue in states' level and also in federal government level. The majority with their vested interests and rights may not like the notion of bilingual education. Some opponents may even think BE will

lead to separation of a country. There were many struggling between different groups for the Bilingual Education programs in United States of America. In Canada, the majority now generally accepts the multicultural and multilingual environments more, BE, has a better climate to grow in. In Europe, diversity and pluralism seemed to be perceived as right and resource.

The key perspective of the major perspectives of proponents of BE are pluralism and enrichment and the perspective of opponents of BE is assimilation, and this is placed in a context of human rights. It can be expected these perspectives and concepts may be identified in the SBE phenomenon in China. Since the linguistic rights of deaf people may be enlarged to human rights issue, it will be a sensitive issue for some countries. I anticipate Bilingual Education will be attacked by those who do not favour pluralism and diversity.

In addition to these matters of rights and maintenance and transition, other concepts emerge and hypotheses are proposed in the field of BE. Cummins in particular raises a Developmental Interdependence Hypothesis (DIP) in the late1970s. He proposes that a second language competence of a child is positively related to the first language competence. That is to say, the more developed the L1, the easier it will be to develop L2. Again, Cummins (1999:13) considered language

as a right. His notion is if an individual has individual rights to choice of religion, individual should also have right to choice of language.

2.2   Critics of Bilingual Education for minorities

Criticisms of bilingual education aimed at education for minorities have been raised, essentially saying that it is ineffective. Duignan's views can represent the one criticism from an assimilationist perspective:

> It kept students too long in minority language classes and slowed down the learning of majority language and assimilation into our society Bilingual Education came under heavy fire because of its costs, the expected growth of new financial burdens… the lack of qualified teachers, and the programs' real or supposed lack of success…(Duignan,1998:12)

Duignan argued that bilingual education "undermines melting- pot theory" (Ibid:15). He claimed the aim of public education should be to assimilate the immigrants, not to preserve their status as cultural aliens. Assimilation should be the national object, not bilingualization and the ethnicization and bilingual programs should be terminated (Ibid: 51).

The literature also tells there are potential conflict of interests between the minorities and their individual members; bilingualism can be seen as the first stage towards assimilation as Byram (1991:20) states:

it is in interest of the group to maintain monolingualism in the minority

language, but it is increasingly in the interests of the individual to be

bilingual in order to benefit from the economic opportunities of the

modern world which a majority group controls.

I can speculate at this point that there might be conflict of interest between a

deaf community which wants to keep individuals within the community and deaf

individuals who wish to live in the majority. I expect there will be conflicts of

interest among the stake holders of the schools for the deaf too. Even if the parents

may have choice to use SBE programs, they may not select this path for their

individual child because of the illusion of better opportunities in terms of better

chance to learn Hanyu and better chance of schooling in other forms of education

especially mainstream.

Cummins (2003:227) summarizes some general patterns emerging

consistently in the research results about different types of Bilingual Education for

minority children. First, there is a general finding that for minority students who

are at risk of school failure, strong promotion of the students' L1 in school often

results in significantly better academic progress in the majority language than does

instruction primarily through the majority language. Second, the research results

support the view that properly implemented bilingual programs can contribute both

to equity for minority students and to the enrichment of educational experience. However, he argues these kinds of programs also change the status quo of the vested interests groups; therefore, bilingual education will be always opposed by strong powers.

This argument might be extended to education for deaf children and the question arises whether there could be an assertion that the promotion of deaf students first language (signed language) in school often results in significantly better academic progress in the Hanyu than does instruction primarily through Hanyu.

To sum up, the knowledge of Bilingual Education leads to the formation of ideas and insights for my present study. It is likely that the concept of the developmental interdependence hypothesis and maintenance and equity are also the concepts I will come across in the Chinese SBE sites. What will be the *emic* view of SBE organizers? Do they advocate linguistic interdependence hypothesis for example? Do they think in terms of maintenance but also of possible conflicts of interest? These are not research questions but they are the underpinnings of the SBE model(s). In the following sub-section, I review the literature on Chinese

Bilingual Education for ethnic minorities in order to gain some insight further from this field.

2.3   Education for linguistic/ethnic minorities in China

Deaf people can be regarded as a linguistic minority and in order to provide a background to the analysis of education for deaf children, it is useful to give an overview of education for linguistic/ethnic minorities in China. However it is not possible in the space allowed to analyse education for linguistic minorities in detail but to give an overview of the situation and of the research available.

There are 56 nationalities using more than eighty languages. Some nationalities such as Huizu and Manzu gave up their own languages to use Hanyu (the language of majority Han group). Forty five nationalities use one language (their own languages) such as Weiwuerzu, Zhuangzu. More than seven nationalities use two or more indigenous languages such as Zangzu, Menbazu. Some minority languages do not have written form. Therefore, there are only thirty languages with written form (Ding, 1999:17-19; Zhou, 2003:25; Dai & Cheng, 2007:78)

In China, deaf people are not recognized as a minority but it can be argued that some of them would like to be treated as a minority, with the recognition of the

existence of deaf community. Hu (2005:82) in her thesis studying deaf college students' deaf identity argued,

> Through wide investigation of real living status of deaf people, the deaf people's particular life style in different fields was revealed, and the existence of the deaf community was confirmed.

The literature about ethnic minorities education shows language policy (including Bilingual Education) as an important portion of the nationalities policy after 1949 is clear and basically stable with the exception of serious political unrest, such as the Cultural Revolution, (Wang Xihong, 1998:208; Wang Yuanxin 2007:8). (During the period of unrest, the language policy changed for a while. After the unrest, BE returned in 1980s). Chinese government promotes Hanyu but Chinese government does not adopt a Hanyu only policy.   However, the information about whether local deaf education is conducted by local spoken language, local sign language, <CSL> together with Hanyu is unavailable.

Chinese government aims at *Min-Han-Jiantong* (high competence of both Hanyu and one minority language) (Feng, 2007:8; Teng, 2001:3). In other words, let the 55 minorities use their own languages and ask them learn Hanyu for the purpose of the communication among all nationalities simultaneously (Zhou, 2003:253; Gai, 1997). Evidence shows PRC government is sincere in their wish to adopt a policy of equality of languages. The Article 3 of the Constitution of PRC (1954), the Article 4 of the Constitution of PRC (1982) stipulate minorities have the freedom to use and to develop their own languages. The Article 19 of "The

Law of Organizing People's Congress of PRC" in 1982 and the Article 30 of "The

Regulation of Meeting for People's Congress of PRC" in 1989 stipulate the

translation requirement for the minorities. In addition, the freedom of minority

language use in the courts and education are also stipulated by Constitution, Laws,

Codes, Rules, and Ordinances. For example "The Regulations of Management of

Kindergartens" approved by the State Council in 1989 allows the use of minority

languages in Kindergartens. Also, the Section 36 & 37 of "The Code of Autonomy

of Ethnic Nationalities" which was promulgated on May 31 1984 and Section 6 of

"The Code of Compulsory Education of PRC" which is promulgated on April 12

1986 stipulate the use of minority languages in the school system and the adoption

of bilingual teaching policy. The Chinese government advocates not only adhere to

freedom-of- languages-use policy but also adopt BE policy (Gai, 1997). In

November 6 1992, there was a Circular from State Council to local governments

which stipulates that the school system should adopt Bilingual Teaching, using

both local minorities' languages and Hanyu as media of instruction. (China

Academy of Social Science, 2003:266) (In China, the term Bilingual Teaching is a

synonym of the term Bilingual Education).

Lin Shiliang, *et al* (1996:260) reported that the number of schools adopting bilingual education programs (both maintenance model and transitional model,) was about 10,000 (no exact numbers provided by the China Education Yearbook 1996).

Ci Ren et al (1998:271) confirmed the approximate number of schools-10,000 (no exact numbers provided by the China Education Yearbook 1998). More than six million students (again, no exact numbers provided) were studying in these schools adopting bilingual education programs (Lin Shiliang, et al 1996:260; Wang Xihong, 1998:64). (In the past, it was difficult to find statistics and exact figures in China. It was not unusual that even the official documents such as Government Yearbooks provided approximate figures). Though only approximate figures are available here, Lin and Ci and Wang did tell us the context of ethnic minority education in PRC to some extent- about 10,000 schools adopting bilingual education programs.

In September, 1999, UNESCO held a "China Week" in Paris. Chinese Government exhibited "Ethnic Minority Bilingual Education" as one of her major themes (Shamajiajia, 2000:249). This event, at least, suggested Chinese

Government intended to show other countries that Bilingual Education for Ethnic Minority are adopted and implemented in PRC.

In August, 2005, a China Bilingual Education official delegation visited South Africa and Kenya for the academic exchange activities (Shamajiajia, 2006:276). This event also suggests "Ethnic Minority Bilingual Education" policy is deemed to be blessed in PRC. It is likely that there is an official formal and developed "Ethnic Minority Bilingual Education" policy in China.

If the deaf community were to be perceived as linguistic and cultural minority (Lane, 1999), then the development of SBE programs would be better and faster. The prerequisite for this are the recognition of the deaf group as a linguistic minority and the recognition of deaf culture and of natural sign language officially and the belief that natural sign language is the first language of deaf children.

2.3.1   *Classification and Models*

China National Bilingual Education for the Ethnic Minorities Association (CNBEEMA) was established in 1979. CNBEEMA have held many large scale seminars and have published many collected works for Bilingual Education (Zhu Chongxian & Wang Yuanxin, 1998:3). They disclosed, "members of CNBEEMA

have issued innumerable theses, books and articles" (Ibid.:3). (However, many of

them are unavailable outside Mainland China perhaps due to an "internal

circulation only policy" and small circulation for small demand of academic

publication). A lot of types of bilingualism and BE models were identified and

proposed. For example, the minority-minority type, such as in the Guangxi Zhuang

Autonomous Region, 55% of the Yao nationality people who use Bunu also speak

Zhuang; many of these people can also speak Hanyu (Dai & Cheng, 2007:80). One

example of the BE model: models by sequences- the 'simultaneous model' in

which two languages are taught at the same time (Zhaojue County of Sichuan

Province- some schools use Yi as classroom language while Hanyu is

simultaneously taught as a course); the 'sequential model' in which one language is

taught first and then the other (Dai & Cheng, 2007:84). Other examples include the

minority language dominant type (minority language is L1 and is medium of

instruction), the Hanyu dominant type (Hanyu is L2 but it is medium of instruction)

and balanced use of two languages type (L1 plus L2 as media of instruction) (Zhu,

2003:72).

Owing to the consideration of the word limit of my thesis and the

consideration of trustworthiness of the BE literature from mainland China, I have

selected two scholars' works to comprehend the BE classification and BE models deeper. Both of them collected a lot of raw data in their field.

Wang Xihong is the deputy professor of the Central University for Nationalities in Beijing. He participated in key projects from China National Minorities Research Centre. Wei Pengfei (the ex-director of Minorities Education Bureau of China Education Committee) recommended the book I quoted below because it is based on a lot of survey materials. (China Education Committee is slightly higher than Ministry of Education in terms of political power in China State Council). Wang Xihong (1998) suggests that education for the minorities may be classified in three kinds based on medium of instruction in different school level. One type is using indigenous language as medium of instruction from kindergarten to University such as Nei Mongol. One type is using native language in primary level and junior secondary level, and then using Hanyu in the University level. The last one is using vernacular language only in junior primary level, after that, using Hanyu **as** medium of instruction. The Nei Mongol method is maintenance model for a long time (over 17 years from primary school to University). The rest are transitional model with different exit time.

Teng Xing is the professor of Education Department of the Central University for Nationalities. He was the visiting professor of Anthropology Department of UC Berkley. Gu Mingyuan (2000:9), the Chairman of China Education Association in 2000, claimed "Teng's work is valuable. Teng used anthropological methods, going to the fields to inspect Yizu's culture… his methodology is rare in China." (Gu: 2000, cited in Teng, 2001:9). Teng Xing (2001:3-4) identified two major types of minority education based on geographical region - north type and south type. The minorities located in north part of China such as Mennguzu, Chaoxianzu, Zangzu, Hasakezu, Weiwuerzu have formal school system. These minorities have long term "parallel bilingual education" system. These systems are mainly maintenance models with various types. The minorities located in the south part of China adopt according to Teng (ibid,:4) a 'crutch style' BE model, mainly a transitional model. At first, students of minorities learn literacy through their native language. When the students of minorities have learnt reading and writing to some extent, the majority language will be adopted and minority language will be thrown away like a crutch.

2.3.2   *Research on models of education for ethnic minorities in PRC*

At the beginning of 1980s, many experts and scholars started to study minority languages and bilingual education. (Dai Qingxia and DongYan 1997:56). Experts, organized by Institute of Nationalities Research of Chinese Academy of Social Sciences went to the field to conduct many surveys of ethnic minority language use, especially bilingual education. They visited extensive areas which included five Autonomous Regions, such as Guangxi Zhuangzu Autonomous Region, Ningxia Huizu Autonomous Region, thirty Autonomous Districts, and thirteen Autonomous Counties.

In the period of 1980s, nationwide experimental Bilingual Education commenced. A lot of study was conducted. In the 8th "Five-year-planning" period, Dai,Q., Teng,X., Guan,X. and Dong,Y. started to synthesize many research studies on Bilingual Education of Ethnic Minorities since 1950s systematically (Dai Qingxia *et al*, 1997:2). They wrote an eminent book on *Bilingual Education of Ethnic Minorities* with the support from the Key National Grant in Education organized by China Education Committee (a division of State Council of Central Government). Based on different perspectives introduced by that book, Dai

Qingxia and DongYan (1997:88-96) propose there are 14 kinds of BE in PRC.

They are:

1A) Bilingual Mono-script type, such as Jinuozu. The media of instruction are Hanyu and Jinuo. Students of Jinuozu only learn written form of Hanyu. (There is no written form of Jinuo language)

1B) Bilingual Bi-script type, such as Chaoxianzu. The media of instruction are Hanyu and Chaoxian. Students of Chaoxianzu learn written form of Hanyu and written form of Chaoxian language (There is written form of Chaoxian language).

2A) Foreign Language type, such as Mengguzu living in pastoral area. Students learn Hanyu without a social environment to use Hanyu.

2B) Second Language type, such as Uygur living in Urumqi. Students from Uygur learn Hanyu with good social environment to use Hanyu.

3A) Partial Bilingual type, Mengguzu living in Liaoning province. Students learn Menggu written form language by using Menggu spoken form. Other subjects from the national curriculum use Hanyu as the medium of instruction.

3B) Full Bilingual type, such as Chaoxianzu primary schools and junior secondary schools. All subjects from the national curriculum use Chaoxian language as the medium of instruction except Hanyu.

4A) Concurrent type, the ultimate goals are to develop both minority language and Hanyu. No example is given by the authors.

4B) Assistant type, only learn minority language to primary school level and junior secondary level. No example is given by the authors.

5A) Pre-school type, such as Kindergarten in Lei Shan county of Guizhou province. Students from Miaozu learn both Miao language and Hanyu in pre-school age.

5B) Primary School type, Minority students learn both minority language and Hanyu in primary school period.

5C) Secondary School type, such as minority secondary school in Lei Shan County of Guizhou province.

6A) Bilingual Mono-cultural type, this type can be bilingual Hanyu culture type or bilingual Minority culture type. No example is given.

6B) Bilingual Bicultural type, such as schools for Baizu in Yunnan province or schools for Naxizu in Yunnan province.

6C) Multilingual Multicultural type, such as Henan Mengguzu Zizhiqu in Qinghai province, students from Mengguzu learn Zang language, Mengugu language and Hanyu

(Further information is not available such as which kindergartens and secondary schools in Lei Shan county of Guizhou province). It is difficult if not impossible to have direct and complete access to those bilingual education studies as Dai, Teng, Guan, and Dong could do. (The data used in those bilingual education and the methodologies adopted were unavailable. I have to identify the BE types without further analysis).

Dai and his colleague continued their efforts to the categorization of BE in PRC (Dai & Cheng, 2007:80). In 2007, Dai and Cheng stated, "Models of bilingual education have been developed according to the local conditions and could be classified into the seven categories". They are:

1) regional models such as Tibet model, Xinjiang Uygur model, Inner Mongolia model, model of Yanbian Korean Autonomous Prefecture, southwest model etc. (Yan, Xuequn: 1985 cited in Dai & Cheng, 2007:84);

2) syllabus models (monolingual syllabus, transitional bilingual syllabus, and long-term bilingual syllabus, etc.), (Zhang,Wei:1987 cited in Dai & Cheng,2007:84)

3) models by dominant language in the classroom,

4) models by school type (pre-school, primary school, etc.), (Dai et al, 1997).

5) models by sequences (simultaneous model in which two languages are taught at the same time or sequential model in which one language is taught and then the other, etc.), for instance of the simultaneous model- Zhaojue County of Sichuan Province- some schools use Yi as classroom language while Hanyu is simultaneously taught as a course or vise-versa;

6) models by textbooks used (Mandarin Chinese textbooks or minority language textbooks),

7) models by the medium of instruction and literacy (bilingualism with monoliteracy, multilingualism with monoliteracy or with biliteracy, or with multiliteracy, etc.) For instance of bilingualism with monoliteracy, in some Lisu primary schools at Nujiang County of

Yunnan Province, from preschool to year three, Lisu is used only as a "helping language" for students to learn Hanyu more easily. In these schools, only written form of Hanyu is used while written form of Lisu "never goes into classroom" (Hu & Yang, 1995 cited in Dai & Cheng, 2007:84).

Some Chinese scholars in the field of education for ethnic minorities have suggested further meaningful classification. Yan Xuequn categories the BE models by geographical region such as Xizang model, Inner Mongol model; Xinjiang model, Yanbian model South-West model (Yan Xuequn,1985, cited in Dai Qingxia et al, 1997:65). Zhou Qingsheng groups BE into three categories by function, i.e. maintenance model, transitional model, and temporary model. The problem is that it is not clear if these models have the exactly same meaning of the western world as the author does not give enough details or refer to western models. He subdivides the maintenance model and the transitional model according to the development stage, i.e. Well-developed model (such as Chaoxian minority), Developing model (Zang minority), Experimental model (Bai minority) (Zhou Qingsheng,1991, cited in Ding, 1999:222). There are however unanswered questions in the Chinese research: Which models have been borrowed to the

Chinese SBE experimental programs? Which terms are also used in the SBE programs?

Almost all the research is written in Chinese. Only a few are articles from Russian, Japanese, American and a Canadian thesis that was translated into Chinese. Many research studies used experimental research methods by comparing experimental group with control group (Ding, 1999:227). There were some exceptional cases. For example, one research study adopting ethnographic field research method was conducted by Teng Xing. According to Lin Yao Hua (Lin, 2001:4), Teng's study has distinct features. They are: a) collecting historical documents in the field- Liang mountain Yi minority autonomous region of Sichuan province; b) adopting *emic* view; c) using multiple methods, etc. There are two experimental models in Liang Mountain. The "Model-one" started in the 1980s'. Yi students in some school learned every subjects using Hanyu as medium of instruction and learned their mother tongue - Yi language – as a subject. In the meantime , the "Model- two" started. Other Yi students learned every subjects using Yi language as medium of instruction and learned Hanyu as a subject. In July 1990, the education committee of Liang Mountain Yi minority autonomous region summarized that students should "start from mother tongue, transit to Hanyu,

become a bilingual". The committee stated the aims are "developing languages, developing thinking, developing intellectual ability, cultivating ability in every aspect." (Teng, 2001:42-45 cited in Ding 1999). In short, findings of the research studies are: 1) mother tongue plays an important role of pre-school and primary education; 2) the academic achievement and the cognitive development of BE students outperform their peer; 3) BE is a must for the education of ethnic minorities. (Ding, 1999: 228).

Dai suggested BE is a systematic project which consists of curriculum designing, text-book compiling, teaching and assessment (Dai & Cheng, 2007:86) and some new issues related to the curriculum, teaching material and assessment, may be relevant for the SBE experiments in PRC.

Wang Xihong (1998:217) states the following issue: a) the low enrolment rate of students of the bilingual schools in some regions such as School for Chaoxianzu in Dong Gang city; parents did not allow their children go to this school; b) the language attitude of minorities parents- giving up their culture and language, thinking their mother tongue and culture are useless to their children (in terms of individual prospect and career). Analyzing these statements proposed by Wang Xihong, I have doubts about the reliability and validity because the information

provided by Wang is only four paragraphs on one page (290 words). However, the reputation of Wang, a deputy professor working in China National University is high and the points made by Wang are certainly worth consideration.

In Miaozu, Buyizu, Dongzu region of Guizhou province, BE schools faced the problems of lacking funds, lacking qualified teachers (Sun,1989:127-128). I try to find more information to judge whether the Sun's statements are valid and reliable. I cannot proceed my checking because of the same reason- the unavailability of the data. However, I argue to deem Sun's points is acceptable for my reference. I speculate the SBE experiments in PRC will have the same problems.

In summary, we can say that research on minority education in China is mainly in the form of surveys and categorizations of different kinds. There are different models but there is little work which gives detailed accounts of the actual curricula or the teaching and learning. This overview provides the background to the analysis of education for deaf children and since this is not a thesis about the education of linguistic minorities. I have to now move on to Deaf Education.

2.4   Deaf Education - mode of communication and signed language

After this overview of minority education, the next stage will be to consider sign bilingual education, but before this it is necessary to clarify some issues in modes of communication in education for deaf people, with an overview of some major developments and some research on modes of communication in other parts of the world.

How should deaf students communicate? The history of deaf education worldwide is long. The mode of communication has been the subject of much controversy. Between the late 1700s and the mid-1800s, schools for the deaf usually followed the French or Manual method developed by Abbé de Epée at his school in Paris, or the German or Oral method designed by Samuel Heinicke at his Leipzig school. From 1760, starting in the UK, a mixed model was used, and from the 1860s oral methods were used in the UK and elsewhere. The situation remained unchanged until a Congress on the Deaf Education, held in Milan in 1880, passed a resolution to support and in a sense validate the oral method. As Cleve (1987:68) said, "the Congress of Milan did have an impact on deaf education… It served as a symbol and as a useful argument to those who would eliminate signs and instruct deaf children with oral language alone, and it occurred at a propitious time."

After the Congress, gradually, oral communication was the dominant mode of communication until early 1970s.

In 1960s, some linguists such as Stokoe argued that American Sign Language and other countries' sign language are natural languages (Grosjean, 2001). This opinion inspired some deaf educators to reflect on the possible problem of oral only policy. Some educators noted the poor academic achievement of the majority of deaf students who studied in schools using oral method. Gustason, G. (1987:200) concluded that for over 50 years, reading scores and English language scores for high-school-aged deaf students had hovered around the level attained by fourth- and fifth-grade hearing children. Some educators started to look for an alternative method. Later, Shifflett, who was a teacher, combined signing and finger-spelling with speech and lip-reading in her teaching (Evans, 1987: 173). In 1968, Holcomb, a supervisor of a deaf program in Santa Ana, initially proposed combined communication. He told people that the combined communication was total communication (Evans, 2004:141; Scheetz, 2001:128). Gradually, Total Communication was not only a method but also a philosophy of deaf education. The era of Total Communication has begun; Total Communication method – credited to David Denton, the superintendent of Maryland School for the deaf

(Baker & Knight, 1998:77) – was a dominant mode of communication adopted by many countries, including U.K., U.S.A. from the 1970s (Easterbrooks, 2002:14; Brelje, 1999: vii).

Some deaf educators, professionals and parents, were still not satisfied with the low academic achievement of the majority of deaf students using both oralists' method and total communication method (Johnson, Liddell and Erting, 1989, cited in McAnally, Rose & Quigley 2004:211; Mas, 1994). In China, the situation is similar. In her Master thesis, Huang (2009:43) states, "professionals in deaf education always focus on written Chinese and spoken language teaching, but don't come with satisfied outcomes…" In parallel with second language acquisition theory such as Cummins' threshold model (Baker, 1996:148; Paul, 1998:151) and developmental interdependence model (Baker, 1996:97; Cummins, 1986:80-82; Strong & Prinz, 2000:131-133, Paul, 1998:151) research began on spoken bilingual education and the Swedish experiences of deaf education (Ahlgren, 1994:55-60; Brelje,1999:357-366), and some scholars proposed sign bilingual-bicultural models (SBB models).

2.4.1   *Other forms of Signed language*

Because of the different modalities in which signed language and spoken language occur, signed language can be simultaneously combined with the spoken language with the goal of making the spoken language more accessible. It is what some professionals have done. Research studies tell us that professionals in many countries introduce the use of some forms of signing system (Watson,1998:75).

Some began incorporating signs into their instruction of deaf students in 1960s. They have developed a variety of sign systems which included vocabulary items from the natural signed language (NATU-SL) as well as invented signs to represent grammatical morphemes and lexical items unique to the spoken language (Garcia, 2005:72).   The variety of sign systems are carefully designed and have been used in 1970s. In U.S.A., they are named as Seeing Essential English (SEE1), Signing Exact English (SEE2), Linguistics of Visual English (LOVE) (Meadows-Orlans, *et al,* 2003:16) and these systems are coined as a collective noun-"Manually-coded English" (MCE). (Baker & Knight, 1998:79).   In U.K., they are named as Sign Supported English (SSE).

In my study, I will use the terms- Sign Supported English (SSE) and Sign Supported Chinese (SSC).

Research studies show that the combined languages used in different classrooms and in different countries can be in varied combinations with natural signed language (NATU-SL) and spoken speech at the two extremes. If the combined languages used are close to the BSL extreme, the classroom communication is sign based. If they are close to the spoken English extreme, the communication is English based. As an illustration, the combined languages used in U.K. are Sign-Supported English (SSE) or Signed English (SE) in 1990s (Baker & Knight, 1998:81). Which forms of signed language should be adopted?

In short, these alternative forms of signed language all involve using signs and features from natural signed language (NATU-SL) alongside spoken language to support the representation of the language using by the majority of hearing people of a country.

In PRC, Sign Supported Chinese (SSC) is the common form of signed language used in the classroom owing to the dominant total communication approach of deaf education. (The feature of SSC is that Chinese word order is retained). I am told by informants that the languages used in different classrooms in PRC, are different forms of hybrid from parents of natural Chinese signed language and spoken Hanyu (language of majority in PRC).

Which forms of signed language should be adopted? It is also debatable in China according to the literature.

2.4.2   Language Use in the Education of Deaf People

Which languages are used in the classroom? In other words, what is the mode of communication in the classroom?   To whom do the deaf students sign? Which language do the deaf students prefer to use to their peers in and outside classroom? Which language the deaf students prefer to use to their hearing teachers in and outside classroom? What has the literature said about these questions?

In this subsection, I review the related literature from a macroscopic perspective: to survey approaches to deaf education in a country or in a region, such as total communication, oral, manual and bilingual- bicultural approach. I also review literature from a microscopic perspective: to survey language use (mainly in classrooms) in a school. In this subsection, I will also focus on some researches conducted in a continent and three countries- European Union (EU), U.K., U.S.A. and China- to see whether there is a suggested pattern of language use (mode of communication) in the education/ classrooms.

A Study in the European Union

In October 1996, a study was carried out for the European Union of the Deaf. Bristol University and research partners in every member state of the EU and Norway and Iceland started the study on Deaf people and sign language in the EU upon the request of the European Union of the Deaf and funded by the European Parliament and the European Commission. The researchers stated that one purpose of this study was to construct a picture of sign language use in Europe in 1997 and also this would provide a basis for EU planning in each participating country (Kyle, 1998:1). The study was designed to collect data on "sign language status" which was partly described in terms of the extent of use. (I have some reservation to the validity that studying language status in terms of the extent of use, however, this may one of the estimators). The study includes interviews with deaf people and a survey by questionnaire. Questionnaires and interview materials which were originated in Bristol were translated into some countries such as Dutch, Spanish and Portuguese (Ibid, 1998:30). Deaf researchers used the national sign language to carry out interviews with deaf people (It is notable contribution to try to understand Deaf perspective in this study). Questionnaires were sent to the Deaf community, to organizations and institutions with an involvement in Deafness and to

individuals who had different levels of involvement with Deaf people in 17 European countries (Ibid., 1998:1). The attached questionnaires (as appendices of the report study) are clear and concise (Ibid., 1998:107). The researchers admitted the sample size was small and the time scale was extremely compressed (only nine months) (Ibid.2; 25). The researchers also said the questionnaires were designed to keep the responses very simple and mostly closed questions were used (Ibid.25). These are the context of this study but here are clearly some reservations- also on the part of the researchers- about the limitations caused by practicalities and the need to keep the numbers of interviews small and to use a "planned sample" in order to ensure the partners of the researchers had time to collect the data (Ibid.25; 31).

Eventually, 325 questionnaire were completed and returned from the deaf community; 251 from organizations and institutions with an involvement in deafness and 454 from hearing individuals (Ibid., 1998:2). Questionnaires from Deaf people came from towns and cities mainly and fewer male respondents of the questionnaires than had been planned (Ibid.33) and this is clearly a further limitation on the research and its findings. Nevertheless, this study had investigated more people in more countries than any work before 1997.

Due to limitations of space, I focus on the part of this EU study about signing in school. The data includes all the valid returns as received by June 1997.

The results are listed as follows:

Table 2.2 Use of Sign with other deaf children

	All the time	Outside the classroom	Rarely	Never
Austria	38	50	6	6
Belgium	68	28	0	4
Denmark	36	36	9	18
Finland	42	58	0	0
France	61	25	3	11
Germany	34	53	9	3
Greece	87	0	9	4
Iceland	100	0	0	0
Ireland	85	8	8	0
Italy	80	10	0	10
Luxembourg	88	13	0	0
Netherlands	38	25	25	13
Norway	92	8	0	0
Portugal	56	38	0	6
Spain	59	24	3	15
Sweden	56	39	0	6
UK	38	50	0	13
Total	58	30	4	7

Source: Kyle,1998:48

Table 2.2 suggests that deaf student signed to each other whenever possible as the researchers stated (Kyle, 1998:47).

Table 2.3 Comparison of signing by teachers and with others (%)

Use of signing in class or outside	Teachers	Other Children
Austria	38 %	88 %
Belgium	44 %	96 %
Denmark	36 %	72 %
Finland	33 %	100 %
France	47 %	86 %
Germany	0 %	87 %
Greece	61 %	87 %
Iceland	38 %	100 %
Ireland	46 %	93 %
Italy	80 %	90 %
Luxembourg	38 %	91 %
Netherlands	32 %	63 %
Norway	84 %	100 %
Portugal	19 %	94 %
Spain	33 %	83 %
Sweden	61%	95%
UK	18%	88%
Total	37%	88%

Source: Kyle,1998:48

Table 2.3 suggests that deaf children sign to each other in the class and

outside than they are to receive sign from their teachers as the researchers stated

(Kyle, 1998:48).

To interpret the data, we should consider carefully the factors provided by the researchers:

- ✧ The incompletion of the sample from Italy

- ✧ The age of the interviewees (whether they were taught by Total Communication); the younger deaf people were more likely to have had teachers who signed

- ✧ The difficulty in making clear to the participants the distinctions between sign language and sign supported English

- ✧ The regional variations in educational policy such as Schools for the Deaf in Catalonia and other region in Spain

- ✧ The variations in integrating policies adopted in different countries (schools which participate of this study can be residential schools for the deaf or mainstreamed day schools).

In brief, this study was not using random sampling. This study made no attempt to test hypothesis statistically and made generalization. However, this study was designed carefully to collect data empirically to provide an estimation of Deaf people and sign language in European Union.

A Survey in U.K.

In 1996, U.K. National Deaf Children's Society (NDCS) conducted a survey of languages used. All special schools and units were asked to specify their communication policies (Baker & Knight, 1998:81). (Unit is a general term used by NDCS to cover a range of degrees of integration of hearing and deaf/hearing impaired children). Their response is shown in Table 2.4.

Table 2.4   Communication policies of U.K. special schools and units.

Total special schools/units	TC	Oral only	Bilingual	Declined to specify
31 special schools	**15 (48%)**	7 (23%)	4 (13%)	5 (16%)
468 units	**104 (22%)**	129 (28%)	15 (3%)	220 (48%)

Source: Baker & Knight, 1998:81

I notice that 16% of the special schools and 48% of the units had declined to specify themselves

A questionnaire was sent to all 15 schools and 104 units which specified a TC policy to ask impressionistically the extent of their use of four different communication options with deaf and hearing-impaired children. The results are shown in Table 2.5

Table 2.5:   Stated extent of use **(%)** of four communication options in schools and units specifying TC policy

		Never	Occasionally	Regularly	Always
Spoken Eng Without sign	Schools	30.8	53.8	15.4	-
	Units	9.7	33.3	47.2	9.7
BSL Without voice	Schools	15.4	15.4	69.2	-
	Units	29.2	38.9	29.2	2.8
Sign Supported English (SSE)	Schools	7.7	-	**76.9**	15.4
	Units	6.9	6.9	**63.9**	22.2
Signed Eng (SE)	Schools	15.4	23.1	46.2	15.4
	Units	37.5	34.7	23.6	4.2

Source: Baker & Knight,1998:82

This Table suggests SSE was a very frequent mode of communication adopted in U.K. ten years ago (76.9% of the TC schools and 63.9% of the TC units using SSE regularly).

A Survey in U.S.A.

In 2004, "American Annals of the Deaf" sent questionnaires to all the States in North America and U.S. Territories to ask about programs and communication

method in the classroom. For examples, the author asked two special schools and

12 schools with programs of Colorado State and two special schools and 25 schools

with programs of Connecticut State to report their communication methods. The

questionnaires were not attached to the Journal. (To interpret this survey, more

information is needed but it is not available practically). However, the author listed

the results of the returned questionnaire in a table form (American Annals of the

Deaf, 2004: 133-166). As illustrations, from the table, I know "Colorado school for

the deaf and blind" adopt ASL as communication method, Rocky Mountain Deaf

School of Colorado adopt Bilingual method… I add up all this special schools and

schools with programs. I compiled and summarised the information as below:

Table 2.6: US mode of communication (By communication approach)

	No. of centers or schools	A/0	CS	ASL	TC	Bi	Other
All regions	608	414	81	335	473	152	31
		68%	13.3%	55.1%	77.8%	25%	5.1%

Legend: Auditory/oral (A/O), Cued speech (CS), American Signed language (ASL), Total
communication (TC) using Sign and speech, Bilingual education (Bi) using ASL & English

Notes: More than one communication approach may be adopted by a school or centre.
As a result, the sum of the numbers in the columns is greater than 608
Source: American Annals of the Deaf, 2004, 149, .2

The data in the Table 2.6 show the language used for the deaf student in the classroom of that 608 centers and schools varied. This table likewise shows absolute figures and percentage of communication approach adopted in that 608 centers and schools. The data in the Table reflect it is likely that TC is still the most popular approach in the deaf education (77.8%). It is also estimated that 25% education settings in U.S.A. have provided Sign Bilingual Education programs to deaf students. What is the situation in China?

Some Studies in China

Is Sign Supported Chinese (SSC) a frequent mode of communication in the classrooms of schools for the deaf? It is obvious to think SSC is the frequent mode based on the quotation from PRC State Education Commission in Section 1.1.

> *Using **Hanyu** as a medium of instruction in the classroom is a **guiding principle**; Hanyu Shouzhiyu method (Chinese Manual Alphabet finger spelling), Chinese Sign Language (CSL), and written form of Hanyu may **play supporting role** for teaching and learning based on the need of subjects teaching.*
>
> (State Education Commission of China, 1993 cited in To, 2001)

Is there more information, such as language use at home, language use with parents and with hearing teachers? Is there any supporting evidence?

Conducting a literature review, I have found only a few references in China. In addition, in China some literature especially the journal papers in the field of deaf education are usually short (1 to 3 pages). If more information (in terms of number of papers in the field and number of words in each paper) and statistics had been found practically, I would have interpreted them more deeply.

Nevertheless, the following tables are an attempt to fit some small pieces together to reconstruct a complicated jigsaw puzzle again. I hope these tables may reflect "reality" a little bit more than other literature reviews done by other studies before.

From literature refers to books, Ye, Liyan (1990:35) clearly defines the sign language used by deaf community as *hanyushoushiyuyan*. (The concept of *hanyushoushiyuyan* is Natural Chinese Sign Language) (N-CSL). Ye was a language teacher of a "school for the deaf". He wrote his book after he had accumulated the understanding of language teaching issue for "school for the deaf" through his practice (Ji, 1990:1). Ji Peiyu (1993:89) suggests, "N-CSL gets the upper hand over other mode of communication in classrooms in the schools for the deaf..."

Ji's opinion is confirmed by Gu,D., a scholar working in Beijing Normal University. Gu (1995:155) states, "the deaf students communicate to each other by using CSL mainly …"

Based on the qualitative data (the quotations), I compiled the information (forming nominal data) (mainly from Ye's book) to form a table to make a suggestion as follows:

The table suggests the mode of communication in the Schools of Deaf about 1990s as follows:

Table 2.7   Mode of communication in Schools of deaf people in PRC

	Hanyu	*Hanyu* / N-CSL	N-CSL
Teachers / Teachers	√		
Teachers /Students		√	
Students /Students			√

(Adapted from Ye, 1990:88-90)

From literature refers to journals, Yuan Yin, a lecturer of Liaoning Normal University, conducted a case study in a School for the deaf in 2002. She investigated 36 deaf students ranging from Grade 7 to Grade 8. The students was asked to choose their communication methods (manual, oral or TC). Yuan reported that 69% of the students made the choice of TC (Yuan, 2002:40). Therefore, these descriptive statistics suggest that the majority of deaf students use both Hanyu and

natural sign language. Yuan's case study was rewritten to a four-page journal article which is short for reviewing critically (The original report is unavailable). The reason I mention this case study here is because the study was conducted by a scholar working in a reputable university and the article was published by a reputable journal. This gives therefore in my view a shallow but reliable understanding and is better than no understanding when no other means are available.

Yu Haixia, also from Liaoning Normal University, conducted a survey in 2002. The subjects of his study were 34 teachers working in Schools for the deaf. The results are listed as follows:

Table 2.8:   Perceived mode of communication in some
Schools for the deaf from teachers of the schools

	Manual	Oral	TC	Other
Ideal approach for schools for the deaf	3%	3%	92%	2%
Suitable approach for schools for the deaf in China	3%		97%	
Approach expected by your students	15%		85%	
Approach expected by your students' parents	3%	30%	64%	3%

Source: Yu Haixia (2002:16)

I reported this survey for the same reason as above (Yuan's case study). (A shallow but reliable understanding and is better than no understanding). Yu's survey was reduced to a three-page article in order to be published in a journal and the original report is unavailable.

From literature refers to master thesis, Gu (2005:17) conducted a survey in eleven cities of Shandong province. Gu (2005:4) explained that her methods were survey eleven cities in one province by sending questionnaire; then she calculated the percentage of the "preferred language use" from the data collected from these eleven cities. The methods adopted for the master thesis by Gu were rather unclear. She used only 125 words (half page) to describe her methods. I have no way to study whether this survey is strong or weak on validity and reliability. In other section of Gu's thesis, she told the returned questionnaire from the deaf students was 104. (She did not tell how many questionnaires she had dispatched but she did tell the students selected ranging from Grade 7 to Grade 9).

This unpublished thesis has an attached questionnaire which consists of 30 questions. In question 10 and question 11, respondents were asked the hearing status of their father and mother. It could be better if she told how many deaf students with deaf parents were her respondents.

Table 2.9   Language choice for the Deaf students (%)

	Spoken form	Manual	Spoken & manual	Written form
Communicate with parents at home	24.2	9.4	37.2	34.4
Communicate with teachers in school	3.5	**29.2**	60.2	7.1
The favourable communication method you like the teachers while teaching	2.7	15	73.5	8.8
The favourable communication method you like to use with classmates	4.5	**60.5**	31.4	3.6
Communicate with hearing people outside schools	19.5	6.8	23.7	50

Source: Gu Li-xia (2005:17)

Gu reported, "the average ratio of deaf teacher to hearing teacher of the schools for the deaf in the eleven cities is approximately 2 %" (Gu, 2005:18). It could be better if she could discern the hearing teachers and deaf teachers rather than just using the term "teacher" in the fourth column of the table 2.9. Nevertheless, this table provides a rough estimation of Mode of communication at home and in schools for the deaf in a province in 2005. (No generalization is recommended due to the small sample size).

To conclude, it is likely that the majority of deaf students tend to communicate by signing both in Europe, USA and China according to the literature discussed in this subsection 2.4.2.

There was a change. The new curriculum for deaf people (provisional) in China was implemented in spring of 2007 (Da, 2007:4; Wang & Zhao, 2008:4-7). When the new curriculum was announced, the Ministry of Education of China does not require mainly use of oral form Hanyu that was stipulated previously. There was an opportunity for the deaf educators to make use of Natural Chinese Signed Language as a medium of instruction.

2.4.3 *Using Natural sign language or Sign Supported Language or both*

In 1972, Swedish National Board of Education wanted to know whether signed Swedish could serve the communicative functions. Bergman was employed to study signed Swedish (information cited in Mashie, 1995:118). Bergman analyzed signed Swedish and knew there was not enough syntactic and morphologic information in the visual output of signed Swedish to make it like other languages. From 1975 to 1994, she studied Swedish Signed language and found that Swedish Signed language had all the properties of a language (Ibid., 1995:118-119).

In 1989, Hansen in Denmark studied the Signed language used by deaf Danish. Her results showed that Danish Signed language is a language in its own right (information cited in Mahshie, 1995:119). With the supporting and encouraging research into the natural sign languages by sign linguists and Deaf Studies Research units such as Stockholm University, Durham University and Bristol University, sign language research raised the status of deaf people and their language to some extent as Ahlgren, Bergman and Brennan stated (1994:viii).

Gradually, some European countries Sweden, Denmark, Netherlands have abandoned sign systems in favor of the natural signed language (NATU-SL).

Some researches studying Signed English systems in US paralleled the European studies generating findings that Signed English systems are incomplete and unnatural. For example, Baker-Shenk (1987:200) pointed out that "manually coded English" changed the ASL signs unnaturally and was commented by Deaf adults as "odd-looking". Their conclusion is Signed Languages are poor but natural signed languages (NATU-SL) are better but there are different voices.

Mayer & Wells suggest that MCE would allow deaf children to gain an insight into the spoken form of English. (Mayer & Well, 1996, cited in Knight & Swanwick, 2002: 84). It is likely to promote MCE for communicating with hearing

people and in the development of literacy. (Mayer & Well, 1996, cited in Pickersgill 1998:93).

Some studies disclose that MCE is good as an intermediary between ASL and written English in the writing process. (Mayer, 1999; Mayer and Akamatsu, 2000 cited in Knight & Swanwick 2002:94). Menzel (1996) argue signed language is unquestionably an important tool for pre-lingually deaf children but any signed language used should be one of the several systems based on English-word-order, (i.e. SEE-I or SEE-II) and should not be ASL. Pickersgill (1998: 94) states:

> The debate about the use of sign support systems within a sign bilingual
> approach is ongoing; according to the rules of language separation,
> manually coded English does not have a place.

However, using MCE as medium of instruction for children with natural sign language as first language is not recommended. If there are some mixed groups of deaf and hearing children, Pidgin Sign English (PSE) or MCE may be used. Also hearing parents can use MCE in initial stage to communicate with their deaf children (Ibid: 94).

Which signed language is adopted in the experimental projects in PRC? Once again, I am sensitized by the literature review on "Natural sign language or Sign

Supported Language". These portions of literature guide me to refine and extend the Research question 1.2 and Research question 2.3.

In short, the study of the literature related to Signed language of Section 2.4 provides background and context for me to understand SBE models. Doing the literature review, three sub-questions have arisen: Question 1.2, sub question 1.2.1, sub question 1.2.2, sub question 1.2.3 and sub question 2.3.2 (see section 2.7)

Natural Chinese Signed language (N-CSL)

Before continuing with the question of which languages to use in schools, it is necessary to consider N-CSL: When did N-CSL emerge? What is CSL? Is there any widely accepted definition of CSL in China?   Is N-CSL or CSL a language? Was there any research study about N-CSL and CSL?   Literature about N-CSL and CSL is limited but there is useful work by Gong (a Chinese linguist), lecturer of Fu Dan University in Shanghai.

N-CSL is the visual-manual code system used habitually and naturally by Chinese deaf people (Gong, 2004c:16). Deaf people have been using N-CSL. Zhang (2002:285) deduces that the history of N-CSL is as long as the history of human being.

CSL is a very confusing term in China. In the field of Deaf Education in China, the typical definition of signed language states that "CSL includes Signed Supported Hanyu and finger spelling". (Hanyu is the language of Han people- the majority of Chinese. Hanyu is the synonym of Mandarin. See Glossary for details). Gong, claims that this widely accepted definition is problematic from linguistic perspective. He illustrates that the meaning of word "China" (if using Scheme for the Chinese phonetic alphabet) is Zhong Guo, in China, someone may use fingers to spell ZG to represent China. Actually, ZG is a sign but is not signed language in this case. Zhang (2002:298) points out that it should be studied whether CSL is N-CSL or Signed Supported Hanyu. There is no answer at that moment. Also, whether CSL or N-CSL is a language is still debatable in China. (Signed Supported Hanyu will be discussed in the next section).

N-CSL has varieties. (One is Beijing dialect. The other is Shanghai dialect. Hong Kong dialect belongs to the family of Shanghai dialect). China National Council for the Deaf (CNCD) attempted to standardize CSL in 1990. Two Vocabulary books were published. The name of the first book is 《Chinese Signed language》and the name of the second one is《Chinese Signed language: serial edition》. 《Chinese Signed language》combines Beijing dialect and Shanghai

dialect. According to "China National Council for the Deaf" (CNCD) (1990: iii), there are 3330 sign characters. Many deaf people do not like 《Chinese Signed language》, nevertheless, the signs listed in 《Chinese Signed language》may be the standardized signs in PRC in the future(China Disabled Person Association,2006b).

Interestingly, N-CSL and CSL, like other SL, are ignored by many experts and educators in China. For examples, "Theory of Language", a text book for the higher education in PRC, with 435,000 words, written by Peng & Li in 2003, does not mention any words and any concepts about N-CSL and CSL. "Linguistics: An Advanced Course Book", a book for the postgraduates in PRC, with 731,000 words, written by Hu Zhanglin & Jiang Wangqi in 2002, mentions nothing about N-CSL and CSL.

Many hearing people think N-CSL and CSL are only a set of gestures, some believe N-CSL and CSL are communication methods and are not languages. Some say N-CSL and CSL are only primitive languages. Therefore, it is not surprising to know many Chinese educators do not recognize signed language is a full language. However, Ye, an educator, points out that N-CSL is a language (1990:37). Handshapes, Location of hands, Movements by hands are the cheremes (like morphemes of spoken language) of the sign characters of N-CSL. N-CSL has verbs,

adjectives, adverbs, nouns, abstract nouns, idioms, phases, linking characters (linking words), such as, *if, unless, though, because*, etc. N-CSL has grammar (Ye,1990:39).   N-CSL has complex inflectional morphologies. Some verbs in N-CSL such as the character *help* show person by the use of specific movements: When you sign, *I help you,* the movement is made away from the signer; when you sign *you help me*, the movement is made towards the signer (Ye,1990:43). For this aspect, N-CSL looks like BSL (Brennan and Brien, 2000: 543). Gong, Qun-hu (2005:1) asserts that the findings of many research studies in western countries have proved Natural Signed language (NATU-SL) is a language. He advocates N-CSL is a full language.

To conclude, what is N-CSL and CSL from literature? What are the status and role of N-CSL and CSL? It is debatable. Some say CSL includes natural Chinese signed language (N-CSL) used by deaf community, finger-spelling and Signed Supported Hanyu (also known as Manually Coded Chinese). Some say only N-CSL is natural signed language. Different people have different definitions of N-CSL and CSL. I will not define these terms. I will look for the *emic* meaning. What are the *emic* views from the SBE organizers? What kinds of languages are used in the six SBE experimental projects? The review of the literature helps me

refine and extend these research questions. For instance, Sub-research questions 1.2.1 and Sub-research questions 1.2.3 are extended from the adumbrated questions (see Section 0.5 and Section 2.7)

2.5 Sign Bilingual Education

2.5.1 Reasons for development of Sign Bilingual Education

We have seen that there has been much debate on modes of communication in education for deaf children but a new departure is to consider the option of bilingual education with Natural Signed Language (NATU-SL) fully recognized as a medium of instruction.

In this subsection, I study briefly what are the reasons behind the phenomenon -the rise of Sign Bilingual Education (SBE) in many countries. Are the reasons similar to Mainland China? What are differences and what is the same? Through the study of this type of related literature, I am sensitized and I may identify the key concepts and formulate and refine my research questions.

From the literature, I see the rise of SBE is caused by the following incidents and assertions.

First, in the 1970's, University and centers set up research programs in sign language in USA, UK and Denmark. It was found that Sign languages are

linguistically complete languages with their own structure and grammar. The recognition of signed languages meant that it is possible for the use of signed language in education of deaf children (Bergmann: 1994:84).

Second, there have been not a few research studies showing the deaf students with deaf parents (dsdp) were more successful academically than deaf students with hearing parent (dshp). Deaf children communicate with their deaf parents usually by signing. This led to a logical attribution that signed language could be beneficial in the education of deaf children (Gregory, 1996:19).

Third, it is often asserted signed language is the first choice of deaf students and deaf adults. In the Chinese context, some research studies support this assertion (see above Table 2.8 and Table 2.9 i.e. (Yu and Gu) as examples). If this assertion can stand, then logically it would lead to monolingual education in signed language, but this is unlikely to happen but it would lead to Sign Bilingual Education gradually and naturally.

Fourth, the development of cognitive theory of bilingualism is crucial. In late 1970s, Cummins (1978) suggested children's L2 competence is partly dependent on the level of competence already achieved in their L1. This is the well known Developmental Interdependence hypothesis. This hypothesis triggers the notion

that the more developed the signed language may be the easier to develop the hearing language. This notion is very exciting for some deaf educators in China.

Fifth, educational attainments of many deaf students were very disappointing in many countries. In a seminal study, Conrad (1979) pointed out that deaf students left their schools with reading ages of nine on average. An empirical study about reading and mathematics SAT performance by deaf students from Allen showed the math computation abilities appeared to plateau for deaf students at about seventh grade level (SAT scaled score 665). Allen (1986, cited by Marschark, 1993:65) found deaf children's reading abilities continued to lag behind those of hearing age-mates over a decade (from 1974-1983). The last point just mentioned is very essential. Chinese deaf educators have the same concern. Fung (2006) states, "*There are many problems in the deaf education for a **long time**, such as inefficient learning, communication difficulties, imperfect effectiveness of teaching and so on.*" (My emphasis) Knowing SBE may improve the quality of deaf education, some Chinese educators show great interest in it.

In brief, few educators in the field of deaf education do not realize deaf students tend to learn/ acquire natural sign language. (In the past, this became one reason to ban the use of sign language in every corner of a school in China). Also,

few educators in the field of deaf education do not realize the unsatisfactory academic achievement in China. Therefore, SBE has some roots in Chinese deaf education.

2.5.2   *Perspectives and key concepts of Sign Bilingual Education*

There is a growing awareness that deaf persons can become bilinguals. Some concepts and terms for the bilingual education field will appear in the literature related to deaf education. In 1993, a conference on the topic of bilingualism in deaf education was held in Stockholm organized by the World Federation of the Deaf (WFD) and the Swedish Deaf Association. The titles of the papers represent some key concepts and the debatable issues in the field of SBE. The following are the contributors and their papers: Andersson wrote "deaf people as a *linguistic minority*"; Ahlgren wrote "sign language as the *first language*"; Bergmann, teaching sign language as the *mother tongue*; Skutnab-Kangas, *linguistic human rights*-A prerequisite for bilingualism. (Ahlgren & Hyltenstam, 1994). (see my emphasis of the highlighted terms).

Johnson, Liddell and Erting (1994) suggested twelve guiding principles as the underlying philosophy of a new approach of bilingual education for the deaf students in USA. Here, I only list three principles:

- The *first language* of deaf children should be a natural sign language (ASL);
- the acquisition of ASL should begin as *early* as possible in order to take advantage of *critical period* effects;
- sign language and spoken language must be kept *separate* both in use and in curriculum.

On the one hand, we can see the linguistic perspective on deaf education. On the other hand, we can see the concepts of deaf education develop in a new direction.

In 1996, Baker proposed a new viewpoint about the deafness. Baker (1996:242) argues that:

> Deafness is regarded as a **difference**. Deaf people are regarded as owning sign language which is a full language in itself, grammatically complex and capable of expressing as much as any spoken language. Deaf people are regarded as a **linguistic and cultural minority** that needs preservation, **enrichment** and celebration…

> (my emphasis)

Baker suggests using an **enrichment model** where signing is allowed as the primary language rather than using deficit models of education that submerges the deaf students in the language and culture of hearers.

The above paragraphs have shown some key concepts and perspectives of sign bilingualism. It is also important to introduce the emerging concept of "right". Grosjean wrote a short text, which was translated to different Chinese versions by Chinese scholars in recent years. In the first paragraph, it says:

> Every deaf child, whatever the level of his/her hearing loss, should have the **right** to grow up bilingual. By knowing and using both a sign language and an oral language (in its written and, when possible, in its spoken modality), the child will attain his/her full cognitive, linguistic, and social capabilities.

(Grosjean, 2001:110)

Grosjean expresses that "right to grow up bilingual" is the result of much reflection over the years on bilingualism and deafness.

In 1996, Baker synthesized the literature and put forward twelve suggestions about Sign Bilingual Education (see Appendix F). To compare with Johnson et al.'s 12 guiding principles, Baker's suggestions are more practical in nature. For instance, the suggestions of the employment of native sign language teachers, the supply of trained personnel in deaf bilingual education, staff pre-service education

programs, in-service education and certification and funding, deaf teacher (teachers who are deaf themselves), parental involvement are the notions that are proposed by Baker (Baker,1996:246). Furthermore, Gregory (1996:72) argues that if SBE is put into practice, deaf children should have the chance to acquire natural sign language as early as possible Therefore, the concepts of early intervention and the facts of sign bilingual education for children with early children emerge and Gregory raises more practical issues such as how to develop bilingual curriculum, to develop assessment methods for bilingual children, to develop specific teaching methods for the teaching of sign language and to consider the use of voice (Ibid:73).

The languages of deaf people ⟵⟶ The languages of hearing people

Sign languages   contact sign (or pidgin sign English)   spoken and written languages

BSL, ASL, French sign language ⟵⟶ (spoken) English, (spoken) French

Source: Knight and Swanwick (1999:82)
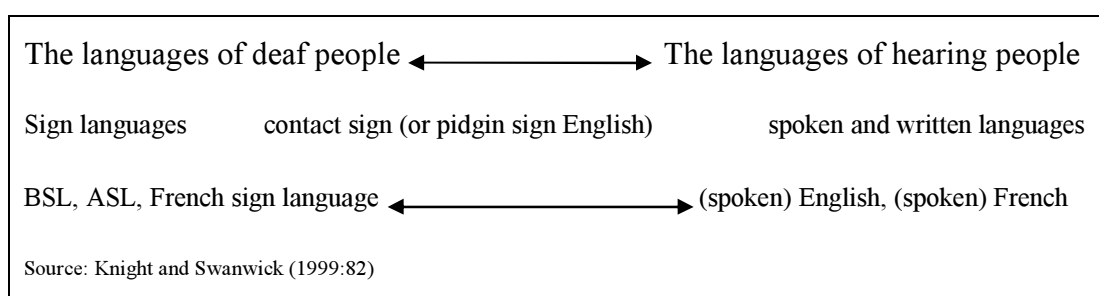
Figure 2.1:   Language mixing in terms of "a language continuum"

At the operating level, contact sign (see above figure), code mixing, code switching (see glossary of terms) are other concepts identified. Knight and Swanwick (1999) who borrowed the concepts of variation from linguistics, describe the relationship between sign language and English and the contact varieties in the centre as the above figure.

However, the use of "a language continuum" (Knight & Swanwick, 1999:82) to relate these languages to each other is somewhat misleading since they are each different from each other.

Besides the linguistic aspects, other crucial aspects are the teachers and teaching methods issues.

McAnally, Rose, and Quigley (2004:209) described some specialized language programs that have been developed and implemented for children who are deaf. They stated that ASL-English or Bilingual-Bicultural (BI-BI) education programs with instructional strategies have been designed and established in a variety of settings in USA (Ibid.,:213). To take one example, McAnally, Rose, and Quigley (2004:214) illustrated a team-teaching approach (adopted in a BI-BI program) where a native ASL teacher and a native English teacher work together in the same lesson in the same time (this arrangement may provide an ASL-English Bilingual instructional environment according to McAnally, *et al*) as follows:

First, ASL teacher presents the objectives of the lesson to the students and discusses what they will be learning in the class.

Second, the ASL teacher then opens each lesson with an advanced organizer and conducts two or three instructional activities focused on the lesson objective.

Throughout the first part of each lesson, the English teacher supports the instruction through the presentation of key words and concepts in print and through visual representations.

Third, the second part of the lesson is led by the English teacher using spoken English, a pidgin sign English, and print, with the ASL teacher providing support and reinforcement for concepts and skills acquired earlier.

It is still too early to say this practice is good or not because MacAnally, *et al* did not provide adequate information (half page description only) about that BI-BI program. Further, original source for this BI-BI program adopting team teaching cannot be located. This team-teaching approach program is a kind of Bilingual Education perceived by McAnally, Rose and Quigley. This BI-BI program could be strong form or weak form which depends on the goals- assimilation or pluralism. Practically, this program may be a possible way to start the ASL-English Bilingual Education program especially when the Sign Bilingual Education organizers cannot find a teacher who is competent in both ASL and English. To conclude, I should bear this team teaching concept in mind for my thesis.

Another example comes from Pickersgill who proposes sign language and English can be separated by topic, time, person or place but she does not oppose

the concurrent use of both languages (1998:93). This is a concurrent approach (Jacobson, 1990:8) of using languages in the classroom. Second, Pickersgill agrees Manually Coded English system (MCE) might have a place in the Sign bilingual education classroom. (Ibid.94). Pickersgill (1998:94) claimed, "… MCE may be used with mixed groups of deaf and hearing children in order to provide both groups with some, if not full, access to the content of the communication."   (MCE is a system using sign from natural sign language but in the word order of English, see glossary for details).   Using two languages with different modalities as media of instruction in a classroom and in a same lesson are creative. We need many studies to evaluate this arrangement in the future. Both "team-teaching" approach and "MCE-has-a-place" approach are novel. We must wait and see. They are not suggested as sign bilingual education principles by Johnson, Liddell, and Erting, and even Baker. These suggest there are 'gap' between the original concepts from sign bilingualism pioneers and novel concepts generated in the front practically.

For my research study, I may scrutinize the collected data to see any "team-teaching" and "MCE-has-a-place" arrangement in PRC. I have a hunch that adumbrated type of Bilingual Education may be identified from the data collected in PRC.

To sum up, the purpose of this section was to present the concepts used to analyze the practical level of SBE. These concepts are basically developed from two bodies of knowledge: research of signed language and bilingual education. It is clear that there are differences in the approaches taken and proposals made. It is not the purpose here to suggest which is the 'best', but to be able to draw on these concepts in the analysis later.

2.6   Empirical Research Studies on Sign Bilingual Education in China

In this subsection, I briefly review four related literature on Sign Bilingual Education in China firstly. Then, I scrutinize three serious, empirical base and theme-closely-related dissertations and paper on Sign Bilingual Education in China.

The first two are written by Callaway (1999; 2000) which are important. Her works "Deaf Children in China" and "Considering sign bilingual education in cultural context: a survey of deaf schools in Jiangsu province, China" provide data per se. For example, the section of "Bilingual programmes for deaf children in China" reflects many facts of the first bilingual class at Nanjing School (1999:45). Also, her works provide historical background for my study, especially in the

period of 1996-1998. Callaway may be credited with the introduction of Sign Bilingual Education in China.

In the early 1990s, Sign Bilingual Education in China was novel. Callaway, a British medical doctor started her research on "Deaf children and their families in China" in 1993. Her view on deafness has a cultural rather than medical perspective. In October 1994, she visited Nanjing to collect her data. Callaway made friend with personnel from Nanjing School for the deaf, Amity Foundation (a Chinese NGO) and officials from Bureau of Education of Nanning city. During her visits in 1996, 1997 and 1998, on one hand, she collected data by interviewing, and on the other hand, Callaway and her colleague introduced concepts of sign bilingualism to deaf schools in Jiangsu province through a series of contacts and exchange visits between Chinese and British scholars (Callaway,1999). For example, in March 1998, there was a three-day training session on bilingual education held in Nanjing. Principals, teachers and administrators from 24 of the 72 deaf schools in Jiangsu attended the training session. The trainers were Callaway and Mackey, who was the head of Frank Barnes School for deaf children in London (Ibid:35).

Callaway's works identified some features of the sign bilingual education in Jiangsu:

1) Nanjing Deaf School has a deaf teacher who provides storytelling in sign language and instruction in sign to a small group of profoundly deaf children: the children also have lessons with a hearing teacher to give them speech training.

2) Nine children selected to form the first bilingual class, which began in March, 1996, all had severe or profoundly hearing losses (more than 90-95 dB).

3) Sign is used extensively, in sign-supported Chinese, as an educational tool to enable children to learn Chinese and access other subjects in the deaf school curriculum…

(Callaway, 1999:45)

According to her works, the features of the first sign bilingual education in Nanjing are identified as follows: 1) the presence of the Deaf teacher; 2) a team of teachers (one deaf, two hearing); 3) the use of story telling; 4) instruction in sign. The 5th feature is the students are preschool-age profoundly deaf children, and the 6th feature is sign-supported Chinese (not natural Chinese sign language) is widely used.

To sum up, Callaway is one of the pioneers and an advocator of sign bilingual education in China. Her research works provide concepts and perspective to further research studies.

Another significant researcher is Kathryn Johnson, who started her Ph.D. program in 2000. She faced difficulty to find data about Deaf education in China. Johnson wrote,

> "Three years ago, when I began my efforts at attaining knowledge of deaf education in China…I was unable to locate any information on this topic."

<div align="right">(Johnson,2003: 329).</div>

What Johnson could find were "a book was published by Alison Callaway on Deaf Children in China, and a few articles have been written about student teaching experiences of a few students from Gallaudet." (Ibid:329).

Johnson collected data by using new technology-Internet and web sites since 2000 and although there was little of no new historical background, current context, theories, models, concepts related to sign bilingual education in China, her work helped me indirectly. I located Internet-based literature from her reference, such as "New institute to train more teachers for deaf children" (2000, July 5), *People's Daily Online* (Retrieved on January 5, 2002 from http://english.peopledaily.com.cn / 200007/ 05/ print20000705_44778.html), Human Rights Library- *Declaration of the rights of the child*- U.N.Doc/A/4354 (1959)(Retrieved on February 20,2002 from http://www1.umn.edu/humanrts/ instree/ k1drc.htm).

Though Johnson attempted to study deaf education in China, she did not have chance to study the rise of the sign bilingual education in China. However, there are valuable aspects of her work.

If Johnson had typed in "sign bilingualism PRC" as keywords to "All University Libraries in Hong Kong" (a network linking all the University libraries catalogues), she would have found one record (one paper written by To, S.). In 2001, To, Samuel submitted his course paper "Sign bilingualism in PRC: an alternative approach to the education of the profoundly hearing disabled students" as an assignment.

Samuel To conducted a case study in a School for the Deaf to collect data by interviewing. He compared data from the literature with the data collected in interviews to understand deaf education in PRC. Reviewing To's work, approaches, perspectives, goals of deaf education, rationales and model of sign bilingual education were discussed. All these concepts (in terms of perspectives, goals, model, etc) are valuable. Based on the deduction of Baker's notion about bilingualism for deaf children, To identifies the existing deaf education in PRC is submersion education. He proposes the immersion education for hard of hearing

children and sign bilingual education for profoundly deaf children. Samuel To did not have chance to visit sign bilingual class when he wrote his course paper.

The last purpose of literature review is to scrutinize the previous studies in order to identify the link to my study and find any gaps in them. A search of journal articles from "China Journals Full-text Database" shows 834 articles are related to deaf education since 1990. A search of dissertations from the "Chinese Dissertations Database" shows 14 Master theses and 2 Doctorate theses are related to deaf education since 1990. However, there are only a few research studies on Sign Bilingual Education in China. For example: A study on influence of parental rearing styles on self esteem (Wan Lili & Zhang Fujuan, 2008:18-23).

Finally there is the Wan Fang Data and China Journal Net (CJN). A literature search shows two master theses written by Chinese graduates became available through the Wan Fang Data and China Journal Net (CJN). These deserve attention as they are indications of new research interest in China. The three authors of these studies are: 1) Sun Ji-hong, who completed her research on problems and counter measures in administration of a deaf bilingual education school in 2004; 2) Gu Li-xia, who completed her study on the language teaching for deaf people: present situation and counter measures in 2005; 3) Yang Jun-hui who published her article

on Chinese Sign Language/ Chinese bilingual experiences of deaf children and adults in 2008 (Yang,2008:297-331).

Sun Ji-hong

Sun explains the key terms of bilingual education, first language and second language, natural sign language, signed support Hanyu, grammatical sign language, hard of hearing, deaf education and sign bilingual education quite well. She makes it clear that bilingual education means the use of two languages as medium of instruction (Sun, 2004:2). She defines the major concepts of Chinese SBE clearly that "the first language of deaf people is signed language; the first language includes the Chinese natural sign language and the grammatical sign language; the second language of deaf people is Hanyu (both written and *oral forms*)" (my emphasis) (Ibid:4).

She has one research question which is explicit: Administration problems and counter measures of a SBE school but her study can be improved if she can refine and extend her research question further.

In graduate schools of China, literature review is a kind of research method. Sun adopted literature review, participant observation, survey, unstructured interview (first stage of data collection: November 2002 to December 2003),

structured interview (second stage of data collection) as her research methods. Her data collection by unstructured interview lasted for one year. It is likely that she had the opportunity over time to diminish the Hawthorne effect and to avoid observer bias. She said she was an insider when she acted as participant observer and was an outsider when she conducted the unstructured interview (Ibid: 6). However she did not say what were the actions she had taken as an outsider sometimes and as an insider sometimes. Sun ought to explain more about her methods of data collection. Sun was invited by a NGO to write a stage report about the SBE experimental project in 2003. She said she obtained seven years of records about the SBE experiment from the NGO and from the school for the deaf since 1997. These records (primary data) include SBE students' files, individual learning plans of the SBE students, and home work assignments of the SBE students. Sun said, "These records provided information for writing and also enhance reliability and relatively accurate facts". (Ibid:7). It is likely but not made explicit that Sun triangulated her data with these seven-year records, to improve the trustworthiness of her study.

In April 2004, Sun conducted a small survey. She collected 36 questionnaires from the parents of that SBE class. The subjects were 9 parents of SBE students

and 27 parents of oral-class students. The findings of this survey (see Table 2.10) show all the parents hope their children can speak. Seventy five percent parents believe oral training has positive effect on cognitive development.

Table 2.10: Parent's attitude towards oral language (OL)

	OL helps written Hanyu (%)	OL helps cognitive growth (%)	OL helps Assimilation (%)
Yes	77.78	75	86.11
No	Nil	nil	Nil
Not clear	22.22	25	13.89

Source: Sun Ji-hong (2004:20)

After the survey, Sun interviewed parents and teachers further.

Sun's research methods are appropriate and the arrangement (survey, interviews, in-depth interviews) are sound and logical. Nevertheless, Sun did not explain enough her ways of analyzing qualitative data. For instance, in page 16, Sun quoted a teacher's essay that a SBE student released her pet bird after a lesson… her teacher and classmates praised the action (Ibid:16) but there is no clear point made about this Also in page 16-18, Sun wrote, "Parents see the hope" as a subtitle. Then, Sun listed ten quotations from parents of SBE children. The lengthy quotations totaled 1600 words. Sun had overuse of the quotations and did not explain what the connection between the quotations and the subtitle are. If Sun

used her words more to explain every quotation, the concepts will be clearer. Despite these problems however, this study is acceptable and useful.

The contributions of this study are the findings and the implications about deaf teacher, teacher training and teacher qualification, conflict between individuals and conflict between groups, parental choice and source of students to the SBE experiments. What will the future of SBE classes be if only a few parents are willing to let their children attending SBE experimental classes? The survey (see table 2.10) shows the future recruitment of deaf children for the SBE classes is a serious question for NGOs.

Gu Li-xia

Gu Li-xia, a graduate of Tianjin University, worries about the quality of deaf education. She states the average academic results of the deaf students lags 3 to 4 years behind their hearing peers with the same age. She presumes "Total communication" approach for the deaf education causes the poor quality. The major issue which concerns Gu Li-xia is the communication of the deaf students. She intended to study the present situation of teaching language for deaf people first. Then she proposed sign bilingual education as a counter measure. Her

methods were survey first, then "literature review method" second. (As mentioned above literature review is a kind of research method in the graduate school of China). Gu selected some Schools for the deaf in 11 cities in Shandong province as her sample and designed a questionnaire for deaf students (grade 7 to 9).The returned questionnaires are 104 (students).

Gu argued that students with hearing loss under 70 dB could be rehabilitated through the hearing aids and training (2005:16). The result of her survey shows over 70% deaf students selected from the 11 cities had hearing loss over 71 dB. Therefore, these deaf students could not be rehabilitated effectively through oral training (2005:17). Gu also constructed tables from the data of survey to show the language choice of deaf students, signed language used of deaf students, etc. Her goal is to support her claim of the problems of present teaching language in China by the survey data. However, her study about Sign bilingual Education in chapter Four and Five are not empirically based. Instead, she proposed many notions by deduction after studying the literature from Europe and North America. The terms she used are: status of sign language, sign language as a mother tongue, sign language as a medium of instruction, linguistic rights, deaf culture, participation of deaf teacher, research and training of sign language, etc. Gu's study is an

advocate of SBE line the NGOs we shall study and her study introduces basic concepts of SBE to Chinese people. However, it is not an empirical study.

Yang Jun-hui

Yang was born in Mainland. She became deaf in her early childhood. She was a teacher of the fourth Beijing Schools for the deaf. Her study on Chinese Sign Language/ Chinese bilingual experiences of deaf children and adults appeared in December 2008. This study is not a formal thesis, and the topic is too broad. She is too ambitious to discuss languages and deaf education in 30 pages. The structure of this study suggests it is a simplified version of a project or a mixer of different papers she wrote before.

Nonetheless, Yang (2008:297) explains quite clear the key concepts related to Sign Bilingual Education at the beginning.   In the first four sections, Yang introduces a) the Chinese Sign language (CSL) including CSL standardization, CSL grammar, CSL and Deaf culture; b) spoken/ written Chinese and deaf learners including modern Chinese, deaf students' reading and writing; c) the five periods of teaching languages in schools for the deaf in China: manual method, oral method, total communication method and sign bilingual education method.

In the fifth section (about 350 words), Yang discloses her methods of data collection are: a) participant observation in two SBE programs in November 2000; b) observation in bilingual schools in the summers of 2001, 2002, and 2004; c) interviews with 30 deaf adults in 2005 (some were video-taped); d) survey (73 deaf teachers by postal questionnaire); e) formal documents and informal documents (38 autobiographic essays written by deaf teachers); f) essays from internet forums (Yang, 2008:309). The methodology adopted is qualitative in nature but this section is very brief and it is a weakness that that Yang did not discuss the characteristics of her research design such as insider-outsider relations, observee-observer biases, breadth and depth of a study, field relationship, etc. The methods section shows Yang adopted a deaf perspective (she herself is deaf) and collected data from deaf adults. This is a significant point because not so many researchers can sign with deaf adult (interviewing and some video-tapping) to obtain deaf perspective. This is her contribution.

Yang also identifies new concepts in her study e.g. the language mixing (Yang 2008:312). She suggests that the different types of contact phenomena in the input help deaf students to create the necessary bridges between the different languages and communication modes in order to develop a metalinguistic

awareness of the commonalities and differences between both languages (Ibid:316).

In Section Eight of her study, Yang reported a lot of results from her data. Some results are contradictory to my data. For example, Amity Fund established three SBE classes in Nanjing in 1996, 1997 and 2000. My data tell a different story (see table D-1). Some results are consistent with my findings such as a) NGOs offering sign language classes for parents, b) the co-teaching of deaf teacher and hearing teacher (Ibid:320), c) speech training are not forbidden in SBE classes, d) the pedagogy and teaching material for the SBE classes (Ibid:321-323).

In the final section, Yang draws conclusions from the results and discussed the implications of the results. Here, I quote the most important statements proposed by her as follows:

1) the recruitment of SBE children is dependent on parents' choice and involvement. Parents need more information about SBE. The partnership among schools for the deaf, rehabilitation centres and deaf communities can help the parents;

2) the greatest current concern is regarding the lack of SBE teachers. Governments should arrangement SBE teacher training programs at normal universities;

3) contact signing serves as a means of learning written Hanyu;

4) the study about "learning Chinese as a second language" is necessary.

(Yang, 2008:326-327)

There are weaknesses however. In the aspect of data analysis, Yang did not tell how she analyzed the data. Are the findings her hunches? It is impossible to scrutinize the trustworthiness of her study. For instance, how did Yang Junhui accept the claims asserted by Bao (2004:4) and Biggs (2004:16)? It is difficult on this basis to say the SBE experiments are successful because the experiments require more scrutiny and analysis. Yang spent adequate time in the field (three summers of 2001, 2002 and 2004) and it is very likely Yang had collected a lot of data. On the other hand, if this study were not published as one chapter, the data collection and data analysis issues would be described by the researcher clearer. Despite these weaknesses Yang has made contribution to the field of Chinese Sign Bilingual Education, in particular in the aspect of language contact.

2.7   Conclusion

As pointed out in the Preface and Chapter 1, the case of China is important because there are many changes taking place in China rapidly; it is a 'revelatory case' (Yin, 2003:43). Yet, scrutinizing the research studies of Chinese SBE, shows there are "gaps" from previous empirical studies. Sun's study is a case study. She focuses on one school.   I study six sites. Yang's study is to identify deaf people's

perspective mainly. Yang's study stresses language contact a path for a deaf to become bilingual. Sun's study focuses on management and conflict of cooperation. These are their contributions.

At this stage in research it is not possible to begin to carry out research which links variables in terms of cause and effect. The current stage of work can be called an 'exploration stage' with projects being carried out on a small scale. It is necessary to describe the situation in as much detail as possible so that later research might begin to link variables and analyze causes and effects. These following questions are not yet answered in the Chinese research and could be a basis for descriptive research:

- ✧ What are the official perspectives of the three NGOs?
- ✧ What are the characteristics of Chinese Exploration Stage SBE projects?
- ✧ What are the distinct features of Chinese Exploration Stage SBE projects (if the features exist)?
- ✧ What are the common propositions of Chinese Exploration Stage SBE projects?
- ✧ What are the relationships among those propositions?
- ✧ What kinds of model do the Chinese Exploration Stage SBE projects belong to?
- ✧ What is the structure of the Chinese Exploration Stage SBE projects?
- ✧ How many types of Chinese Exploration Stage SBE projects exist?

- ✧ What are the perceived outcomes of Chinese Exploration Stage SBE projects?
- ✧ Are the Chinese Exploration Stage SBE projects similar to north-west European SBE models?

These became the guiding questions in my study which using a lot of ethnographic methods, tries to be open and to describe and analyze what the researcher finds, rather than being confined by specific research questions.

As indicated in the Preface, I am aware that a fuller picture could have been given if I had been able to talk with deaf people in their first language. My study will be focused on the NGOs' perspective as revealed in my research in six sites. None of the previous studies describe and analyze the common propositions in the different NGOs and their projects and the relationship among these propositions as I do. Though I have no intention to generalize the findings like quantitative researchers do, I use qualitative methods to obtain the general statements. I stress the research of models, features and types of the SBE projects. This will be my contribution if I can answer at least some of the above mentioned questions.

The process of deciding the final research questions is a consequence of the literature review which continued throughout my study and the perceptions and perspectives I gained during the fieldwork. The research questions (RQ) were

extended and modified and deleted from those which were considered in early

stage. For examples, RQ (1.1) and RQ (4) are deleted. (RQ (1.1) What are the

notions of bilingual education for ethnic minorities in PRC? RQ (4) Are the SBE

model(s) adopted in China justifiable theoretically and practically?) Some new

research questions are added (such as RQ (2.4), RQ (2.3.7)). Some research

questions such as RQ (2.3.3) and RQ (2.3.5) are changed in the following list. .

After the ongoing literature review, and fieldwork the final list of research

questions which might be answered in the thesis was decided as follows:

(1) What is happening after the bilingual experimental classes for deaf people
were set up in PRC from 1996 to 2004.

   (1.2) What are the status and role of Sign Languages?

     (1.2.1) What is the status and role of natural Chinese Sign Language
(N-CSL) used by deaf community and signed support Chinese
(SSC) in deaf education?

     (1.2.2) Do deaf children tend to use N-CSL naturally? Which language
(N-CSL or SSC) is a predominant language for the deaf children
in their classrooms?

     (1.2.3) How are the languages allocated?

   (1.3) What are the perspectives? What are the arguments and claims of
proponents and opponents about the SBE debate in PRC?

(2) What kind of SBE is in PRC?

   (2.1) How many types of SBE are there in PRC?

   (2.2) Which SBE models are adopted?

   (2.3) What are the characteristics of the models?

     (2.3.1) What is the role of teachers who are deaf?

(2.3.2) What are the role and status of languages, language use and language allocation?

    (2.3.2.1) What is the status and role of natural Chinese Sign Language (N-CSL) used by deaf community and signed support Chinese (SSC) in SBE classrooms?

    (2.3.2.2) What are the language use in SBE classrooms?

    (2.3.2.3) How are the languages allocated in SBE classrooms?

(2.3.3) What are the relationships among different languages?

(2.3.4) What is the curriculum for the SBE classes?

(2.3.5) What are the pedagogy and teaching materials of the SBE classes?

(2.3.6) What are their assessments?

(2.3.7) Is deaf culture matter?

(2.3.8) What the parents are required to do?

(2.3.9) Others

    (2.3.9.1) What is the structure of Chinese SBE?

    (2.3.9.2) To what extent the Chinese SBE is similar to Western European?

    (2.3.9.3) What are the aims of SBE?

(2.4) What are the common propositions of Chinese SBE organizers?

(3) What are the outcomes of the SBE models?

I have refined my research questions to guide me and now I begin my journey.

Chapter Three   Research Methodology

This chapter describes the methodology, the design and data collection methods and data analysis of my research.

3.1   Origin and Rationale

In this section, two questions will be dealt with: How was the research started? Why a descriptive and qualitative case study research is chosen?

3.1.1   Unit of analysis

As pointed out from the beginning of this thesis the purpose is to investigate the innovations in education for deaf children and the views of those involved in innovation – policy makers and deciders whether they are hearing or deaf. The focus is not on the views of deaf people per se.

To clarify this further, I quote Nachmias. & Nachimias (1992:52)

> In principle there are no limitations on the selection of units to be employed in a research project. However, once a selection has been made, sequent research operations, in particular the scope and the level of generalization and theorizing, are to be congruent to the units chosen

The unit of analysis here therefore is the group of people responsible for innovation and the NGO perspective (which includes both deaf and hearing people). This is not the same as the deaf group perspective but that is not the focus of the

research. However I am also aware that there is a problem of reductionism. Rubin & Babbie (1997:119) state 'reductionism of any type tends to suggest that particular units of analysis or variables are more relevant than others.' It is not my intention to claim that the views of deaf people are less relevant and I will not neglect views from deaf people working for NGOs. On the other hand I do not think that views from deaf people working for NGOs are more relevant than views from hearing people working for NGOs.

3.1.2   *Rationale for the chosen methodology*

Having decided the field of study, I then considered the conditions in the stage of research design under which the research was carried out. These conditions need to be clarified as part of the explanation of choice of methods and design:

First, the research began with a general question: what was happening after the introduction of SBB experimental programme? (see section 0.5) It is inappropriate to formulate some sound hypothesis for testing from this vague question.

Second, as mentioned at Chapter 1, this study aims to understand and analyze the SBE rather than to evaluate it. I was unwilling to evaluate a phenomenon before the adequate understanding of SBE.

Third, in the early stage of this research study, I knew it is difficult to collect reliable and valid data by sampling and measuring, as there are only six SBE experimental classes, i.e. the population is very small, an in this condition, random sampling does not make sense.

Fourth, I have never been any member in the SBB experimental classes. I could not be a true "insider" with for example the possibility f doing participant observation in depth. Though I have established a pleasant form of rapport with the gatekeepers and have good chance to do fieldwork in their schools, I realized that I could not stay too long in kindergartens for the deaf students. The degree of rapport did not allow me to stay six months to proceed with a "depth" research with thick description (Geertz, 1973) in a SBE experimental class. In addition, it was very unlikely that I could revisit these sites frequently. Therefore, I had to consider the method of study that should mainly aim at breadth instead of aiming at depth and a method where I could collect data continuously.

Fifth, from the literature and key informants, I know the six SBE experimental classes are funded by local Funds and International Non-Governmental Organization (INGO). The local Funds and INGOs have connection with British scholars and North European deaf educators. The

Europeans were invited to SBE experimental sites in PRC to introduce their experience. The notions of SBE of the Europeans are likely to be similar to Baker's SBE model. It is probable that one of the Europeans' models may be a Chinese SBE prototype. If this is the case, Baker's SBE model could be a starting point to give me some ways of thinking about the research of the six SBE experimental classes in PRC. The SBE experimental classes might be compared and contrasted with Baker's SBE model in order to see, to what extent they are different or similar among each other.

It follows from the above conditions that the research could not be:

a) experimental design,   b) evaluation design,   c) quantitative design,

d) ethnographic design,   f) longitudinal design.

At this stage of research design, I also considered my existing strengths and stance. Technically, I am quite good at statistics - both descriptive and inferential statistics. But, my philosophical stance is not positivism. To consider the nature of reality (ontological consideration), I adopt the view of the inevitability of socially constructed multiple realities. Rubin & Babbie (1997:40) suggest that:

> interpretive researchers attempt to walk in the shoes of the small number
> of people they study and try to see the subject's world through the

subject's own eyes... and provide a richly detailed idiographic description.

This expresses well the position I take for this research, but I am not a pure interpretivist. My approach of this research study is pragmatic. I take the pragmatic position which is described by Greene & Caracelli (1997:8-9) that though paradigms contain incompatible assumptions, it does not really matter to the practice of social inquiry and researchers have to make choices about research design mainly by practical consideration, as I too have done.

Selection of research design and methods ought to depend on the purposes and circumstances of the research, rather than being derived from methodological or philosophical commitments (Hammersley, 1992:172). It is not necessary to swear vows of allegiance to *any single epistemological perspective* to use qualitative methods (Patton, 2002:136 my emphasis). I share their views. I do not think it is essential to have a firm commitment to the extreme of the dichotomy of quantitative research strategy or qualitative research strategy. When the aims of research cannot be achieved by using a single method, I need to find a mixed-method design which will reasonably substitute for the preferred, but not practical, mono-method design (Datta, 1997; Chen,1997). In this research study, the fundamental design is interpretative qualitative in nature based on qualitative

data. I choose what will work best. However, I am aware that mixed methods may have problems and limitations. I am also aware that my previous experience of research has not included the methods which I am going to use but see this as an opportunity to develop my research skills.

To sum up, in accordance with the mentioned conditions, the role of theory and practical considerations, a descriptive, cross-sectional, qualitative, mixed-methods research is more appropriate as my research strategy, where the purpose is understanding, seeking a hermeneutic insight into the experience of those in the schools. The research questions which are listed at the end of the previous chapter are therefore to be addressed not from an observer perspective – which is a possible option for later studies – but by using methods which provide the means of interpreting how people involved in the research sites perceive and understand the issues which the research questions raise.

3.2   The Characteristics of the Research Design

Once, the research paradigm was decided, I also determined the concrete way to conduct the research after my trip to Anhui and Jiangsu provinces. My data collection methods include analysis of document collections, interviews,

observation, artifact collection and focus groups. The research design adopted has the following characteristics.

3.2.1 Theory/ model in the research

As mentioned in section 3.1.2, Baker's SBE model can be a starting point for asking questions about models on China; Baker's SBE model is not treated as a standard or ideal. A model as used here is an idealized description of reality using a set of interrelated concepts (Byram, 2009). There may be assumptions and prejudices behind the concepts. I may find counter-instances for the Baker's SBE model and I intend to use any counter-instances to refine or reconstruct rather than to reject the model. Therefore, instead of proving a model by corroboration or forsaking a model because it faces falsification, our preferred approach is to improve the model by turning anomalies into exemplars (Burawoy,1991:10).

This approach is a specific characteristic of this research methodology. This approach is on-going and cyclic in nature. In the initial stage, using Baker's SBE model to compare and contrast the PRC SBE models is a way to improve the SBE model itself. In later stage, it was not only concepts of Baker's model but also other concepts of SBE models in Europe were identified through the on-going literature review process.

3.2.2 *Principles and choices in an interpretative design: insider-outsider relations / emic view- etic view*

To all the gatekeepers of the six experimental education settings, I was mainly an outsider but in some settings, I was deemed as an "insider". Sometimes, I was an observer. Occasionally and briefly, I was a participant-observer. For example, I was invited as a guest to attend the "First Bilingual Research Meeting" organized by "Save the children, U.K." in AnHui, PRC on Sept.,19 2003. I was accepted by the community under study as a member. I listened, observed and thought as if I were an insider temporarily. I was even invited to express my views on signed languages and the theoretical reasons of sign bilingual education at the meeting. Bearing my research role in mind, I answered shortly, honestly and politely (PRCD/01:42). After the meeting, I have withdrawn from the insider role.

In 2005, I was tempted to become involved in a Deaf Development project which is organized by a group of Deaf Culture advocators. Actually, I could change my name to join them. Should I do that? On one hand, I agree the notion that becoming an "insider" may understand the community under study more, on the other hand, I share the view that researches have to remain distanced from the community in order to have "room" to do their research (Ely, 1991; Hammersley &

Atkinson, 1983). I refused the invitation politely to keep my impartiality before the end of this research study (d-b-d1.doc; d-b-d-1.jpg; d-b-d-2.jpg).

In PRC, both "outsider" (*etic*) and "insider"(*emic*) perspectives are important to capture. The managers, the staff of NGO and Funds that sponsor the SBE experimental classes are "insider", as are headteachers, teachers of the SBE experimental classes. My focus therefore was to attempt to interpret the insider/emic views of these different groups of insiders.

As mentioned in Section 3.1.2, for practical reasons I made a decision of breadth instead of depth which was also influenced by additional practical reasons: limited financial, physical and time resources as a part-time research student who has to work. In spite of that, it was possible for me to leave for one or two weeks to collect data occasionally.

3.3 Data collection

3.3.1 *Access and Rapport*

Gaining access is a problem. Goetz & LeCompte (1984:87-88) state that "researchers must decide who to contact and how to initiate contact and how to maintain contact" and in this section I describe my processes of access and rapport.

I did not contact special education section of Education Committee of PRC because my "guanxi" ('relationships') was not strong and so I made an important decision. I went to Beijing to visit one scholar - my good friend. He introduced me to famous scholars in deaf education, and I visited Beijing Normal University to meet old and new friends. I visited different places to meet retired experts in the field of deaf education to ask for their opinions of my research study. They introduced me to a key person who participated in SBE experimental projects and I took a flight to meet this key person. Being acquainted with these scholars, I got a "best ticket" into the SBE experimental classes, as Fetterman (1989: 43) states. These scholars have credibility with the group who are conducting SBE experiments and some headteachers and teachers are the students of these scholars. The trust the group places in the scholars "approximate the trust extended to me" at the beginning of the study. I thus "benefitted from a halo effect" (Ibid: 44). I was introduced by right persons and thus, with a little bit of luck, I gained the access. A detailed description of the institutions and their links with NGOs and local and national governments is provided in Appendix D.

This was also helped by the fact that, although from Hong Kong and being a speaker of Cantonese, I do not have language barrier with Han people. I have

relatively high degree of understanding of Chinese traditional culture and Chinese

socialist culture. These are favorable conditions to maintain the contact and get the

rapport.

After gaining the access, I have done the following to earn their trust and

respect gradually - to get the rapport and to observe, to interview informants

without escort.   First, I tried to collect data unobtrusively, inconspicuously and

inoffensively if possible.   Second, I told them I came to the site to learn

experience from them and I did not come to evaluate their SBE experiments.

Therefore, many informants viewed my purposes of study "as valuable - or, at least,

as harmless" (Goetz & LeCompte 1984:89) and some of them said they were happy

to know my interest in SBE.   Third, I told them about the ethical requirements of

my Graduate School to protect them by abiding by the principle of anonymity and

confidentiality. Fourth, I contacted persons from different levels with different

views, not only talking to high rank persons. Through effort and again with a little

bit of luck, I have "established relationships at different levels" (Murphy, 1980:47),

and tried to be as Fetterman says, "an impartial or at least nonjudgmental witness"

(1989:44).

The last issue I need to consider is the "return for informants". What might constitute a "fair return" to informants (Spradley, 1979:38)? In Beijing, I asked my good friend about gift giving. Usually, in the commercial field of PRC, one should establish and maintain good "guanxi" (relationships) by giving a lot of gifts. (Gifts can be cash, can be cigarettes and wine, can be all sorts of things).   To my surprise, I was told by my friend that in the special education research field, no gifts were necessary. Therefore, I prepared not to pay any informants any rewards. Later, in the field, I did not pay informants reward and no one asked me to give them gifts. However, in order to express my gratitude to the informants, I gave informal banquet to them whenever I had chance.

3.3.2   *Instruments and process of data collection*

Although it was not the intention to produce ethnography of the SBE sites, I used instruments and methods from ethnography and will here describe the instruments and the processes which were used and the types of data collected. There are a lot of qualitative data: field observations in different settings; different forms of interviews; and reviews of documents and archives-all triangulating on the same set of research questions. In concrete terms this meant field-notes (interview notes, classroom observation notes), personal documents (such as diaries, personal

letters, personal notes), official documents (such as newsletters, reports, yearbooks), archival records in computerized form, artifacts (calendars, give-away), photographs, etc. Nevertheless, I made no attempt to exclude the collection and the use of quantitative data. The extensive use of qualitative data in my study "is not made out of the researcher's personal choice…it was the nature of this study which shaped the choice" (Lam, 1991:66).

Semi-structured interviews

Semi-structured interviews (Wiersma, 2004) are based on a number of questions or issues which the researcher wishes informants to talk about but with the option of encouraging informants to take the lead and introduce whatever they think are important. Doing the literature review continuously and repeatedly provided some questions about SBE in general. As Babbie (2004:300) described, I had a general plan of interview but not a specific set of questions that must be asked with particular words and in a particular order. Such interviews can take place in many forms and locations. I made formal appointments with the key informants and conducted interviews with key informants in their offices, in restaurants, at the hotel lobbies, in hotel rooms (see Section 3.3) for details).

In order to ensure the interviewees were able to raise their own questions freely, when I started interviewing them for the first time, I always assured them of confidentiality and told them their information and notions were important for the understanding of SBE experiments and for my study. I also told every key informant my interview that I was trying to learn from them.

The length of a semi-structured interview lasted from 60 to 120 minutes. I jotted down the notes inconspicuously as Wiersma (2004:189) suggests. For ethical reason, I did not audio tape the process of interviews without their consent. Seeing that some informants were uncomfortable to be recorded, I decided not to use tape recorder. I want them speak frankly and naturally. Note recording did not cause problems because my note taking speed was fast enough to jot down almost 100% of their words.

Every night, I wrote down what they told me in a note pad no matter how tired I was because I myself was a human instrument, as ethnographers assert (Fetterman, 1989:13). Also, I filled in any "holes" that had been created during the process of interviews in the day time. I would forget what I had heard. I had to write it down as soon as possible to avoid "data loss". At night, the hotel rooms

I stayed usually were dim. I learnt from experience to carry a lamp with 40 watt light bulb and with "universal" electric socket adaptor to make sure I could work.

Informal conversational interview

Working in the field, I grasped every chance to collect data because I did not have lots of time and time to visit the sites. Informal conversational interviews are used as one method. I often had lunch, dinner with INGO Funds mangers, headteachers, teachers and staffs. Sometimes, there was no predetermination of specific question topic or wording in my mind. Informally, I asked them general questions about my area of interest and concern to elicit their discussion. I "let the conversation develop within this area" (Robson,1993: 231). I listened and jotted down the contents of their conversations inconspicuously. For instances, in one of the cities I visited, after a lunch I had a ten minutes' walk with an informant. The conversation in these ten minutes was valuable. I was told some latest information about the sign bilingual experimental class and also the most recent debate of deaf education in PRC. Sitting in a sedan of a key informant on the way to a school for the deaf, I asked about the working experience of an informant. It triggered a talk between the informant and the key informant. I heard some new information about the deaf students who were attending the sign bilingual experimental class. I did

as Bernard (1988:207) suggests, "get an informant onto a topic of interest and get out of the way…let the informants provide information that he or she thinks is important." In addition, I interviewed the deaf teachers individually by 'pen-talk' whenever I had chance, for example I paid a home visit to a male deaf teacher (Informant U) working for the NGO in 2004. He wrote on writing pad to introduce his understanding of the principles of SBE he had learnt and his learning experience in a school for the deaf when he was little (Field note F:14).

During my process of data collection in the field, semi-structured interview is a good method when both the interviewee and interviewer were competent in a same language-Hanyu. However, I confess I had no way to avoid the "memory errors" which were described by Sudman and Bradburn (1974): informants might forget things. Further, "interview data can easily become biased… too often interviewees provide information based on what they think the interviewer wants to hear", as Best and Kahn (2003:255) point out. I had no method to prevent this also. I dealt with these by collecting data from different sources to check the credibility of them later. Group interview is one of the sources.

Group Interviews

Whether using group interviews or one-on-one interview methodology is controversial (Greenbaum, 2000) and depends on the particular topic one is studying and the particular situation in which one is operating (Lofland, 1971:88). As mentioned in Section 3.1.2, researchers have to be pragmatic, and I decided to adopt group interviews as one of the methods based on practical consideration. I had determined to conduct a research in breadth rather than depth and to use a lot of methods to collect data, and to collect data from as many people as possible. I therefore asked the head-teachers or directors to arrange group interviews if possible. Usually, the group interviews lasted for forty five minutes to sixty minutes.

With respect to the particular issues in group interviews, I was prepared to face informants with "extraverted, dominant, and assertive personalities" (Fern, 2001:43). From my data collection experience in PRC, I did not need to worry about how to "deal with overly talkative people" who insist on dominating the sessions (Taylor & Bogdan, 1998: 113). On the contrary, I did worry about collecting data in group situations when group dynamics and group pressure come into play, informants may not ready to express their independent views. In Chinese

Confucian society, they may be actually influenced by the prevalent views during the group discussion, especially in a society where people often believe in collectivism and correctness of views (Cheng, K.1997:4-13; Fern, 2001:44). I did have some shy, quiet, reserved, and withdrawn group interview informants who are teachers and parents of the six bilingual experimental classes in PRC. Luckily, the percentage of socially anxious informants was small in practice, and because of my relatively high degree of understanding of Chinese culture, I often know the difference between an informant who is shy or just unwilling to speak and one who simply does not care or have an opinion about the topics being discussed subtly, what Fern describes as a 'free rider' i.e. an informant who believes his/her point of views will be pooled along with those of others in the group (Fern, 2001: 110). However, my ability to make this distinction applies only in the case of Han people.

I had specific topics in my mind for group interviews and introduced these at the beginning and during the interviews. I let them talk and jotted down notes to supplement my memory. I decided not to use tape recorder for the same reasons I mentioned above and also because I did not have advanced microphones and tape recorder which could be operated to record every speech of informants clearly.

When the informants discussed irrelevant issues, as a moderator, I reminded them to go back to the specific topics by reiterating my questions politely.

These group interviews generated many "qualitative data in the *emic* sense" (Stewart & Shamdasani, 1990:12) and the group interview method worked well; it brought me into the world of the informants. A large of amount of information can be released in a comparatively short period of time. But, this group interview method has many limitations, such as the effect of "group dynamics or power hierarchies effect" (Robson, 1993:241) and being aware of this I adopted this method as a supplement to other interviews.

Language issues in interviews

In my study, both the semi-structured interviews and informal interviews were conducted in Hanyu (Mandarin). Basically, there was no language barrier except in the School for the deaf in Dali. I met three parents of two students of SBE experimental class in the school office. The parents were from an ethnic minority. Two of them could speak Hanyu fluently. I collected data from them without problems. However, one parent of the student of SBE experimental class could not communicate in Hanyu. Interpretation between Mandarin and their ethnic language

was needed. One parent acted as interpreter voluntarily. Through the interpretation, I collected data indirectly but I worried about the credibility of the data. I worried that to what extent the parent and I might understand each other because the volunteer was not a professional interpreter. His interpretation might be inaccurate. Nevertheless, the percentage of the data collected in this way is very small and these data were triangulated in the analysis by other methods and other sources.

In some SBE experimental sites, there was only one teacher who himself/herself was deaf. As I have written in the above I am aware that a fuller picture could have been given if I had been able to sign with deaf people in the target group i.e. those involved in deciding on policy and education models and approaches, in their first language (see Section 2.7). Nevertheless, high level competence of Hanyu (both oral and written form) rather than C-NL-SL was crucial to all kind of interviews in these NGOs' Chinese experimental SBE contexts.

Participant Observation

Observation is a major method I adopted to collect data in the field. I faced two questions. To what degree could I participate in the setting? What are the roles

for me to play? Like many researchers, I faced a participant/ observer continuum. At one extreme is the complete observer. At the other end is complete involvement. Usually, researchers stay somewhere between these extremes (Bogdan & Biklen, 1982:127). In my study, my roles varied according to time and situation. As mentioned above, I take a pragmatic position. Which roles I play depends on my research design, my opportunities and my own personal style and feelings toward the activities I might participate in. As Lofland (1971:99) says it is important to be able to get along with people and feel comfortable if the method is to be successful and I did feel this condition was met.

Opportunities came and I mention here some examples. I was invited to attend two meetings, one in Anhui province (Sept.,2003) and one in Jiangsu province (Dec.,2004). The first event was a bilingual research meeting sponsored by an NGO from U.K. The second event was a sign bilingual research meeting for teaching and learning co-organized by Chinese NGO and Norwegian NGO and many attendants presented their articles at the forum for the interchange of teaching and learning experiences of Sign Bilingual experiments. In these two meetings I was a temporary participant observer. I met many key informants that I interviewed before and met almost all representatives from five (out of six) SBE experimental projects again. In the second meeting, I made acquaintance with new friends. I could interview, verify and confirm the data that I collected in their schools and centers previously and I had distinctive opportunity to perceive reality from the viewpoint of someone "inside" the events rather than external to them (Yin,

2003:94). I tried to be inconspicuous and inoffensive in the meetings (Lofland, 1971:100), taking notes and a lot of photographs as unobtrusive as possible (with the flash off and shooting from the back view of people). The notes taken were "gone through shortly afterwards to add detail and substance and to ensure that the record is understandable and says what I intended it to say" (Robson, 1993:203). Every night, I wrote down what I observed no matter how tired I was to avoid "data loss" as Robson says (ibid.). However I also tried to bear in mind the point made by Bernard (1988:271):

> There is always a danger in reactive observation that you will record what people want you to and not the behavior that goes on when you are not there.

This is a version of the Hawthorne effect which refers to the observees changing their behavior when they know they are being observed (Babbie,2005:232). For that reason, in the fieldwork in general, I did not discuss the purpose of my observation with the observees (Gay, 1981:181). I tried to be as unobtrusive as possible. I took the position that observees' biases tend to be diminished if I am deemed as an insider.

The other side of observation bias is the observer bias, which refers to invalid observations that result from the way in which the observer observes. For example, the observer might tend to rate the majority of observees as above average, average, or below average regardless of the observees' actual behavior (ibid). The observer

might also tend to see what he/she was expecting. As an illustration, one morning of June, 2004, I went into a SBE class. There were eleven students in it and there was only one teacher in the classroom (The head teacher told me usually there were two teachers in a SBE classroom. On that day, one teacher was on leave). A deaf teacher tried to teach some Chinese characters by matching them to pictures. I observed the majority of the students (8 students) were "on task". Two students were daydreaming and one was playing with his pencil. I wrote in my note book "the teaching and learning in that classroom was (on average) acceptable and three students were not on task - two were daydreaming; one, playing small stuff' (Field note G: 35-36). It is true that "daydreaming" and "playing with a pencil" are not a big deal in many classrooms. However, an observer should not just record the average performance or the majority performance. The observer ought to take the note to describe both the majority performance of students and also the behaviors of a few students. I reminded myself not to only record what I expected to see and what I like to see.

Having read the textbooks and thus knowing the biases I was likely to face, I hoped that this would help in counteracting the collection of invalid data. However, I acknowledge that I could only reduce the bias to certain extent.

Direct observation

I used direct observation as a supplementary method in my study. When visited the sign bilingual experimental classes, I sat at the back of classrooms to observe. I was a "pure" overt outsider in the classroom observation. Once again, I took notes and a lot of photographs as unobtrusively as possible in the classroom (with the flash off and shooting from the back view of students). This kind of observation has the same problems as participant observation: observee bias. My presence did change the behavior of some deaf students in the classrooms. It took time for the students being observed to ignore my presence generally, but not too many students were distracted by my presence, and despite the bias, classroom observation provided valuable information.

I saw the dual-teachers arrangement in the classes, the curriculum of the sign bilingual experimental classes, the teaching material, the level of enthusiasm of students, the response and participation of students in the learning and teaching process, and the medium of instruction in the classes, etc. Despite of the possibility of collecting invalid data due to observational biases, observation allowed me to collect data that I might not even think to ask about in an interview.

In the field, I also observed inanimate objects which did not have observation bias. Murphy suggests the observation of "props" with the following:

> People surround themselves with props - books, photographs, name plates, plaques, mementos, paintings, wall hangings, and posters. Such things…can provide insight into his background, interests, values, attitudes.

(Murphy, 1980:115)

Props did tell me something important. In Kunming, I saw a lot of big posters hanging on the wall of a corridor of the main office building of an INGO. Each poster proclaimed the rights of children and this indicated that this INGO, that is one of the sponsors of the sign bilingual experimental classes in PRC, holds the view that SBE is the right of deaf children,. These props thus tell me the interest and values of the INGO. I also observe books on the shelves, notices on bulletin boards, not only for the purpose of collecting documents but also to search for "props" to understanding what is happening in the SBE experimental projects. In short, direct observation of this kind is a method to collect evidence inconspicuously and it is not affected by observer bias.

Gathering of archives, documents, materials and artifacts

This is not the least important of the methods I adopted. It is an unobtrusive method and it is observation bias free (Sproull, 1988: 162). Besides the importance of triangulation, there are many advantages of this method, as Murphy argues:

> documents written at the time are not subject to recall problems…if you want to learn what the program says it is doing (the stated goals), documents are the ideal source… if you want to learn about professional opinion on program- related issues, read professional journals…documents might be the only source of some data.

> (Murphy, 1980:122)

With respect to the final point made by Murphy, the SBE experimental class of Nanjing school for the deaf ended in 1997. Collecting documents is a key method to explore the "retrospective data" of this first experimental class in PRC.

In the field, I took time to the library of Special Education Institute of Beijing United University to browse. I saved archives related to deaf education in PRC to my memory stick. In Dali city, I jotted down the titles of books on the book shelves of key informants' offices. I borrowed their reports, books, yearbooks to read at night and returned the books in the morning. I even borrowed one book for three months and mailed that book back to the owner of the book from Hong Kong. Also, during the past five years, data such as proceedings of meetings, unpublished

speeches, books related to SBE were mailed to Hong Kong by my informants. In the sites, I searched the professional journals for special education in PRC. I picked up everything available such as leaflets, bulletins, and newsletters from NGO and INGO offices and Club for the Deaf too. I photocopied a few lesson plans for a SBE class in Hefei city. With the permission of the INGO, I made copy of a lot of related documents about SBE experiment such as the curriculum of SBE experimental class (provisional). China has been developing. It was possible to go to a private owned small firm in city to make photocopy myself and this was a big help in getting the photocopy of some official records.

Training materials are valuable data too. I asked key informants for their teacher training materials about SBE experiments. Later, I got a translated book as a SBE project training material written by Marschark: "Raising and educating a deaf child" (BG/INFO-D; Marschark,1997). Recently, I have received a report about "Denmark (1982-1992) SBE experiment, which is written by Lewis, *et al* , which is translated by a Chinese couple in 2004 (Lewis,1992).

Documents also cover a very wide range including diaries, timetables, curricular (Robson, 1993:274). I asked a teacher of a SBE experimental class to show me her diaries and daily teaching log book. These personal records are

invaluable in understanding her views and in getting an unofficial view of what happened in the SBE class. With her permission, I copied part of her log book as still photos. In some settings, I shot timetables, rules, circulars of the schools. In the field, digital camera was used to record documents, materials and artifacts efficiently. Leaving the field, data such as essays and other relevant messages in electronic version were sent by email since 2004.

However, despite the advantages, documents have limitations. For example, documents can be designed to sell the program rather than to reveal its problems. It is necessary to cross-check where possible documents with other articles written from different perspectives, and all the data collection methods above mentioned can be verified among each other by triangulation.

3.3.3   Field relationships and Key Informants

As described above, key informants were interviewed to obtain information about what I had not or could not experience, as well as a source of explanation for events I had actually witnessed in the field. Initially, some informants were selected simply because they were willing to talk and others were selected because of his/ her fame or position or roles and status in early stage. Gradually, I selected

key informants from those informants and this became a purposeful selection.

I then kept on asking key informants to introduce their friends - other good informants to me at a later stage. Some of them are scholars and experts in the field of deaf education in PRC. Some of them are schools' leaders; some, teachers. I met them in the bilingual research meetings organized by NGO and INGO mentioned above. I spent considerable time talking with them to understand what was happening (Patton,1980:182-183), and for instance, I was told by key informants that controversies and enthusiastic debates did exist among some special education experts and INGO SBE projects leaders in some meetings. Usually, I did not tell informants which persons I had talked to (it is possible that some people who won't talk to researcher when they know the researcher is so-and-so's friend, as Bernard (1988:179) states.

By the teachers and deaf teachers, I was considered as a friend, as their "teacher" through whom they could ask the deaf education outside China.   They all call me "Du Laoshi"- Teacher To. (To is my last name. Du is the Chinese *pinyin* of my last name. Laoshi refers to teacher). In China, Laoshi also refers to those persons who had respectable knowledge. It seemed that many of them were "implicitly assumed the superiority of researcher" (Babbie, 2005:301). This is a

danger in collecting biased data (informants might tell you what they thought you liked to know only) due to the phenomenon of their belief that "researcher is superior to his/her subjects" (Ibid). I tried to overcome this by telling them I was trying to learn SBE from their practice and their experience.

My relations with the experts, educators and scholars in Beijing, the managers of NGO and INGO and the headteachers and teachers of the SBE classes and those teachers who were deaf were different. To the experts in Beijing, I am their new/ old friend and I am a researcher in the field of deaf education. They felt happy to know my interest in SBE. I was once invited to introduce my opinions about the mode of communication for the deaf education in a University in North East of China. Lecturers, research students and undergraduates from their Department attended. To the managers of NGO and INGO, I was viewed as a researcher, an administrator and a teacher of a special education centre in Hong Kong. Soon, we became friends. When they wished to visit Hong Kong to visit schools for the deaf, deaf organizations, Special Education Unit of Hong Kong Education Bureau, I was the person they considered to ask to send invitation letters for them and who organized their activities in Hong Kong.

However one weakness in my work was that my relationships with deaf teachers were not close, because I do not know Chinese Sign Language and that hampers the friendship building though I always tried to communicate with them through writing.

3.4 Data analysis

3.4.1 Data analysis process

Fetterman (1989:89) says that the analyst of qualitative data "compares information sources to test the quality of the information… testing one source of information against another" and this kind be labeled triangulation, which I will discuss in more detail later. Data analysis is to distill themes, to find principal ideas and unidentified relationship, to generate new slants, to group concepts to form categories and further, to categorize, refine, delete, add categories, to spell out attribute of classification, and to draw relationships among them as Murphy (1980:140-142) says or in other terms, I have been perceiving, comparing, and contrasting, aggregating, sifting and sorting data as Goetz & LeCompte (1984:165-167) described. However what the textbooks say is not always easy in

practice. Data analysis of qualitative study in comparison to analysis of quantitative data is poorly described and lacks prescriptive procedures as Morse (1994:1) states:

> the process of doing qualitative research presents a challenge because procedures for organizing images are ill-defined and rely on processes of inference, **insight**, logic, and **luck**, and eventually, with **creativity** and **hard work**.

(My emphasis)

Many studies using ethnographic method or grounded theory method say their concepts emerged from the data. To some scholars, the qualitative data analysis methods and processes are "the magic of creativity and intuition" (May, 1994: 20). Moreover, "the precise process whereby a grounded theory analysis was undertaken is often imprecise" (Bryman & Burgess, 1994:6). I felt uncomfortable with the notion that findings emerge from data magically due to my mathematical background but I do believe hard work is the necessary condition for the readiness of emergence of findings. That is to say, I had to be prepared to undergo a long process of data analysis. I had to be prepared for the emergence of findings and to believe I may see one day that findings emerge if I push their analyses further by hard work. Also, I saw the need to describe the methods clearly so that the reader may understand what was done and how the results were derived. If a qualitative researcher does not describe his/her methods and techniques for data

analysis clearly, people will perceive mistakenly that the findings emerge magically. I know it is difficult to do this owing to the non-linear nature of qualitative data analysis processes. I know it is very difficult to explain creativity, intuition, and insight. Nevertheless, I try to describe my methods and techniques more clearly to some extent.

Learning data analysis in the process of data analysis

Analysis of qualitative data is like jumping in the water to learn swimming: I have to learn practical methods and techniques of data analysis in the process of data analysis. I started data analysis in December 2007. To certain extent the notions suggested by qualitative scholars help me. For instance, I learnt open coding (the process of breaking down, examining, comparing, conceptualizing, and categorizing data). From the grounded theorists' opinions, I learnt I may use the words and phrases used by informants themselves: "*in vivo codes*". I learnt I might refrain from using borrowed concepts from literature because the concepts "often bring with them commonly held meanings and associations" as Strauss & Corbin (1990:68-69) described. I learnt two basic procedures to the coding process are: asking of questions and making of comparisons (Ibid: 68).

The cost of pushing the data analysis far enough is high. It took seven months to comprehend and synthesize my data and to reaching saturation stage. The price of describing the data analysis methods *more clearly* is high too. It took six more months to understand more about these data analysis methods and techniques. As a result, it is more likely that the findings of this study do not emerge at a pre-mature stage. Chance favors the prepared mind. Findings emerge when everything is readiness. It is the reward for hard working. Some insights (e.g. classifying the Chinese SBE models by the role of natural sign language and the speech) also came in the final stage of data analysis.

Data analysis is a thus cognitive process and Morse (1994:25) describes precisely the process I experienced as follows:

> Data analysis is a process that requires astute questioning, relentless search for answers, active observation, and the accurate recall. It is a process of piecing together data, of making the invisible obvious, of recognizing the significant from the insignificant, of linking seemingly unrelated facts logically, of fitting categories one with another, and of attributing consequences to antecedents. It is a process of conjecture and verification, of correction and modification, of suggestion and defense. It is a creative process of organizing data so that the analytic scheme will appear obvious.

Morse argues there are four cognitive processes: comprehending, synthesizing, theorizing, and recontextualizing (ibid: 25). These processes are more or less in a sequential order. I went through the first and the second process mainly and repeatedly. For instance, when I sorted data by key event, I started comprehending data, then synthesizing data. Likewise when I identified characteristics of Chinese SBE, these two processes reiterated again. In concrete terms my methods and techniques of data analysis can be summarised as follows:

✧ Open coding, a central process of data analysis of grounded theory researchers is borrowed. Open coding is the process of breaking down, examining, comparing, conceptualizing, and categorizing data as mentioned above; Coding is labeling. Many codes in this study are *in vivo* labels;

✧ Comparing incidents applicable to each category adopted (coding each incident in my data into as many categories of analysis as possible, as categories emerge or as data emerge that fit an existing category) (Glaser & Strauss,1968:105);

✧ Line-by-line analysis, a detailed type of analysis was used for some part of my field-notes and some official documents as suggested by qualitative researchers (Strauss & Corbin, 1990:72; Strauss & Corbin, 1998:57; Punch,1998:212); See Appendix A and Appendix B;

✧ Triangulating the data collected (by different methods, from different sources, and in different time) is adopted. I also triangulate

information provided by a same informant in different places and in different time.

✧ Enhancing sensitivity is my technique. In the whole stage of data analysis, I read the primary data and literature again and again to enhance the sensitivity. I agree with a saying in the banking field. If bankers want to distinguish the authenticity of a bank note, say one-hundred Euros, they have to know the real one-hundred Euros notes in details first. They need to scrutinize the real one continuously. I studied the SBE models especially Baker's model as careful as the bankers study the bank notes.

✧ Asking questions: I asked basic questions Who? When? Why? What? Where? How? How much? For example, what are the properties of signed language? I also ask temporal questions and spatial types of questions. I ask questions to confirm, discover, define, and refine the categories of SBE in China. For instance, the following question was asked: *Are there different kinds of signed language?* I looked for the structure of the concepts. I ask semantic relationship questions as proposed by Spradley (1979:111). I looked for the semantic relationship between cover terms and included terms. (e.g. tree is a cover term and pine, oak, fir are included terms). In my thesis, signed language is a cover term and Natural Sign Language (NL-SL) is an included term. The semantic relationship is "NL-SL is a kind of signed language";

✧ All this had the purpose of constructing a "taxonomy of Chinese SBE" on the basis of what the SBE insiders think.

Appendix C demonstrates some methods I adopted for data analysis. Table C-1 (in Appendix C) shows the how I take concepts in the aggregate. This appendix demonstrates three publications from each of the NGOs were selected carefully to represent their advocated points. Using the 'checking out hunches about frequencies' method as described by Murphy (1980:133-136), I weeded out the less essential elements of Chinese SBE. Ten key concepts which are adopted by all three NGOs were identified. After the sifting process, a new table (Table C-2) was constructed. This table is a speculation and it is not a finding. It is a semi-product, but then it contributes to the findings of features of Chinese SBE. Furthermore, this appendix shows names of concepts of Chinese SBE are similar to the concepts of European SBE models.

Once the data analysis was complete, to enhance the credibility of my study, I planned to send a summary of the key points to the key informants to seek corroboration. I coined a new term - key informants validation. It is a form of "respondent validation" (Bryman, 2001: 273) where informants confirm the information they have said during the semi-structured interviews. Sometimes, it seemed that this is a good idea. In August, 2006, I met a key informant again in Jiangxi province, I showed a summary of my field notes to him and ask if the notes

reflect his notion accurately as Mertens & McLaughlin (1995:54) suggested. However, it is "important to recognize the limitations" of this arrangement (Hammersley, 1983: 196). For instances, First, should I assume the key informants had good memory? Would they remember what they had said? Second, it is possible for some key informants to misinterpret or mis-describe their points intentionally due to personal interests or position they held (Ibid: 196). Third, I conducted my study with my values, theoretical perspectives, ontological, epistemological and methodological standpoints. It is not rare to see different interpretation by the informants and by myself. Despite these limitations, I still use this "validation" as a kind of triangulation.

Triangulation

Said at the beginning of this discussion of analysis, triangulation is the crucial characteristic and this is now discussed in more detail.

Originally, triangulation is a technique of physical measurement used by engineers, scientists and surveyors. They used different markers to pinpoint a spot. Cohen & Manion (1994:233) state "By analogy, triangular techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of

human behavior by studying it from more than one standpoint…" Triangulation is widely accepted by researchers (Denzin, 1970; Patton,1980:109; Yin,1993:69; Taylor, S. & Bogdan, R.,1998; Bryman, 2001:447). Patton (1980:109) states "where possible, triangulation is to be highly recommended". Robson (1993:383) claims that "triangulation is an indispensable tool in real world enquiry". In the field of ethnographic research, triangulation is basic and it is at the heart of ethnographic validity (Fetterman, 1989:89). In other research, for example, evaluation, triangulation is adopted too (Frey & Fontana, 1993:24). Frey and Fontana state "the use of multiple data-gathering techniques… thus would complement any other method being used…by allowing opinions to bounce back and forth and be modified by the group… rather than being the definitive statement of a single respondent".

Triangulation is a major technique of my research study. I have adopted both data triangulation technique (the use of a variety of data sources) and methodological triangulation technique (the use of multiple methods). I have explained the ways of triangulation I adopted from which the data were collected by different methods such as observations, interviews and reviews of documents.

I have introduced the notions that data can be verified among each other by triangulation.

Triangulation is however not a notion that without objection. Triangulation involves checking information that has been collected from different sources or methods for *consistency of evidence* across sources of data. Although obtaining consistency of evidence is desirable for doing research study, "consistency" may contradict the notion of multiple realities. This is the argument that Guba and Lincoln present (Guba and Lincoln, 1989 cited in Mertens & McLaughlin, 1995:54). I agree with this notion. Therefore, in my study, I scrutinize both consistency and inconsistency. I hope to check the consistency on factual data but examine the inconsistency which may reveal the different perspectives.

Triangulation is not a panacea. I make no attempt to claim my findings are absolutely the "truth".

The following statements explain my view:

> data produced by different techniques are compared… however, triangulation is not a simple test. Even if the results tally, this provides no guarantee that the inferences involved are correct. It may be that all the inferences are invalid, that as a result of systematic or even random error they lead to the same, incorrect, conclusion. One should not therefore, adopt a naively 'optimistic' view (original emphasis) that the

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aggregation of data from different sources will unproblematically add up to produce a more complete picture. Differences between sets or types of data may be just as important and illuminating."

(Hammersley,1983:198-199)

In short, triangulation is an important and valuable technique. I adopt it and use it carefully in my research study because, as mentioned in Section 3.1.2, adopt the view of the inevitability of socially constructed multiple realities because of my ontological consideration. As a matter of principle, alternative explanations of data collected in this study exist. For instance, the perceived outcomes that I have identified from SBE projects organizers, SBE teachers and parents are not unquestionable even they might express their views sincerely. However, other perspectives do exist. Let me illustrate this point by a specific example. "Better academic achievement" is a common claim of an outcome of SBE projects (see Section 5.2.14) but "Better academic achievement" can be explained in other ways. Just to mention some; better academic achievement may be because of higher teachers' expectation. It is also possibly due to the halo effect and labeling effect. It could be owing to the better input of resources (such as smaller teacher/student ratio, resources provided by NGOs). The higher socio-economic status of SBE parents and the better aptitude of the deaf children may be factors. The better

parental participation could be other factors of academic achievement. Therefore, other researches are needed.

I do not attempt to reject other possible explanations. However I hold the view that the best interpretation is one which accounts for the most data and which is 'trustworthy'.

3.4.2 Trustworthiness of the data and data analysis

Validity and reliability are two basic criteria developed for assessing quantitative research study. Usually, quantitative researchers are concerned with the external reliability (the extent to which research is replicable), the internal reliability (the extent of consistency in the methods, conditions, and results of research), the external validity (the extent and appropriateness of the generalizability of results) and the internal validity (the basic minimum control, measurement, analysis, and procedures necessary to make the results interpretable) (Wiersma & Jurs, 2004: 491-492).

Some qualitative researchers adopt the above mentioned criteria. For instance, if the data can be collected repeatedly through repeated observations of the same phenomenon or through two or more observers, then the criteria can be adopted to

some extent. Reliability and validity are not always relevant however and when we assess historical research such as the study of Cuban Missile Crisis, the criteria are inappropriate (Allison, 1971). Furthermore, "simple random sample is the basic sampling technique for inferential statistics because it is the sampling technique that was posited when most statistical theories and techniques were originally derived" (Loether & McTavish, 1974: 46). When the sample size is very small (less than 20) or when simple random sampling is impossible, statistical generalizations are out of question. The criteria are inappropriate.

Examining my research questions and research design again, I have to use an alternative criterion (trustworthiness) rather than the popular but inappropriate criteria- reliability and validity. Trustworthiness which includes credibility, transferability, dependability and confirmability, is a more appropriate alternative criterion to my study (Lincoln, & Guba, 1985).

Credibility is a parallel construct to "internal validity" in positivist research (Guba & Lincoln, 1989). In my study, I adopted triangulation to enhance credibility.

I collected evidence from different sources or by different methods to check the consistency of data. In the field, I interviewed informants with different forms

of interview. Some topics/ events (such as dual teachers and signed Chinese) were referred to by more than one informant. When many informants said the same things; when data generated by different methods indicated the same things, it is possible gradually to understand what has been happening in the experimental SBE classes.

"Member Checks" is also a technique I adopted to improve the credibility (Robson,1993:404; Mertens & McLaughlin, 1995:54; Bryman, 2001:272). For example, after an interview, I summarized what has been said, and asked the informants if the summary reflected his/her position accurately.

Transferability is a parallel construct to "external validity" in positivist research. It means the degree to which you can generalize the results to other situations (Mertens & McLaughlin,1995:55). In my study, I did not use random sampling methodology. I make no attempt to generalize my findings to other SBE experiments. Transferability is not my concern.

Dependability is a parallel construct to reliability. Besides triangulation and "Member Checks" techniques, I adopted "enquiry audit" (Robson, 1993:406). Enquiry audit refers to the examination of the processes and the examination of the product. If the processes of research are clear, systematic, well documented,

providing safeguard against bias, then the research can be attested as dependable (ibid). As discussed above my research is well documented and preventive measures were taken against biases. Dependability was improved by these safeguard.

Confirmability is the corresponding concept to objectivity. It means that the data and their interpretation are not figments of the researcher's imagination. Data can be tracked to their sources, and the logic that is used to interpret the data should be made explicit (Mertens & McLaughlin,1995:56). Robson (1993:406) has listed the categories of information as follows: a) Raw data-field notes, documents, etc; b) Processed data- summaries, etc; c) Synthesis products- codes, patterns, etc; d) Process notes- procedures, designs; e) Materials relating to intentions and dispositions- original proposal, etc; f) instrument development information-schedules, etc. Confirmability also means the researcher can be shown to have acted in good faith: he or she has not overtly allowed personal values or theoretical inclinations manifestly to sway the conduct of the research and findings deriving from it (Bryman, 2001:274). My way to establish confirmability is to keep all kind of information as much as possible. This information constitutes an "audit trail" that is ready for perusing if needed in the future (Ibid).

<u>T</u>able 3.1 is constructed below in order that the writer and readers may get an overview of data collection processes of this study at one glance.

Table 3.1: Data Collection Activities

Period	Places	Methods						Whom I met
		S	I	G-I	P	D	Ga	
2003-8-25 to 2003-9-1	Beijing Dalian	✓	✓	✓	✓	✓	✓	Informant Y, Informant G-D, Informant P, Informant Zh-S, Informant Huang, teachers of school for the deaf,
2003-9-19 to 2003-9-24	Hefei Nanjing	✓	✓	✓	✓	✓	✓	Informant Zh-S, Informant Zh-Y, Informant Fl, Informant Li, Informant Ga, Informant Xu, Informant Liu, Informant M, Informant W, Informant Sh, Informant Zhu, Informant M, Informant Wu, Informant Sh, Informant Jia, Informant Sh, SBE teachers of schools for the deaf and Rehabilitation Centres
2004-5-23 to 2004-6-1	Tianjin Beijing	✓	✓	✓	✓	✓	✓	Informant Wa-l, Informant Zh-O, Informant Hu, Informant Do, Informant Su, Informant Wa-N, Informant Qu, Informant Ye, SBE teachers of school for the deaf, teachers of school for the deaf
2004-6-20 to 2004-7-1	Kunming Dali	✓	✓	✓	✓	✓	✓	Informant Zh-W, Informant Zh-Y, Informant Yu-W, Informant Ya-G, Informant Fa, Informant Ya-H, Informant Zh-F, Informant Li, Informant Ya-Y, Informant Don, Informant Sh, Informant Zhu, Informant M, Informant Wu, Informant Sh, Informant Jia, Informant Sh, Informant Ya-Y Parents of SBE children, SBE teachers of schools for the deaf
2004-12-3 to 2004-12-8	Chang-zhou Suzhou	✓	✓	X	x	X	✓	Informant Zh-S, Informant Wu, Informant Hu, Informant Yu-W, Informant Sh, Informant Jia, Informant He, Informant Gu-S, Informant Yo, Informant Ta
2005-11-20 to 2005-11-26	Hong Kong	✓	✓	X	x	X	x	Informant Wa-l, Informant Ga-T, Informant X, Informant Su from Tianjin city
2006-July	Lu Mountain Jiangxi	✓	x	X	x	X	✓	Informant Zh-S, Informant Gon
2007-May	Hong Kong	✓	✓	X	x	X	x	Informant Zh-S
2008-Nov	Hong Kong	✓	✓	X	X	X	x	Informant Zh-S, Informant Fo

Legend: S: Semi-structured interviews   I: Informal conversational interview
         G-I: Group Interviews   P: Participant Observation
         D: Direct observation   Ga: Gathering of archives, documents, materials and artifacts
         Symbol ✓ represents affirmation.   **Symbol** ҳ represents negation.

Table 3.1 shows the data collection activities since August, 2003. I am aware that the more information is provided (such as informants' background), the higher "dependability" and "confirmability" can be attained. As discussed above, this thesis study could be better documented to improve 'dependability' and I could disclose more information by breaking down the information to school/ centre level. However, I have to consider the ethical issue. For example, I must not tell who the informants are for each school in order to protect the rights of informants. I have assured them of confidentiality (see the third paragraph of section 3.3.2 and section 3.5). I try my best to make sure that none can identify the informants and have also promised not to disclose their working places/schools. (I will disclose more about the background of my informants to my supervisor, to Ethical Committee of Durham University, and to examiners on request) There are only a few teachers/ headteachers or staff and director in every school for the deaf / rehabilitation centre. If I break down the details too much, it is very likely the informants can be easily identified. I have constructed a second table bearing these issues in mind, to balance the need of increase of dependability and importance of ethical requirements (see Appendix F).

3.5   Ethical issues

I abided by the normal ethical principles to ensure that the rights of deaf primary students, the rights of their parents, their teachers and headteachers, the rights of the managers of INGO are protected. I shared the concern of Babbie (2005:65), that both informants' and observees' interests and wellbeing should be protected. I agree with the notion of Spradley (1979:36) that the researcher has a positive responsibility to safeguard their rights, their interests, and even their sensitivities. Practically, I had to avoid informants and observees being hurt physically and psychologically as Miles & Huberman (1994:292) state.

In my study, I cannot guarantee anonymity because I can identify key informants, informants, observees in the sites (Anonymity refers to the arrangement that neither the researcher nor the readers of the findings can identify a given response with a given informants and a behavior acted by an observee). On the other hand, I have guaranteed confidentiality when I know who speaks/does what, and I promised not to tell the public (Confidentiality means that though the respondent's identity will be known to the researcher, the researcher agrees never to divulge it to anyone else).   I have to maintain strict confidentiality scrupulously because I also share the notion of Mertens and McLaughlin (1995:83)

that research in special education must follow ethical principles to protect their human rights. I have therefore used codes or pseudonyms where appropriate.

In my study, key informants and informants have information (not full information) about what my study will involve. As mentioned in a previous section, I told them I came to their setting to learn experience from them. I did not come to evaluate their SBE experiments. Also as mentioned in that section, when I started interviewing them for the first time, I always assured them of confidentiality and told them their information and notions were important for the understanding of SBE experiments and for my study. To large extent, I abided by one of the ethical principles - "informed consent" - successfully. Informants were free to reject my invitation of semi-structured interviews, focus group interview. Their consent to participate was voluntary and un-coerced.

On the one hand, confidentiality is essential, but on the other hand, intellectual property should be respected. Some informants, who used their real names, wrote essays and made opening speeches on SBE issues in the SBE seminars. Also, some informants contributed their articles to journals in China by using their real names. Their identities have already been disclosed by themselves. In this case, I will use their real names. Hence, in chapter four and chapter five, my

study is based on different sources of evidence for reference. For the evidence from interviews and observations, I use coding system to replace the names of different informants. For the evidence from the above mentioned essays, speeches and articles, I use their real names.

3.6   Summary

In this chapter I have described why a descriptive, qualitative research was chosen; how data were collected and how I adopted concrete methods and techniques of data analysis. My purpose is to let those involved in the SBE projects speak and to analyse what are the common underlying themes and ways of thinking which they share, even though they work in different projects and different NGOs. In order to allow then to do so as openly as possible I have followed ethical guidelines and have described how these were put into operation.

In the next chapter I will present the themes which emerged from the data analysis process which has been described in this chapter.

Chapter Four   The Debate on SBE

4.1   Introduction

At the end of Chapter 2, I listed the questions which emerged from my analysis of research literature and which guided my fieldwork. In Chapter 3, I explained the processes of fieldwork and data analysis. The conventional approach is to present the analysed data, the findings, by following the research questions. In fact this list of questions is longer than the conventional approach and served as a set of guidelines for fieldwork and the collection of data. I decided therefore to analyse these data in order to understand the perspectives and claims from both sides present in the situation I was researching and then to analyse the views I found among informants in the fieldwork about the specific issues of SBE projects and their characteristics. I am also aware however that I need to show how (some of) my research questions were answered and to what extent, in the conventional way and have therefore throughout this analysis given references to specific questions. In this Chapter, I may suggest answers to Research Question number 1.3. What are the perspectives? What are the arguments and claims of proponents and opponents about the SBE debate in PRC?

4.2　　The Debate on SBE in China

As mentioned in Section 3.3.2, some literature such as official reports and Yearbooks from the NGOs, proceedings from the Bilingual Education Research Meetings organized by "Save the Children UK", especially the articles from *Chinese Journal of Special Education* (CJSE) and *Journal of Modern Special Education* (JMSE) are treated as data and used for triangulation purposes. Unlike the research literature analyzed in Chapter Two, this literature furnishes information that is not available from interviews and observation. Some of the articles are even advocacies for certain perspectives, and many of them provide the context and different points of views on the purposes and aims of education for deaf children and SBE in particular. Though some of these data – such as many articles from CJSE and JMSE which are short and not always well founded – should be queried to a certain extent, nonetheless they are not necessarily to be read at face value, as accurate representations of social reality as Hammersley stated (1983:131); but to reveal views, opinions and ideas rather than empirical findings, and to understand their "claims" and their "perspectives".

In the following sections, I am going to identify the arguments and claims of proponents and opponents about the SBE debate in PRC. (I will use Informant

A,B,C to keep the anonymity if it was required. If someone used pseudo names, I also used their pseudo names in this thesis. If someone did not mind their real names being disclosed, I used their real names.)

4.2.1   Documenting the debate

When I participated in the first Bilingual Research Meeting organized by Save the Children UK (SCUK) in Hefei city of Anhui province in September 2003, Wang Ting-yu, the general manager of SCUK stated in the meeting,

> The debate of sign bilingual teaching at that moment is intense; the benevolent see benevolence and the wise see wisdom; different people have different views; opinions are widely divided; we are unable to agree or decide which is right."

> (PRCD/01:11).

The debate started approximately in 1999, several years after the SBE experimental class started by the Amity Funds in 1996, the SBE training workshops in Nanjing in 1998 and the promotion of SBE training workshops conducted by four British participants-Callaway, Mackey, Day and Roberts in Hefei , Nanjing, Kunming cities in 1999 (ODS/03:6-7) and the Britain visit by

a Chinese delegation in the end of 1999 (SEJ:Shen,2000). The education

administrators, scholars, experts, teachers, professionals argued in the form of

discussions, contests, quarrels, dissensions, and intense debates. Face-to-face

debate also happened. Debates seemed to be diminished gradually after 2006.

The main platforms of the debate were CJSE and JMSE, and forums

organized by national and international auditory organizations and NGOs.   From

2000 to 2005, there were a lot of related articles written and published on the

platforms; some articles were unpublished but I have collected them in the field.

The contents included the discussion of deaf education and the discussion of

Signed language, the language use of deaf people, the advocacy and criticism of

SBE, etc. The following table shows the amount of most relevant articles published

in these two nationwide journals.

Table 4.1:   The number of articles related to SBE and Signed Language published during 2000 to 2005

	2000	2001	2002	2003	2004	2005	Total
Chinese Journal of Special Education (CJSE)	4	3	5	8	6	9	35
Journal of Modern Special Education (JMSE)	5	11`	15	18	3	5	57
Total	9	14	20	26	9	14	92

Internet is also a platform for the debate about SBE. Internet provides

discussion platforms for the deaf people and their parents (such as

http://www.deafchild.cn; http://bbs.eduol.cn). A bilingual education web site

(http://www.shuangyu.org) was established as a base to advocate SBE. I read and

downloaded quite a lot of articles and speeches from this web site.

It was not only the words but also the actions of NGOs which incurred hot

debate (see Appendix D and Appendix E, seven SBE experimental classes were

established from 2000 to 2002 and many sign bilingual research meetings and

seminars were organized: The Sino-British 1st Stage SBE Training Project in

Anhui and Yunnan in May of 1999, The SBE Training Course organized by Amity

Fund in May of 1999, The Sino-British 2nd Stage SBE Training Project in Yunnan

in Nov. of 2000, The SBE Promotion Meeting organized by UNICEF in Aug. of

2001, The SBE Seminar organized by UNICEF in Hebei Province Changli City in

Aug. of 2002, The Signed Language Seminar in ZheJiang Province Shaoxing City

in Dec. of 2002, The first Bilingual Research Meeting organized by Save the

Children (UK) in Anhui in Sept. of 2003, The second Bilingual Research Meeting

organized by Save the Children (UK) in Yunnan Province Dali City in March of

2004, etc.). During this period, a lot of substantive activities were organized by

NGOs. For instances, teachers from Yunnan SBE project had a visit to Nanjing for a 3-week training course in July, 2000; SBE teachers from UNICEF had a visit to Yunnan in September, 2001. (PRCD/01; PRCD/02; ODS/YN-YDPF:12; FD-NS G:11).

The contents of debate can be classified as three levels: the level of principles of SBE (concepts), the philosophical level of SBE (perspectives) and the operational level of SBE (pragmatic considerations).

Signed language (a simple label for a complex set of concepts), notion of bilingual and bicultural education (also a simple label for a complex set of concepts), deaf teachers and deaf culture are the key points for hot debate. Due to the limits on length of my thesis, the discussion below for each sub-section will not be long and simplify to some extent. Nevertheless, a few sub-sections (such as the nature and status of signed language) will be described as much detailed as possible.

4.2.2   Key points in the debate

From the analysis and classification of the documents described in the previous section, the following claims can be identified in the debate as a means of formulating the main issues.

The first group of claims is focused on the nature of Signed language and how it should be use and the first claims are about whether Signed language is a language:

C1- 1ˢᵗ Claim: Signed language is language.

C2- 2ⁿᵈ Claim: Signed language is first language

The insiders of SBE experimental projects advocate C1 and C2 without doubt. (See the following examples). Zhang, Y. a project officer of Kunming office of the SCUK, in 2004 claimed:

Signed language is first language of deaf people. Signed language is a symbol of deaf culture and also a carrier of deaf culture

(PRCD: preface).

Liu, M. is a deaf male teacher working for Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) since November, 2002. He wrote an article and signed in "The first Bilingual Research Meeting" in Hefie City of Anhui Province in September of 2003, signing that

"Signed language is a language"   (PRCD/01:32-33).

The proceedings of the first and second Bilingual Research Meetings were mailed to me by informants three months after the meetings. Papers which were addressed in the meetings showed the insiders' fundamental views:

'Signed language is language and is the first language of deaf students' (For examples, Xu, PRCD/ 02:18; Zhou, a deaf female teacher, PRCD/02: 26; Duan, a deaf female teacher, PRCD/01:34).

According to the official documents, Jiao & Wang, who worked for UNICEF's SBE experiment in Tianjin and also Wu, an executive and her colleague, working for Amity's SBE experiment in Nanjing, stressed their views that 'Signed language is language and is the first language of deaf students' (ODS/TJ:15; ODS/NJ-02:5).

According to the data collected in the field, deaf native signers were employed as teachers for the SBE classes. I observed five out of six SBE classrooms using signed language except the Amity's SBE class in Nanjing city. (FNS-F:11; FNS-G:36; FNS-G:83; FNS-B:18; FNS-B:28). (The SBE class in Nanjing had ended when I visited the school). The deaf native signers really used the signed language in the SBE classrooms. Using signed language was not an empty rhetoric.

In personal documents, I saw beliefs about signed language. Liao for example is female and the deaf teacher of SBE class in Yunnan province. She kept her diary of work since September of 2000. In the first week of September, 2000, she wrote:

> This is my first lesson. I have 8 to 9 students. Five to six of the students were trained orally previously. Two to three children are new students. The theme of the lesson of this week is 'going to kindergarten happily'. The aim of this lesson is to learn the following words: good morning teachers; sitting, standing, walking, having meal, exercising and sleeping. We provide photos and related picture stories… I use signed language to explain the stories…then I show the children how to sign the words…it is difficult to recognize the words at that moment… I teach them signed language first…   (PDS-YDPF:56)

Data from proceedings, from observation, from official documents and personal documents are thus triangulated, and show consistency in the view that 'Signed language is language and is the first language of deaf students'. However it is important to note that the debate and much of the writing on these issues and their claims comes from both hearing teachers, hearing staff, deaf project officers, deaf consultants, and deaf teachers. The perspectives of deaf people are less

presented in terms of number of articles. (However, I observed that the NGOs do not neglect the perspectives of deaf in the process of SBE experiments). It seems that the NGOs' perspectives include the Deaf perspective (See the concept of Deaf- the primary users of primary sign languages are Deaf- where the capital denotes participation in Deaf culture, not degree of hearing loss (Stokoe, 1987:35)).

The proponents of SBE experimental projects also advocate C1 and C2.

Some SBE proponents wrote articles to *Chinese Journal of Special Education* (CJSE) and *Journal of Modern Special Education* (JMSE), to advocate the claims (Xu Yongjuan, 2000; Chen Xiaoying, 2000; Yang Junhui (a deaf female), 2002a; Xu Tiewei, 2004; Mei Fusheng (a deaf male), 2001; Ha Pingan , 2002; Jiang Yun (a deaf female), 2003). For example, Xu, who works in a special school in Jiangsu, suggests,

> *Dactylology for the deaf people is their first language…judging from the linguistics and the way of communication of deaf children, dactylology for the deaf is very helpful for these children to learn their "second language" (native language). It should be widely popularized.*

> (SEJ, Xu, 2000)

In the above quotation, Xu claims that dactylology (an *emic* term for signed language) is the first language for the deaf and dactylology is helpful because the

second language/native language (Hanyu) can be learned through the use of signed language (Xu perceived Hanyu as 'native language').

(The articles published in CJSE and JMSE are written in Chinese. The CJSE requires the authors to translate themselves the abstract of their articles into English. Hence, I use the italic font type to indicate the direct quotation from the abstract. If some information or notion, which is not shown in the abstract, deserves quotation, I shall do the translation from Chinese into English. In this situation, I use the normal font.)

Yang, who is a deaf female, is an active proponent. She wrote an article on signed language and SBE for CJSE in 2002. She claims,

> Deaf people form a distinct social group. Deaf people have their own language: signed language…signed language is a language... signed language can claim a place in contemporary linguistic systems…signed language can be naturally acquired as the first language by deaf children and signed language can be used as the first language for the communication between deaf people…
>
> (SEJ, Yang, 2002a)

Liu Runnan, who is a scholar working in the Department of Chinese in Beijing University, contributed his article on linguistic study on sign language in mainland. He said,

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...more people have gradually recognized the language status of sign language in mainland China and more researches on sign language have been made... (SEJ, Liu,2005)

Interestingly, in this article, Liu never says sign language is a language explicitly. However, from the context of the article, he made the claim that signed language is a language implicitly by saying that,

> Linguistics of sign language is a part of linguistics. How to make the research on sign language in China successful is really important to the research on sign language in general. We are "Ren zhong dao yuan". We shoulder heavy responsibilities. (Liu used a phrase "Ren zhong dao yuan" here, that means the burden is heavy and the road is long.)
>
> (SEJ, Liu,2005:29)

Some SBE insiders go further. Amity Funds and UNICEF's agent deem that Signed language is the 'mother tongue' of deaf people (ODS/NJ-02:2; ODS/TJ:15; PRCD/ 01:32-33).

I also interviewed two experts in Beijing in 2003. Informant P is an expert in the field of special education, who had worked in the USSR from 1956 to 1961. His view was:

> We should recognize signed language...I have held this view since 1980s... We should not prohibit the use of SL. Any attempt to ban the use is in vain... (FD/NS A: 25-29)

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However, in China, how many people consider Signed language is a language? How many of them consider that Signed language is the first language? There are many opponents to these claims.

Refutation of C1- 1ˢᵗ Claim: Signed language is not a language.

Refutation of C2- 2ⁿᵈ Claim: Signed language is not a first language

Informant G, who is the second expert on deaf education I met in Beijing, and who was a team member for the compilation of *Chinese Sign Language* <CSL>, a dictionary for deaf education in 1994, told me that a lot of Chinese think Signed language is 'not a language'; it is only a form of expression, a tool for communication. He himself holds this view (See Appendix A for details)

What are the views from Deaf organization? Dai Mu, a deaf person, an ex-chairman of China Deaf Association states:

> Signed Language is a language. It is a very good communication means.
>
> (Dai Mu, 2002: preface).

However, although he is a deaf person, he believes that Hanyu, not Chinese Signed language, is the mother tongue of deaf people in China (Dai, 2003:3). Dai was the consultant on the dictionary Chinese Sign Language in 1994, and is an example to show people who hold the view that Signed language is a language may also hold the view Signed language is not a first language.

The perspective of Dai Mu demonstrates the use of the term 'deaf perspective' may be ambiguous in Chinese context. Dai Mu, as a deaf person, is not a member of the Deaf group. On the other hand, many hearing people working in the NGOs hold the same view as the Deaf and I now turn to the NGOs' perspective which may have some similarities to Deaf perspective.

What are the views from the majority of schools for the deaf? In 2003, I interviewed one Key Informant Zhang and Informant Wang in a restaurant. Informant Zhang stated,

> Since 1957, deaf education in China stressed the oral approach and many educators neglected the sign language development of deaf students. A revised curriculum for deaf education was promulgated in 1993. I still see in the early 1990s the approach being favorably inclined to the oral method. There are two reasons. First, the belief of that sign language can be learned by deaf students easily; therefore it is not necessary to teach them. Second, sign language is not a language. Sign language does not have language status. Whenever it is possible, do not use sign language. Better not to use sign language.

> (FD/NS A: 33-34)

Mei Cikai is an educator working in Shanghai Youth Technical School for the Deaf. Mei (2002) regarded "Chinese Signed Language is not a language; it is a special form of Hanyu; and Hanyu is the mother tongue of deaf people". Mei Cikai (2002) also claimed "Chinese Signed Language is primitive and it is *wu-ke-nai-he*". It is difficult to translate *wu-ke-nai-he* (no one-to-one correspondence with English words). This phrase in Chinese means something is not good enough but people have no alternative; therefore, it is a pity that they have to use this thing. This may be a suggested answer to why better not use sign language. Like many Chinese educators, Mei Cikai was influenced by Joseph Stalin, the Russian leader in 1950s. Stalin (1950) draws an analogy between language and an agricultural tool, saying that:

> Signed language is limited and poor…you cannot compare a wooden
>
> plough with modern tractor… Signed language is not a language…

But Mei's views are refuted by others.

Jiang Yun, a deaf female working for China Disabled People's Federation, (2003) said "hearing people tend to think Signed language is primitive and *wu-ke-nai-he*" (PRCD/01,2003: 59). As mentioned above, a bilingual education web site (http://www.shuangyu.org) was established as a platform for the

discussion of SBE. (The translation of the Chinese words *shuangyu* is bilingual).

Jiang Benhai posted his paper on the discussion area of the web- *shuangyu*. He

argued,

> I have never heard any deaf people have no interest to Signed language
>
> and to learn Signed language unwillingly.

<div align="right">(AR/SH-YU/04:7)</div>

(A note of caution: the names appeared on the web could be pseudonyms).

Ai, J. (AR/SH-YU/04:5) said, "Mei Cikai was ignorant; one felt his contempt

for Signed language" (This name appeared on the web is very likely a pseudonym;

usually, Chinese people do not use this word as name).

Qian, S. (AR/SH-YU/17:1) claimed deaf people should use Signed language

though it is primitive; Signed language is good for deaf people and Signed

language is a language for deaf people. Chang, C. (AR/SH-YU/17:3) claims when

deaf people using Signed language, no deaf people feel *wu-ke-nai-he*. (Qian and

Chang are pen names).

Sometimes, I hesitate to quote the information from the web, especially for

the essays written by persons using pseudonym. I quote their words with caution.

I do not spend effort to verify the quotations from Jiang, Ai, Qian and Chang such

as whether their arguments were reliable and valid to claim no deaf people feel

wu-ke-nai-he. The above three paragraphs only serve to indicate the existence of quarrels and dissensions.

In response to the dissensions, Mei Cikai (2004a) went on to elaborate his notions of *primitive* Signed language and *wu-ke-nai-he*. He said:

> My attitude towards Signed language is sympathy, not contempt…I suggests Signed language is primitive because I want to see the research and development of primitive Signed language… it is unrealistic to name primitive Signed language as mother tongue and first language and to utilize this 'first language' to learn 'second language' (Hanyu)
>
> (AR/SH-YU/03:3-4).

As mentioned above, Mei's statements are not necessarily to be read at face value, as valid or invalid, but just to review his perspective: "it is unrealistic to name primitive Signed language as mother tongue and first language."

As mentioned earlier, signed language is a simple label for a complex of concepts. Li Shangsheng is an educator working in Quanzhou Normal Institute of Fujian province. Unlike Mei Cikai, Li admitted signed language is a language but it is a developing language. Li Shangsheng expressed this in the abstract of his article by saying that,

The author consider sign language has possessed the basic language character in nature, it is a developing language…we can't neither deprive the language competency of sign language, nor drive up the language status of sign language blindly.

(SEJ, Li, 2000:4)

It is clear to see the perspective of Li Shangsheng that languages have different status and the status of sign language is low. Based on the Chinese version of the abstract translated by Li himself, there is a discrepancy. Actually, Li just translate "*it is a developing language*". According to the Chinese version, his exact meaning is "it is a developing 'would-be' language". This term he used means the language will be a full language in the future. At that time, this language is not well developed.

Informant Hua has been working in the field of deaf education for many years. In an interview, she told me many people perceive,

signed language can not be used to express abstraction; signed language is not good enough and signed language is inferior or even not a language.

(FD/NS A: 44)

To sum up, the quotations from informant G, Informant Hua, Mei, Dai, Li suggest many people consider Signed language is not a language. Many of them consider that it is better not to use Signed language.

This then can be formulated as two other claims present in the debate and the discussion goes further:

C3: the 3rd claim

Signed language is inferior.

It is difficult to utilize Signed language

to learn a second language (Hanyu).

C4: the 4th claim

The majority of Chinese people do not consider Signed language

as first language and mother tongue.

Studying all three types of data, not a few teachers in PRC said signed language causes the deaf student to produce sentences with words in inappropriate orders and to make many grammatical mistakes. For example, Huang Hongyan (SEJ-2004:27) says that 'instead of writing "very beautiful", deaf students may write *"beautiful very"* and this is a common mistake.' (The grammar of Hanyu is *"very beautiful"*.) As mentioned in Section 4.2.1, debates in the open seemed to be diminished gradually after 2006. Some people still cast the blame on sign language. In 2007, this claim is still being made by Lin Shuiying, a teacher of a special class in normal primary school, who said deaf students wrote *" rice eat I"* (The correct words order of Hanyu is *"I eat rice"*) (SEJ-2007:22). Besides the syntax error, there are other problems, Chen said,

Signing is primitive; signing is a rough and shallow form of expression…

signing has a negative effect …Speech will be undermined by signing…

The language development of deaf students will be seriously delayed

because of signing…

(SEJ, Chen Kewang, 2007:4)

Chen urges to improve the poor level of Hanyu of the deaf students in terms

of lexicon rather than the word order.   Chen illustrated two examples:

First, when two deaf children saw a dog, one deaf child signed to other-

"this dog is same as us, this dog is *boy"* (The correct word is male).

Second, after the visit of a prison, one deaf child signed to other- There

are *fathers*, wearing uniform, working inside the prison. (The correct

word is men). Chen said that these phenomena (the lexicon problem) are

common for the deaf students.

(Ibid.: 46)

In accordance with the quotations from Huang Hongyan, from Lin Shuiying

and from Chen Kewang, some teachers and educators charged the blame on signed

language for causing negative effect on oral and written Hanyu development.

Lei Jianghui is working in Department of Special Education, East China

Normal University. Lei said,

Before liberation (1949), the majority of schools for the deaf used manual

approach. Signed language helped student understand the meaning of

sentences but it hampered the learning and using of oral Hanyu and

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written Hanyu to certain extent. For the post-lingual deaf children, using

signed language in a long time caused the loss of oral ability…

(SEJ-Lei, 2005:38)

Lei said that the official documents from National Education authorities in

1956, 1957, 1984 and 1993 showed the inclination towards oral method policy

(Ibid.).

Since 1950's, almost all the schools for the deaf in mainland China had

adopted oral approach and method. In addition, Zhang (2002:310) stated that oral

approach is easily accepted by parents and community.

The information about inclination towards oral approach is triangulated by

Liu Chunfeng, who is working in a school for the deaf in Shandong province,

stated,

'The Outline of Language Teaching for Schools for the Deaf' stipulates

clearly that teachers must use oral language mainly for teaching and use

finger-spelling and hand gesture as supporting measures reasonably.

(SEJ,Liu,2002:23)

The notion of "Using oral language mainly" does not necessarily lead to the

belief of signed language is harmful to Hanyu learning. However, the accusation

about "rice eat I" and "this dog is boy" mentioned above suggest it is likely that

many administrators, teachers and parents entertain an opinion that signed language

is harmful to Hanyu learning. As informant X4 said, "once the deaf students can communicate easily by signed language, they do not learn Hanyu…" (FD/NS A: 44)

It is not possible from my methodology to know how many people believe that signed language causes negative effect on Hanyu development. And this might be a question for further research I suspect however that many educators and teachers in China believe signed language causes negative effect and I have thus identified a further claim:

<div align="center">

C5: the 5th claim

Signed language can hamper the learning of Hanyu.

</div>

In December 2006, I received a six pages text file (Z4X8C 4-:4) which was attached with email sending by Informant H-Y. The title of this text file is 'the analysis of Deaf Culture'. The time to download this file was at September 18, 2006. The file had been clicked to read for 399 times and it seems that hundreds of people have interest on this article. Unfortunately, the file did not tell the Uniform Resource Locator (URL). I contacted other informants to check whether they knew more about this six pages text file. Informant H-M told me he had read this six pages file recently. He did not know the URL too. I kept on seeking however I could not locate the file through Internet.

This six pages text file is special. Huang, the author, put forward an argument in the field of language and thought. Huang said,

> …using a relatively simple language to support the learning of a sophisticated language…how it can be done? An inference can be drawn from Sapir-Whorf doctrine: if and only if a cultural set of words have a corresponding words referring to an object or event, this object or event can be shown in human's mind. Sapir-Whorf said: different language leads to different thinking pattern. For example, Eskimos have more than twenty terms for different kinds of snow and these differences of terms of snow are difficult to be comprehended by non-Eskimos.
>
> (Z4X8C 4-:5)

Lander University (2000) explains the principle of charity requires seeking a sympathetic understanding of the new idea; seeking to tolerate ambiguity for the larger aim of understanding ideas which might prove useful and helpful.

Huang's statements are short and not easy to understand. I try hard not to mutilate Huang's quotation. Applying the principle of charity, I interpret his words in the way that makes the most sense given by the above quotation. What Huang is trying to say might be that the argument "simple Signed language is unhelpful to the learning of Hanyu, which is an advanced full language." Huang intended to support his argument by the Sapir-Whorf hypothesis as a warrant. (In different

areas of discussion, the warrants can be rules of thumb, can be principles, can be laws of nature. Elsewhere, it can be accepted values, customs, or procedures) (Toulmin *et al* 1984: 47).

How can the deduction of Sapir-Whorf hypothesis arrive at a conclusion that simple Signed language is unhelpful to the learning of Hanyu which is an advanced full language? To examine this argument, first, I would have to start from the Sapir-Whorf hypothesis (both weak version-linguistic relativism and stronger from-linguistic determinism) and second, to analyze whether the deduction is relevant, valid and sound, but that is not the point here since my purpose is to identify the claims and perspectives. However, I have to say the linguistic relativism and linguistic determinism proposed by Huang is unwarranted as in fact the Sapir-Whorf hypothesis is irrelevant to his claim and the deduction is invalid.

From the data I can now summarise the next claim in the debate that:

C6: the 6th claim

Simple language is unhelpful to learning a well developed language.

In brief, the role and status of Signed language, the recognition of Signed language and the effect of signed language on Hanyu learning are the major elements of the debate. In the literature review chapter, however it became clear

that the terminology is complex and that this needs to be taken into account in the analysis of the terms used in the debate.

At the operational level, Signed language is still a focal point and raises the question which Signed languages should be adopted for the SBE projects.

Chinese people perceive, adopt and use Signed language differently. For example, Chen Jinyou, the headteacher of Nanjing School for the deaf defines Signed language adopted in his school as the signs printed in Chinese Signed Language (CSL) and grammar of Hanyu. Chen posted this definition on the web site of Nanjing School for the Deaf in Summer of 2007 (http://www.njlrxx.com). The article did not exist after the redesign of the school web site. Fortunately, this article was downloaded by *daoxialiugui* (pseudo name). *Daoxialiugui uploaded this article to* (http://bbs.eduol.cn/post_293007556.html). (This archival record is downloaded and is saved as Electronic file: AR/NJ-DS-07 for reference.) Sun Wanli, the headteacher of Tianjin School for the deaf told me the mode of communication between teachers and students in his SBE project is Natural Signed Language (NATU-SL) (FD/NS F1:34). Reclaimer (pseudo name) argues for not signing according to grammar of Hanyu. Reclaimer states NATU-SL is a language and NATU-SL is the first language (shuangyu-net-04 year:4). Lu Zhenhua, a deaf

educator, suggests using Grammatical Signed Language. He views that using what he calls standardized Grammatical Signed Language can avoid deaf students writing *'eat rice'* to *'rice eat'* (shuangyu- net-01, 2006:1-2) (In Hanyu, the correct word order should be *'eat rice'*).

Shi, L. who is a deaf female project officer, working for Heifei office of the SCUK, in "The second Bilingual Research Meeting" in Dali City of Yunnan Province in March of 2004, advocated:

> We need to raise the status of signed language. Natural Sign Language which has its own grammar is the language of deaf people

> (PRCD/02:6)

Yang, G. who is the representative of Yunnan Rehabilitation School for Deaf Children (YRSDC), introduced her experience of the SBE experiment in her school-YRSDC. She affirmed her belief in SBE:

> For our profoundly deaf students, SBE adopts Natural Sign Language as the first language and through this first language to learn second language (oral and written form of Hanyu)

> (PRCD: 22)

Shen Yulin, the consultant of SBE projects, proposes using NL-SL (FD/NS G:33). Zhou Shufen, the deaf teacher of SBE class of Dali, uses NL-SL but Yang Hai, the hearing teacher of SBE class of Dali, uses GL-SL (FD/NS G:98). Liu

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Ming, the deaf teacher of SBE class of Hefei, uses 80% NL-SL-20% GL-SL (FD/NS B: 39).

Amity Foundation admitted that their principles of SBE have changed. In the early stage of SBE project in Nanjing, they used Signed supported Chinese. Informant Zhu said,

> Today, we know clearly that the big difference between Signed supported Chinese (SSC) and Natural Signed Language…SSC cannot be acquired naturally and SSC does not have grammar…so strictly speaking SSC is not a language; SSC is a tool for teaching…the use of Natural Signed Language increases gradually; Natural Signed Language is the formal medium of instruction in SBE class.
>
> (ODS/NJ-02:12-13)

To summarize this part of the debate, we can formulate the next claim:

C7: the 7th claim

Natural Signed language should be the first language.

The next set of claims identifies the issues in the question of combinations of languages in Sign Bilingual Education

Bilingual Education is in its essence a matter of using first language and a second language in the classroom as media of instruction. The literal meaning of Sign Bilingual Education in China could be using Signed languages and the

language of the majority – Hanyu with its two forms: oral form and written form –

in the classroom as media of instruction.

The data show in fact combinations as in the following table:

Table 4.2: Typology of Languages Use in SBE classrooms

	Mainly NL-SL	Mainly SSC	NL-SL and SSC
Mainly Oral form Hanyu	1	2	3
Mainly Written form Hanyu	4	5	6
Oral and written form	7	8	9

Zhang N., the consultant of SBE projects (FD/NS G:30) suggests using the 7th

and 9th scenario. SBE experiments, such as experiments in Anhui province adopted

using mainly NL-SL with oral and written Hanyu. Zhang elaborates,

> the written form of Hanyu is the main domain to be learnt, and does not
>
> object to the learning and teaching of the oral form of Hanyu… knowing
>
> the oral form of Hanyu helps the learning of Chinese
>
> characters…learning and teaching Hanyu is not for articulation.

(Ibid.:30)

Bao Yongqing reported in the 2nd SBE seminar their experience of teaching

oral form Hanyu in their Rehabilitation Centre of Anhui Province

(PRCD/02,2004:15).

Shi Li, (a deaf female), a project officer working for SCUK Hefei office, presented her SBE model to the audience of the 2nd SBE seminar. She posits the deaf teacher using NL-SL to explain the contents firstly, then students learn the written form of Hanyu secondly and the hearing teacher uses oral methods to teach the oral form of Hanyu finally (PRCD/02,2004:10). Both Bao Yongqing and Shi Li advocate the 7th scenario.

Mei Fusheng, who is deaf, was a consultant of SBE projects. Mei recommended adopting the 4th scenario, i.e. mainly NL-SL combined with written form of Hanyu. He argues for not wasting resources and time to learn the oral form and SBE deaf students should concentrate on the learning of NL-SL (PRCD/01, 2003:68). In April 2004, Mei addressed the 2nd SBE seminar organized by Save the Children UK, saying

> running SBE experiments, we have to gather the experiences of teaching deaf students through Signed language, not other; the time for the experiments will not be long so we ought not to be teaching oral Hanyu to avoid wasting time and slowing down the main task.

Mei continued,

> after the success of SBE, if we have energy and time, we may organize those deaf students with residual hearing to form an oral experimental

class but at that moment, absolutely no learning and teaching oral form

of Hanyu is permitted.

(PRCD/02, 2004:53)

SCUK-SBE experiment in Dali City project adopted using mainly Natural

Signed Language with written form Hanyu (the 4th scenario for language lessons

and 6th scenario for mathematics lessons) (FD/NS G:99). In addition, UNICEF

SBE project in Tianjin used the 4th scenario (FD/NS F:1; FD/NS G:6). As

mentioned above , Amity Fund's SBE was the 5th and 8th scenarios in early stage of

SBE project in Nanjing (ODS/NJ-02:12-13).

In an interview in June 2004 in Kunming city, Yang Jiaye, a member of the

Jiangsu delegation to UK at the end of year 1999, advocated using the 1st and 3rd

scenarios for the preschool students. He holds the view that the written form of

Hanyu can be learnt in later stage (FD/NS G:124).

After analyzing all types of data, I find most of the SBE organizers advocate

the 7th scenario: the combination of mainly NL-SL with oral and written forms of

Hanyu. The potential use of two languages in SBE classes is quite complicated and

it is possible in PRC that people talking about SBE refer to different combination

of Hanyu and Signed languages. It is important to analyse the different views of all

those present in the debate, although again it is important to note that the debate is dominated by hearing people, and the claim from the SBE insiders is clear in 2004:

C8: the 8th claim

Mainly Natural Signed language together with mainly written form of Hanyu will be a good combination for SBE students.

The formal title of SBE is 'Sign Bilingual-bicultural Education' and this raises new perspectives. In 2003, Amity (2003:2) made a report on the first and second SBE experimental projects in Nanjing school for the deaf. There are eight hearing officer, staff and teachers and three deaf teachers writing up this report together. The report said Amity contacted deaf educators and scholars from western countries and took the view that:

> Deaf community is a minority. This deaf community has distinct culture; signed language is not only the language of this community but also the mother tongue of deaf people; early acquisition of signed language helps the cognitive, emotional and social development; deaf culture is spread by teachers who are Deaf.   (ODS-RP-AMI-03)

The SBE experiments of Amity began in 1996. The first SBE class started in Feb.1998 and the second class started in 2001. In early stage of the experiments,

Amity admitted the principles of SBE in their mind were vague. After practicing the SBE projects for several years, Amity have a better understanding of SBE. Shen,Y. is a consultant of Amity SBE projects. He argued that the deaf education in China should be the education of bicultural education (SEJ, Shen, 2002:20).

In 2004, Amity advocated and explained,

> Bicultural refers to the culture of the deaf and the culture of hearing (mainstream society)… lets deaf students learn the two languages and the two cultures…acquiring these two languages provide deaf students with wings enabling them to fly freely in both the societies of the deaf and the hearing… (ODS-LF-AMI-03)

Also in 2003, UNICEF and its Chinese agent issued a picture book to advocate SBE. The picture book suggested,

> Adopting the multilingualism and multiculturalism, Valuing signed language for the deaf and deaf culture, valuing the research of signed language, using signed language and encouraging the participation of deaf people in the deaf education…
>
> (ODS/TJ:15)

The picture book argued,

> Deaf culture is an indispensable element of deaf education. History of Deaf people, deaf value, deaf arts and the life of deaf- are deaf culture. Deaf culture helps deaf children to develop their self concepts positively.

Coincidentally in 2003, SCUK promoted deaf culture in Dali city by organizing the Dali Deaf Club and publishing the Deaf Newsletter (ODS-BTN-DALI-03; PRCD/01, 2003:20). This deaf club had function every month. It was planned to organize the deaf students, the deaf graduates and some deaf people in the society coming together to attend the functions.

Promoting deaf culture in Dali was not an empty rhetoric. I had received the photo album from my informant in 2004. I also received a copy of Deaf Bulletin as a gift when I visited Dali. Li Zhihong's report confirmed the deaf club's activities organized in 2003. The functions were organizing seminar, group discussion, outings, drama, and publishing photo album (PRCD/02:25; ODS/DALI/ PHOTO-ALB). Amity, SCUK and UNICEF- all claim the deaf culture is important. Some proponent of SBE supported the notion of biculturalism. For example, Huang, L. (2002) stated "with regard to SBE, language education and culture education should proceed together; it is inappropriate to stress only language education". However, I did not see the adequate evidence of promoting deaf culture in SBE sites except Dali.

In short, SBE insiders and proponents – albeit mainly hearing people – support the notion of deaf culture. The three NGOs uphold the principle of deaf culture, and this can be summarised as the next claim:

C9: the 9th claim

The concept of deaf culture is essential to SBE projects.

On the other hand, there are some who have difficulty with the concept. For example, Sun Feng was a Master degree holder in Beijing Normal University in 2004. (His thesis is the "Study of Self-consciousness of deaf people"). In his article, Sun, F. (2007:58) argued that "the term 'deaf culture' was not accepted by many people in China and there were a lot of voices denying the existence of deaf culture.

Informant Sw is one of my key informants.　I had a chance to interview him for three hours in 2005. (I promised to preserve anonymity). Informant Sw said,

> the notion of sign bilingual education was mature but not the bicultural education…the definition of deaf culture was not clear enough and the reasoning of bicultural education was not valid enough…the concept of biculturalism is 'immature' and that many people do not credit the notion of deaf culture…the issue of deaf culture was sensitive…

(FD/NS-T:91)

A view from a deaf person is presented by Jiang Yun, a deaf female working for China Disabled Persons Federation, who said that she heard the term deaf culture in 1998 and it took 5 years for her to understand deaf culture. She reflected in her paper why it took so long (PRCD/02, 2004:61).

Another view from an educator came from Informant W. During an interview in a canteen in Beijing, he expressed,

> Deaf culture was not fully developed; people did not understand deaf culture; what is the meaning of deaf culture? Is it a kind of value? Is it a moral? We need to know the definition of deaf culture... We have to wait ten to twenty years, till deaf people form their deaf culture after more deaf people have been educated in senior secondary level and tertiary level of education; in the future, let the deaf people tell what is deaf culture; it is not appropriate for the hearing people to advocate deaf culture… deaf culture is part of hearing culture…today it is difficult to say something sensible about deaf culture…it is controversial.
>
> (FD/NS F1:58)

Another similar view was found from a different source – the "Deaf Child Web" message. A SBE teacher said,

> some famous deaf educators such as Dai, M., Mei, C., Huang, Z. and Ji, P. did not recognize the existence of deaf culture in China. They "encircled and suppressed" SBE projects. They addressed in every meeting to refute the argument about deaf culture and signed language.

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(Retrieved on April 3, 2004 from http://www.deafchild.cn/1/leadbbs1314/ leadbbs /Announce /Announce.asp? Board ID =25&ID =3649).

The debate continued up to year 2006 covered by my data and in the field of deaf education, people will argue on and on. Liang Xinyue, working for Bai Yin School for the deaf in Gan Su Province, said,

> Oral form, written form and signed language are different form of Hanyu. Each form can be used by deaf children to learn language and Chinese culture…deaf children will not use oral form Chinese to learn hearing culture and use signed language to learn the "so called" deaf culture…   (SEJ-Liang,2006:15)

Using the term "so called" deaf culture, Liang said implicitly that he did not recognize signed language or suspect the existence of signed language at least. So the 9th claim is queried by many deaf and hearing people and there is another claim in the debate:

Refutation of C9

the 9th Claim: Deaf culture does not exist.

As mentioned above, I received an email with an attachment of a six-pages-text file in December 2006, (Z4X8C 4-4). The title of this text file is 'the analysis of Deaf Culture'. I keep on asking whether this text file is reliable and

whether the author-Huang is the person working in the field of audiology in China. From the reference of an article written by Sun Feng in 2007, I found the original source. It is an article published in Chinese Journal of Special Education (CJSE) in October, 2004. Huang Zhaoming, an auditory professional from Shanghai recognized the existence of deaf culture. Huang made a claim about the undesirable implication and consequence of deaf culture. He expressed his opinion that deaf culture as a fundamental principle of SBE could undermine deaf education and rehabilitation of deaf children (SEJ-Huang:42). He represents therefore another claim in the debate:

C10: the 10th claim

The advocacy of deaf culture will have negative impact on

deaf children's rehabilitation and the 9-year compulsory education in China

Huang did not provide the evidence and reasoning of this claim but he had attempted to influence others. Despite the position which he presents as a consequence of the recognition of deaf culture, Huang, who advises the PRC Government take deaf culture seriously, stated,

> Some advocators of deaf culture in western countries seem to have specific social background. Under the slogan of "respect and protect deaf culture", some deaf people organizations are established. Such people

organize themselves to ask for special political rights and economic benefits, claiming the same rights as any other linguistic minority.

<div align="right">(JSE- Huang:43)</div>

Huang said,

We have constructed value system and moral standards for Han people and ethnic minorities and communities. If we emphasize partially towards to the so called 'cultural difference', then it follows the enlargement of gap between deaf and hearing people. If we do not guide this thinking, this notion of deaf culture could jeopardize the social stability…   (Ibid:43)

Huang's further claim is clear.

<div align="center">C11: the 11th claim</div>

Deaf culture may enlarge the gap between deaf and hearing people and

Deaf culture could influence on the social stability and unity.

And, in the same article, Huang (Ibid:43) states that if deaf people do not aim at the learning of the majority (hearing) language and culture, they could not be integrated into Chinese society and this leads to another claim:

<div align="center">C12: the 12th claim</div>

The promotion of deaf culture causes the marginalization of deaf people.

In brief, the 10th claim, 11th claim and 12th claim are not supported by evidence and by reasoning or inferences. Huang did not provide proof in his article,

and these three claims look like "slippery slope arguments" which basically claim that an innocent-looking step should not be taken because it will lead to a bad result, without giving reasons (Waller,1994:234). As mentioned above, "Dai,M., Mei,C., Huang, Z. and Ji,P. spoke in every meeting to refute the argument about deaf culture and signed language" (AR/SH-YU-15:4), and Sun, F. (2007:59) considered Huang Zhaoming was the representative of the opponents of deaf culture. I agree with Sun's judgment. It is likely that Huang's points of view have represented the opponents' major view of deaf culture in PRC.

This debate on the concept of deaf culture is related to another point present in the discussion: the need for deaf and hearing teachers.

There is a saying among the hearing teachers who work in schools for the deaf in China: "One-sentence-teaching from deaf teachers to deaf students overcome ten-sentences-lecture from hearing teachers" (JSE-Mei,2001:27). There is no evidence in my data of any of the three kinds that this proposition is challenged. The view is that deaf teachers understand deaf students better, and deaf teachers are the best role models of the deaf students (AR/SH-YU-06:1; AR/SH-YU-16; ODS/ LF-AM-002; ODS/ RP-UNICEF-05:35)

Mei Fusheng, who is deaf, is a consultant of NGO. Mei stated,

> Deaf and hearing teachers work together, like the left-hand side mirror and right-hand side mirror of a car; both of them are indispensable … unfortunately, almost all the schools for deaf children do not have deaf teacher in China. (SEJ: Mei, 2001:27)

In 2003, Zhang, Hu and Huang made a survey of the deaf culture phenomenon and deaf community in some cities of PRC for the UNICEF. Zhang, Hu and Huang claimed,

> Deaf teachers are important to deaf education. Deaf teacher as a successful deaf adult in the society play active role models to the deaf students. Deaf teachers, who make a model, are indispensable. Deaf teachers can not be substituted by hearing teachers.
>
> (Zhang, etal, 2003:35)

Deaf teacher is indispensable. This is a major claim argued by NGOs (ODS/TJ:15; ODS/YN-RP:11; ODS/ LF-AMT-003). Today the SBE proponents always suggest every special school should recruit deaf teachers. In 2007, Zhang urged the education administrators on employing deaf teachers in schools for the deaf. He made the link with the concept of deaf culture more explicitly, arguing,

> Deaf teachers are NL-SL native signers; deaf teachers are Signed language and deaf culture carriers; deaf teachers are the necessary condition for SBE. (Zhang, 2007:37)

To summarize the above paragraphs, a claim is identified as follows:

C13: the 13th claim

Deaf teachers provide role models and a good sign language environment to both deaf students and hearing teachers.

In practice, unlike other schools for deaf children which have almost no deaf teachers, SBE projects advocate the participation of deaf teachers based on their principle of bilingualism and biculturalism, although it is in fact difficult if not impossible to enroll adequate qualified deaf teachers if SBE projects develop in PRC (ODS/-RP-NJ-01:24).

This discussion of deaf culture and the ideal use of deaf teachers are then also related to the question of two teachers teaching together in a classroom at the same time. *Dual- teacher arrangement* is what the SBE insiders call it. All three types of data reveal the majority of SBE insiders tend to support the Dual teachers arrangement. For example Shen Y., a consultant of Amity, stated his support for the Dual-teachers arrangement (PRCD/02, 2004:61). This provides the next claim:

C14: the 14th claim

Dual teacher arrangement is appropriate for the SBE.

The assumptions of these claims (C13 and C14), that NGOs took for granted, are Signed language is a language; signed language is the first language of deaf people; signed language is the mother tongue of deaf (children and adult) and deaf people participation in deaf education is important. Here, NGOs put forward these claims to their staff and SBE insiders. The "contexts for argument" changed from argument between proponents and opponents of SBE to argument among the SBE insiders. There are however, some who do not support; Mei Fusheng, who is deaf, is a consultant of SCUK. Mei stated that it was inappropriate to arrange two teachers in a classroom (FD/NS B:23; PRCD/ 01,2003:70). The dual teacher arrangement leads to a question of changing existing Government policy. Dali School for the Deaf for example does not adopt the dual teachers arrangement because of the provision for special school stipulated by local government (PRCD/02, 2004:62).

So far in the debate, there has been discussion of the nature of Signed languages, of the combinations of Signed and majority language in bilingual models, of the nature of deaf culture and of the role of deaf teachers. The next group of claims focuses more specifically on arguments about the nature of bilingual education using Signed language.

In 2003, after seven years of practice, Amity Foundation presented their report of the SBE project in Nanjing. The report admitted that at the beginning of the experiment they had vague principles of SBE. The majority of the participants of their SBE experiment class was not trained and had no idea about SBE. Only a few leaders and organizer had the chance to visit SBE projects in Britain and Norway (ODS-RP-AMI:2). That was all they knew about SBE at that moment. The report went on to disclose that after many years practicing experience, after their reflection and especially their participation at a Bilingual Bicultural Seminar for the School for the Deaf of PRC organized by UNICEF in 2001, now, they had a better understanding of the SBE project.

As we saw in the analysis of research literature in an earlier chapter, there are 55 ethnic minorities in PRC, and there are many experts who have been studying on what is called "bilingual teaching"; (there is no substantial different of meaning when using *bilingual education* or *bilingual teaching* in China) (AR/Shaung-net-12:1). However, from several searches in "Chinese Journal Net" and "Wanfang Net", there appear to be no articles written by Chinese bilingual education experts about SBE in Chinese journals. In the field of linguistics, there are many experts in

China, it seems that Chinese *bilingual teaching* experts and linguists do not have interest in SBE. There is an exception.

Gong Qunhu is a linguist and a professor of Fudan University, who writes about Chinese signed language from a linguistics perspective (Gong, 2004a; Gong,2004b; Gong,2005; Gong,2006a, Gong,2006b). He gradually became an active speaker in SBE seminars organized by Amity Fund from 2004 and I met him in summer of 2006 in Lu mountain, Jiangxi and he gave many his articles to me.

As mentioned above, at the beginning of the experiment the majority of the participants of SBE projects (Amity) had vague principles of SBE. They had a better understanding of the SBE project after seven years practice (ODS-RP-AMI-03:2).

How did the SBE opponents perceive the principle of SBE? Did the SBE opponents have different points of view?

Dai Mu is a famous deaf person. He was the ex-chairman of China Deaf People's Association and was the vice-chairman of "China Disabled Person's Association" (CDPA). (The chairman of CDPA is Deng Tuofang who is the son of Deng Xiaoping). In March, 2003, Dai wrote a notable article "On Sign Bilingual Education" for "Chinese Scientific Journal of Hearing and Speech Rehabilitation".

(This article is not available. I try to find a reliable source to confirm the message from this article though I have read this article before. In early November of 2008, a key informant sent me an article written by Yu Dunqing. Yu in his article quoted a lot of words from Dai. When primary source is unavailable, I prefer secondary source rather than an attached file sent by Informant.)

Yu Dunqing (2005:42) introduced Dai Mu's perspectives by adducing his quotation. Dai Mu states,

> Up to this moment, no matter which one is better, signed language, oral form of language, and written form of language are still the media of instruction. We (schools for the deaf) have to select to use the languages and we cannot refuse to use the languages. This is a fact. No matter using oral teaching method or manual teaching method, written form language have to be used as supplement. Every one knows that. Manual teaching method or oral teaching method needs to use the written form of language together. Therefore Sign Bilingual Education is no novelty. Sign Bilingual Education is manual teaching method. Signed language is not the mother tongue of deaf people but the language of majority of hearing people is the mother tongue of deaf people.
>
> (Dai, 2003 cited in Yu Dunqing,2005:43)

Applying the principle of charity, I interpret Dai's words in the way that makes the most sense given by the above quotation as follows: In the past, using

oral form Hanyu as medium of instruction (oral approach), we should use written form as supplement to teach. Long time ago, using signed language as medium instruction (manual approach), we also use written form Hanyu as supplement. Now, SBE approach is using signed language first, then learning written form Hanyu later. That is same as manual approach. Nothing is new. Therefore SBE teaching is manual teaching.

Dai reasoned by using what is known and familiar (manual method) to reach conclusions about the unknown and unfamiliar (SBE). Manual method had two features: using signed language mainly and also using written form Hanyu... SBE also had features: using signed language mainly and also using written form Hanyu…By comparison, SBE is manual teaching. This is the way that Dai using for reasoning.

Mei Cikai (2004b) echoes Dai's opinion:

> I agree with Dai's point of view-Sign Bilingual Education is no novelty. Sign Bilingual Education is manual teaching method. It is because SBE supporters believe Signed language is the mother tongue and first language of deaf people. They believe in learning second language Hanyu through the use of first language after deaf children have learnt the first language-Signed language.   Is this not manual teaching actually?

According to Informant KK, Dai and Mei worked in Shanghai Deaf Youth Technical School for many years. They contacted a lot of deaf students studying in senior secondary level and seldom contacted deaf student in preschool level and in primary school level. Their standpoint might be due to their experience working for the deaf youth in Shanghai (AR/Shaung-net-03:6).

In addition, in April of 2004, I was told that in the field of deaf education, some educators such as Dai and Mei, Huang and Ji, saying in every seminar and meeting that SBE is manual teaching, practicing SBE is a regression of history (AR/Web-15:67). This message was confirmed by informant D (FD/NS F:21).

To sum up, some opponents perceive the teaching method adopted in SBE classrooms as manual method adopted in 1940s and this point if view can be formulated as the next claim:

C15: the 15th claim

SBE is the past Manual teaching. Practicing SBE is history regression.

(The 'historical regression' connotes going back to a less advanced state. Practicing SBE is this regressive way implies doing something (SBE) which is undesirable in deaf education.)

Another issue in the part of the debate focused on the nature of SBE is related to the question of standardization. The variations of Signed language in China are

large as is illustrated by the situation, when I met Li Zhihong, the Dean of education of Dali Special School in Dali in 2004. He told me that,

> Zhou Shufen (Dali deaf teacher) can understand approximately 70% of the Kunming Signed language signing by Liao Yanping (Kunming deaf teacher). (FD/NS G:95)

(Both Zhou and Liao were my informants).

The distance between Kunming and Dali is about 300 Kilometers. Standardization of Signed language is thus a topic discussed frequently within the insiders of SBE.

Pete Mackey was the headteacher of Blanche Nevile School for Deaf Children in London. Mackey, and Callaway provided workshop in Nanjing on sign bilingual approach for teachers from deaf schools all over Jiangsu in 1998, organized by Amity. Mackey was one of the project personnel of UK-China project to develop sign bilingual education for deaf children in 1999. In the same year, Mackey and Callaway provided SBE training workshops in Hefei, Nanjing and Kunming. *(http://www.idcs.info/docs/Developing_bilingual_education_for_deaf_children_ China.pdf) (The article was downloaded on Oct 21st, 2007).*

Mackey visited China again in November of 2000 to introduce the concepts of SBE in Yunnan province. After his visit, I was received a message from Ms Li,

who works for Yunnan Rehabilitation School for Deaf Children and who had talked with Mackey:

> I was told the language used in SBE should be natural signed language. The <CSL> we used is based on Hanyu and the word order is based on Hanyu too. So this is not a true signed language for the deaf people…So, what we have learnt from <CSL> is not a true signed language…how can deaf people acquire their signed language? How to standardize the natural signed language? What are the criteria and requirement of signing natural signed language…   (FD/NS YN:70)

The debate continued. For example, Shen Yulin, the consultant of Amity Fund suggested not to standardize Signed language because standardization may cause limitation of development (PRCD/02, 2004:61).

On the other hand, Jiang Yun, the deaf lady working in "China Disabled Person's Association", suggested to standardize Signed language (PRCD/ 01,2003:43) and Xu Taokun, the headteacher of Hefei Special Education Centre, urges to unify CSL (PRCD/01, 2003:31). Shi Li, the deaf lady working for SCUK, suggests, standardizing Signed language in school level in order to produce a Sign Language teaching CD-ROM in September, 2003 (FD/NS B:41). In June 2004, at the Kunming office of SCUK, Zhao Zhonghua, said

> the standardization of Signed language is an essential issue for the SBE projects. I recommended standardizing Signed language in school level

first because standardizing Signed language nationwide was a difficult

task   (FD/NS G:3)

The majority views of SBE insiders seem to support the standardization and

these views from different data sources can be summarised as the next claim:

C16: the 16th claim

Standardizing Signed language in a school is important for SBE classes.

Standardization of Signed language is an essential issue for the SBE projects.

NGOs, advocate to standardize and to use "Natural Signed Language" in SBE

classes. (It is noted that the standardization of Signed Language words was

started from 1950s (CDPF,2006:50). In the eyes of "China Disabled Person's

Federation", signed language (Signed support Hanyu) is standardized basically

after the revised edition of <CSL> was published in 2003. For this event, Deng

Tuofang, the son of Deng Xiaoping was invited to write inscription for the

publication of <CSL>. Deng wrote, "standardizing Chinese Signed Language and

facilitating communication channel") (Ibid:50)

4.3   Differing perspectives on the debate

The debate is complex and the previous section has attempted to identify the main claims without representing all the contributors in detail. In this section, I shall present more by looking at different perspectives on the debate.

The question of perspectives can be illustrated as follows. Lu Shan is a scenic and historic interest area in Jiangxi Province which I like to visit again and again. There are a lot of cultural and natural sites scattered in Lu Shan. Su Tung Po (1037-1101), a Sung dynasty Poets wrote a poem on the wall at West Forest Temple in Lu Shan region.

>It's a range viewed in face and peaks viewed from one side,
>
>Assuming different shapes viewed from far and wide.
>
>Of Lu Mountains we cannot make out the true face,
>
>For we are lost in the heart of the very place.

>   (Su Tung Po edited by Gao, translated by Xu, 2003)

This poem reminds me to remember something can be viewed in different perspectives and standpoints and I have identified five major perspectives of the debate of SBE as in the following paragraphs.

4.3.1 Half full-half empty perspective

A person pours water into a glass until water reaches the middle of the glass. Is the glass half full or half empty? Those who say the glass is half empty are pessimistic relatively, those who say it is half full are optimistic and as Johnson (2003:17) said,

> The half-empty perspective represents a perspective that sees only what individuals do not have (hearing, speaking ability): the glass is half-empty. In contrast, the half-full perspective represents a perspective that sees what individuals do have (a unique visual language, deaf culture…): the glass is half-full.

Zhou Demao (2007: preface), a special education administrator in Ministry of Education of PRC, told a short story in his article, "A psychologist put a big piece of white paper on a blackboard. Then the psychologist drew a black spot on the paper and asked the audience what they saw. "A black spot", all answered. "Only one spot?" the psychologist asked again. "Yes, one black spot." All provided the same answer, but the psychologist said "What about the big white paper".

Zhou Demao (Ibid.) continued,

> …deaf students have difficulty in learning caused by hearing impairment…many teachers considered the difficulty as their typical feature…Does this look like the story: only look at the black spot and ignore the white paper?

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The half-empty perspective in the field of deafness represents a perspective that sees only that the deaf students do not have hearing and speaking ability. These viewers see the glass as half-empty and see the black spot on the paper. The consequence of this is to think that seeing a series of doctors, receiving treatment, seeking advice are rational steps, and many people adopt the medical perspective on deafness. This is consistent with Johnson's findings of half full-half empty perspective (Johnson, 2003: 286-289), and I agree with Johnson that many hearing individuals in China face a challenge to shift from the half-empty perspective to half-full perspective. In the future, a lot of work is needed to change the attitude of teachers and parents of schools for the deaf.

4.3.2 *Medical perspective (also known as deficit perspective)*

Certain diseases that can lead to deafness in children are amenable to standard medical treatment. Ear infections, for example can be treated with antibiotics (Callaway, 2000:59). Everyone wants the deafness to be cured and the deaf children be rehabilitated. As just mentioned, a lot of people adopt this medical perspective, which has been a dominant perspective in PRC since 1950s, in considering issues of deafness and deaf education.

Mao,L. (2000:28-30) argues that this is a successful perspective and gives examples: Zhou Tingting, a well known deaf person in PRC, can now read and write proficiently; Zhang Bingyu (left ear: 85dB; right ear: 90dB) is another example since this deaf child can recognize 1300 Chinese characters and Zhang left the soundless world after her parents spent their family fortune (RMB 220,000) to have a Cochlear Implant operation. The consequence of this is that children can be placed in mainstream schools as Deng et al. say, giving Li Kang as an example for mainstreaming (Deng et al, 2000:17). Deng Yuancheng, (a reputable professor of Beijing Ear-nose-throat Research Institute) also introduced 20 Chinese deaf undergraduates into universities (AR/SH-YU-05)

This article was uploaded to the web site of "China Rehabilitation Research Centre" (http://www.crrc.com.cn/kfxh/kfxh04-05.doc). (This archival record is downloaded and is saved as Electronic file: AR/SH-YU-05) and due to the advancement of science and technology and improvement of training methods, the "enrollment rate" to general primary school system for the China Rehabilitation Research Centre increases every year (FD/NS F:3;8). The "enrollment rate" was set to be 17% in 2002, 2% higher than the previous target and the rate climbs up

annually though slowly. The half-full optimistic perspective can be taken, because the successful cases can not be denied.

On the other hand, let us consider the half empty perspective. Lao Lu (possibly a pseudo name) (Shuangyu-net-05:4) perceived the above mentioned 20 cases of success from a different view. Lao Lu said, "there are 20.57 million hearing impaired people (16.79% of total population), and 800,000 deaf children under years of seven; besides these 20 cases, how can we help deaf people?" Are most of deaf students far from success?

When I was in Tianjin city, I was told deaf children in their age of 6 to 7 spent a lot of time in oral training such as lip reading and their actual language development matched two to three years old normal children (FD/NS F:9). When I had a chance to talk with a group of deaf educators in Beijing in May 2004, Ye, a headmaster expressed his judgment that the curriculum for the schools for deaf children is two years lagging behind the curriculum for normal schools (FD/NS F:76). His judgment suggests even though some deaf students work hard and study well, they may only achieve a level (grade 9) which is two years lagging behind hearing students institutionally. Ye's opinion is triangulated by Wang Kenan, a headmaster of a school for the deaf in Beijing. He states he believes the gap is 2 to

3 years (FD/NS F:56). Deng Yuancheng (2003), the above mentioned professor, said he had contacted the students from the 4th Beijing School for the deaf, where the graduates after studying 8 to 10 years in the school, only achieve a level of primary 6 students in normal schools.

The low expectations of parents of deaf children, the low teachers' expectations, the two years (at least) lagging behind curriculum, and the Chinese style oral approach of deaf education in PRC lead to poor performance of deaf children. Many deaf students in rural area are unable to access or early access schools. Many of them are locked away from knowledge. Some lucky urban deaf students spend a lot of time in aural/ speech training at the expense of cognitive delay.

4.3.3   *Linguistic cultural minority perspective*

As argued by Zhou Demao, we should not only look at the black spot and ignore the white paper, treating the black spot as a problem to be treated. The alternative is to think positively about what deaf people have: their language and culture.

In the field, an informant told me a delegation from PRC visited Gallaudet University in U.S.A in 2002. I received an article written by Zhao Xian (FNS-B:32). Zhao, a member of the delegation, introduced the view from Gallaudet University:

> being deaf is not a sickness and deafness is not a deficit; deafness is a difference and deaf people have a distinct culture…
>
> (FNS-B:32; SEJ-Zhao,2003:47)

This view is also represented by Yang Junhui, a deaf female working for the fourth School for the deaf in Beijing, who was a graduate of Gallaudet University in 2006. Yang stated,

> Sign language is a language, sign language is not a tool for rehabilitation…deafness is normal, deafness is not illness…do not consider deaf children as subjects that need rehabilitation…do not treat deaf children and deaf people as patients…   (FNS-F:14)

This article was given to me by different informants in the field which suggests their awareness of Yang's views (Ibid;AR/Web-15:63).

The claims C1, C2, C7, C8, C9 and C13 which are described above reflect a linguistic cultural minority perspective, as well as the half full perspective that sees that deaf students do have a unique visual language and deaf culture. The SBE

proponents see the glass is half-full and see the white paper. In their eyes, deaf students can achieve what hearing students can do (language development); sign language does not hamper the development of Hanyu based on their beliefs about second language acquisition theories. This is supported by a finding that "the better a deaf children signs, the better the written and oral form of Hanyu this children can achieve" in SBE (Bao, PRCD/02:16).

This perspective argues that deaf educators ought to provide better sign language environments for deaf students especially preschool children due to the critical period notion. It also argues that teachers who are deaf are a model for the deaf children and the teachers are indispensable; the *Dual teachers arrangement* is recommended whenever it is possible; deaf identity and deaf cultural are recognized positively instead of feeling shame.

There is much support for this linguistic cultural minority perspective in the different kinds of data. For example, I have received a file attached by an email in December of 2005. This is an article written by Zhang Ningsheng and Niu Yubo, summarizes this linguistic cultural perspective in PRC as the following points:

1) disability (including deaf) is not a deficit, it is a difference;
2) disability is something distinct only;

3) the key concept of not only changing disabled children to adapt to the environment but also changing the environment to adapt to the disabled children;

4) the concept of seeing what the disabled children can do, rather what they cannot; disability is not impotence;

5) developing full potential and minimizing shortcoming of the disability instead of remedy and rehabilitation;

6) changing from mainstreaming to inclusive education;

7) changing from deafness is sickness to deafness is an cultural identity;

8) changing from the concept sign language as a tool for teaching to seeing it is a language;

9) changing from an education, rehabilitation and social services model to a multiple services model

(Zhang & Niu, 2005:9)

Once deaf people are deemed as an ethic minority, the minority has rights, and the Rights perspective is identified frequently in the field data, and this is the topic of the next sub-section.

4.3.4   *Rights perspective and Individual Difference perspective*

The rights perspective is an easily noticed perspective in the debate (ODS/TJ:11; YN-YDPF:3). The Individual Difference Perspective is logically deduced from the individual rights. Some SBE proponents always posit the rights

of deaf adults and deaf children. For example, in 2004 when I met Zhao, M.Z., who is an important figure in the SBE project in the office of Tianjin Hearing and Speech Rehabilitation Training Centre (TJHSRTC) in Tianjin, he stated during our interview,

> We should respect deaf people and should not pity them…we should dignify deaf people…deaf people have rights   (FD/NS F:6)

Another example comes from December 2006, when a national meeting advocating Sign Bilingual Education for the head-teachers of schools for deaf children was held in Tianjin. More than 240 head teachers and leaders from 140 schools for deaf children in China participated in the meeting. After Zhao, M.Z addressed the opening ceremony, Wang Liqun, on behalf of Tianjin Hearing and Speech Rehabilitation Training Centre, (the agent of UNICEF) presented her report on Sign Bilingual Bicultural Education from the perspective of "Convention on the Rights of Child" in the meeting.

SBE proponents often suggest taking the individual difference (that is individual rights) into account in the deaf education. Save the Children UK is an example (Bao, PRCD/02:14). In the Kunming office of SCUK, I saw the mission

and vision of Save the Children UK, which are enclosed in big frames and are hung

on the walls in 2004 (FD/NS G:20).   They proclaim:

> Our Vision: Save the children works for a world:
>
> - which respects and values each child
>
> - which listens to children and learns
>
> - where all children have hope and opportunity.
>
> Our Mission: Save the children fights for children's right.
>
> We deliver immediate and lasting improvements to
>
> children's lives worldwide.

This is a general statement but it can be interpreted as including deaf children,

as was evident from a statement by Flood, Mary, an Australian project consultant

of Save the Children UK at the first Bilingual Research Meeting in Anhui Province

in 2003. I was a participant of the first Bilingual Research Meeting in Anhui. In the

meeting, I recorded Flood's speech as follows,

> Under the convention on the rights of the child, to which China was one
> of the first signatories, children have the right to survival, development,
> protection and participation. These rights apply to all children-including
> children with disabilities… A social approach to children with
> disabilities sees a society valuing all members, and changing and
> adapting to meet the needs of its citizens. In Educational terms this

means finding solutions to enable equal access to learning for all. To
ensure equal access to learning, methodologies and curriculums need to
be flexible suit children's particular learning needs

(FD/NS B:6; PRCD/01, 2003:4)

She added later:

All children with hearing impairments are not the same, and one single
curriculum and methodology may not be suiting all children's learning
needs, and may in fact be restricting some children's access to education.

(FD/NS B:6).

All the speeches delivered in the meeting were printed as proceedings of the

meeting (PRCD/01). Flood's speech mentioned above was the official introduction

of the proceedings and is thus a strong statement of the rights perspective and

individual difference perspective, representing the perspective of Save the Children

UK as a whole. This notion is confirmed by a promotion document issued by Save

the Children UK to invite deaf experts, researchers, SBE projects insiders to the

first Bilingual Research Meeting in Anhui Province in September 2003 at Anhui

Hotel which was printed on a page right after Flood's words. This promotion

document explains that "the theme of this meeting is 'For the rights of the deaf

children, we work together'" (Ibid.5). In addition, this theme *"For the rights of*

deaf children, we work together" was printed on canvas bags. (see photographs

props-1, props-2, props-3). These canvas bags are gifts for all the participants of the first Bilingual Research Meeting in Anhui Province.

In March 2004, Liu Lihan, the representative of Save the Children UK spoke at the opening ceremony of the Second Bilingual Research Meeting in Yunnan Province and said:

> Since 1999, Save the Children UK has cooperated with Disabled Person's Federation and school authority on Anhui and Yunnan to start Sign Bilingual Teaching Experimental Projects. Our aims are through the adopting of Sign Bilingual Teaching in the pre-school stage and compulsory education stage, to enhance people's understanding of the rights of the deaf children…   (PRCD/02,2004:1)

In May 2004, Shen Yulin delivered his paper at the 2nd Bilingual Education Research Meeting in Dali, Yunnan province. He stated:

> ignoring the difference among deaf children, unreasonable education resource match…   rejection of deaf teachers… aims to arouse public concern to achieve a just, democratic and scientific deaf education.
>
>   (PRCD/02,2004:31)

According to Shen's view, the difference among deaf children should be taken into account in a "just and democratic" deaf education.

Further indications of this perspective in the data include a Chinese version of "The right of the deaf child to grow up bilingual" written by Grosjean (2001) and translated by Yang Junhui, the graduate of Gallaudet University posted on the web (Shuangyu-net-14).

If deaf children have their rights, they should have choice. Deaf education should cater the special educational needs for every deaf individual and the rights perspective and the individual difference perspective are salient perspectives appearing in the debate.

4.3.5 Special Perspectives with Chinese flavor

Besides the above mentioned major perspectives, which can also be found in other countries, there are some special perspectives with Chinese flavor. The following themes were emerging.

Pragmatic perspective and Deng's words

"No matter black cats or white cats, those cats which catch mice are good cats." This is a famous quotation from Deng Xiaoping in 1962, and it is easy to identify the "black-cat-white-cat perspective" in PRC. For example, the SBE

proponent, informant W told me in May 26, 2004 during an interview saying that "Appropriate education is the best education." (FD/NS F:37) Informant W argued organizers of SBE experimental projects understood and satisfied the needs of pre-school deaf children; SBE projects work, therefore, they are appropriate and good.

In a pragmatic way, Informant S also stated, "Oral approach, total communication and SBE are instrumental." Informant S asked, "What do you prefer - more tools or fewer tools?" He continued to say: "SBE is a tool, we adopt SBE no matter what other experts claim." (FD/NS F:34) It is unsurprising to find the dialectical materialist perspective from Deng Xiaoping's brand of Chinese style Marxism and Stalinist brand of Marxism, for example, the notion that "practice is the only way of testing truth" (an argument claimed by Deng Xiaoping).

It follows that some SBE opponents always argue that we should wait and not move on till we have enough evidence of the success of SBE. (In other words, deaf education in PRC better maintains or restores the status quo). On the other hand, some SBE proponents believe in the concept of "Critical Period": from a psycholinguistic perspective, deaf students should learn their first language within

the critical period to avoid negative consequences. That is to say, languages can best be learned earlier, and should be learned in preschool stage. They urge SBE to move on and not to wait. Many of them also hold a notion that if a white cat can not catch mice efficiently, why don't just let a black cat a chance and not wait! Save the Children UK , UNICEF and Amity Foundation all advocate change. For example, a leaflet I collected in the field from Amity suggests:

> We need to study the concepts and methods of bilingual approaches in deaf education and put them into practice to try to **catch up with** the international developments in this field for the benefit of the deaf and also that of the society as a whole (my emphasis).
>
> (ODS-LT-AMI-03)

Eclectic perspective

Many educated Chinese have learned the lesson that China is large (in terms of area and population), and therefore many Chinese issues are complicated due to the different contexts. Some policies may be good in cities such as Shanghai and Beijing but may not be good in a rural region. It is unwise to hold any imported unproven principles rigidly.

Similarly, some SBE proponents do not hold rigidly to the principles of SBE

and also some oralists do not hold inflexibly to the set of assumptions of oral

approach, Examples from field notes include:

SBE and oral approach are not necessarily mutually excluded.

We do not reject our counterpart.

We do not repel the use of oral form of Hanyu. SBE and oral training are

not antagonistic towards each other.

Such statements that have a flavour of eclecticism, are frequent in my data (e.g.

ODS-LT-AMI-02; ODS-LT-SCUK-002; ODS/TJ:15).

Development perspective

"Development is the real rationale." This is another quotation from Deng

Xiaoping in 1980, and in PRC, 'development' is a catch word which connotes

advancement and betterment.

People with the development perspective together with the medical

perspective think advanced technology such as Cochlear Implant, the digital

hearing aid with artificial intelligence and the improvement of aural and speech

training programs, will help deaf students better in the future, especially deaf students with higher residual hearing ability (FD/NS G:16).

People with this development perspective together with the linguistic cultural and minority perspective believe SBE will lead to a comprehensive development of deaf students including emotional, social and cognitive development, especially the profoundly deaf students. Some parents and teachers told me their experience. For examples, when I held a group interview in Tianjin, Parent F said,

> It is difficult to communicate with my son Ming. I hope he can open his mouth to speak something…He cannot speak… I let him go to SBE class… big change… I have joined the Signed language course for parents… now, we can communicate… Ming recognizes Chinese characters; Ming can make sentences… now, my son told story to me… Ming even performed dancing at home. I see the hope.
>
> (FD/NS F:11;28-30)

Teacher L of SBE class told,

> My student ZL has visited Shanghai recently. After the visit, ZL signed what she had seen to teachers and classmates. She expressed her stories in Shanghai clearly. (Ibid:31)

When I held a group interview in Dali, a parent C told me,

My son (XB) did not have the concept of "private ownership". XB took everything he likes in the street. I asked XB to send the "stolen stuff" back to the owners. Consequently, XB did not bring the stuff he took (stolen) back to home. Last year, XB "took" a toy aero plane. When XB saw me, he dropped the toy and ran away. Now, XB has been studying in SBE class, he leant the concept of "stealing" and XB did not steal anymore.   (FD/NS G:104)

When I held a group interview in Nanjing, a parent J told me,

My son had been trained in an oral training centre for three years. I could not understand the need… we (mother and son) lost temper… I felt nervous and my son felt nervous too… now, he has been learning in SBE class. He is willing to go to SBE class everyday.

(FD/NS B:79-80).

From these illustrative quotations, I see some evidence of emotional, social and cognitive development of deaf students in SBE classes. Evidence of development perspective were also shown in official reports (see ODS/TJ:23), personal documents (diary from Fan and diary from Liao) (PDS/KM- F:48;52;54; PDS/KM-L:57; 59-61 ;69). For example, in March 12, 2001 to March 16, 2001, Liao, a deaf female teacher wrote in her diary how she taught the concepts of

"morning", "afternoon" and "evening" to SBE students in this week (PDS/KM-L:60). One more example, on June5, 2001, Fan wrote down her student XH had learned eventually not to beat other classmates because of her social development. In the past, Fan told XH did not hit other but once Fan turned her back, XH hit other again (PDS/KM-F:52).

Total Development perspective

This is the last but very important perspective emerging in the SBE debate.

Mao Tsedong, the founder of the PRC states (1957: 44)

Our educational policy must enable everyone who receives an education to develop morally, intellectually and physically and become a worker with both socialist consciousness and culture.

From Mao's quotation, perspective of education is a perspective to develop every aspect of a student since 1950s. For a long time, total development is the main goal for the compulsory education in PRC. This is also the main goal for the deaf education and for the SBE experimental projects, as is evident from a number of data sources.

UNICEF China advocates Signed language as the mother tongue, Signed language as the base for the total development of deaf children (ODS/TJ:15). Total development is the unquestionable main goal that needs to be achieved. For example, in Tianjin city on May 27, 2004, I read the "Outline of teaching and learning for the pre-school students" and the "Educational goals for the pre-school students in Tianjin". Based on these documents, Tianjin Number One School for the Deaf had framed an education policy and operating rules for the deaf students. The main theme is- teachers are required to promote the total development of deaf students (FD/NS F:45-47).

Save the Children UK claims the need for the total development for the deaf students of the SBE experimental projects according to my field notes taken in Yunnan province and Anhui province (Yang Jiaye, FD/NS G:120; Xu Taokun, FD/NS B:9; Chen Shun Yun PRCD/01,2003:12). From the official document I collected in the field, Yang Haiyu, the representative of SCUK stated in July 2002.

The development of deaf students is similar to other students. The development should be comprehensive and total. The total development includes language development, physical development, cognitive development, social development (ODS-YN-RP-02:10).

From the official document I collected in 2004, Amity concludes SBE projects allow deaf students to study in a better environment, developing them happily and comprehensively in 2003 (ODS-RP-AMI-01:25).

From the private document (I borrowed the personal notes taken by my informant Zy to study), Shen Yulin, a consultant of Amity's SBE project urged the total development of deaf students in March 2004 (FD/NS G:29).

According to these data, it is clear to identify "total development" is a common perspective of the three NGOs in China.

4.4   Summary: Claims and Perspectives

In this chapter, the debate about SBE in China has been presented from two angles: using a number of 'claims' which appear in the debate as explicit or implicit formulations of significant points; and secondly by discussing a number of 'perspectives' which reflect the positions taken in the data at a more general level. For convenience the following Tables summarizes the Perspectives at a glance and the Claims at a glance:

Table 4.3:   The different Perspectives

Half full-half empty perspective	
Medical perspective	also known as deficit perspective
Linguistic cultural minority perspective	
Rights perspective and Individual Difference Perspective	
Special Perspectives with Chinese flavor	Pragmatic perspective Eclectic perspective Development perspective Total Development perspective

Table 4.4: The different Claims

C1- 1st Claim	*Signed language is language.*
C2- 2nd Claim	*Signed language is first language*
C3: the 3rd claim	*Signed language is inferior. It is difficult to utilize Signed language to learn a second language (Hanyu).*
C4: the 4th claim	*The majority of Chinese people do not consider Signed language as first language and mother tongue.*
C5: the 5th claim	*Signed language can hamper the learning of Hanyu.*
C6: the 6th claim	*Simple language is unhelpful to learning a well developed language.*
C7: the 7th claim	*Natural Signed language (NL-SL) should be the first language.*
C8: the 8th claim	*Mainly Natural Signed language (NL-SL) together with mainly written form of Hanyu will be a good combination for SBE students.*
C9: the 9th claim	*The concept of deaf culture is essential to SBE projects.*
C10: the 10th claim	*The advocacy of deaf culture will have negative impact on deaf children's rehabilitation and the 9-year compulsory education in China*
11: the 11th claim	*Deaf culture enlarges the gap between deaf and hearing people. Deaf culture influences on the social stability and unity.*
C12: the 12th claim	*The promotion of deaf culture causes the marginalization of deaf people.*
C13: the 13th claim	*Deaf teachers provide role models and a good sign language environment to both deaf students and hearing teachers.*
C14: the 14th claim	*Dual teacher arrangement is appropriate for the SBE.*
C15: the 15th claim	*SBE is the past Manual teaching. Practicing SBE is history regression.*
C16: the 16th claim	*Standardizing Signed language in a school is important for SBE classes. Standardization of Signed language is an essential issue for the SBE projects.*

SBE therefore exists within this context of debate on claims and perspectives and the analyzing of these provides a position from which to analyze and understand more specifically the SBE phenomenon in China. In the next chapter, the focus will be on the ways in which those involved in the practice of SBE within the context of debate described here, talk and think about the characteristics of SBE as it existed at the time of the research.

Chapter Five   SBE and its characteristics

5.1   Introduction

In the previous chapter, the focus was on the ideas present in the context in which SBE was introduced. In this chapter the focus is on the ways in which people involved talk and think about the characteristics of SBE as it works in practice.

During the process of analysis, data were classified and categorized in different forms using data from different sources and of different types. The purpose of constant comparison and questioning of data was to identify underlying features and concepts emerging from the data which could be used to describe the SBE projects and their commonalities and differences. At the same time Baker's analysis of purposes, processes and outcomes of different forms of bilingual education presented in the literature chapter was used as a means of identifying underlying characteristics in the SBE. The presentation of data is thus in terms of the features of Chinese SBE which emerged from this process of analysis.

5.2 The features of Chinese SBE

5.2.1 The 1st feature: Chinese SBE organizers advocate the recognition of Signed Language

Chinese SBE organizers perceive Signed Language to be a mother tongue, a first language (L1) and a primary language. Even though Signed Language in China is not standardized and the research on Signed Language is inadequate, the role of Signed Language is essential. A lot of NGOs' insiders including project officers, managers, and teachers of SBE classes uphold this proposition. The following statements illustrates this,

> In the field of special education, the majority do not recognize the status of signed language. Some one considers signed language is "a form of expression" (this means signed language is not a language). Some one deems signed language as a primitive language…the Chinese government policy does not support the use of signed language…the public opinion on signed language is "better not use the signed language because of the negative effect… (FD/NS F:1-13; interview)

The intentions of NGOs are clear. To advocate the recognition of signed language is to find a foothold and to find a space to breathe.

As informant Z explains,

If signed language is not a language or at least proposed by experts to be recognized as a language, how can we convince the parents to allow their children studying in SBE classes using primitive form of expression to learn Hanyu and other knowledge; how can we ask the education authority to support or at least not to oppose SBE experiments.

(FD/NS F: A-41b; interview)

It is an important and logical step to advocate the recognition of signed language in the context of China, even if the status and role of signed language will not have a big change after this advocacy. This advocacy asks parents and authority to believe in the language status of signed language and give a chance to deaf children learning in the SBE classes. It is a distinct feature of Chinese SBE.

Throughout the process of data analysis, this theme emerges again and again and further references to the data can be given but for lack of space what has been cited above must stand for the rest: Zhang, Y., PRCD -02, 2004: preface;　Shi- li, (deaf female) PRCD-02, 2004:6; Xu, T.K., PRCD-02, 2004:18; Yeung, K.L., PRCD-02, 2004:22; Lee,C.H., PRCD-02, 2004:24; Zhou, S.F., (deaf female) PRCD- 02:26; Yeung, H.Y. PRCD-02, 2004:54; Chan, S.Y., PRCD-01, 2003:12; Lau, M.,(deaf) PRCD-01, 2003:32; Daun, Y.W., PRCD-01, 2003:34; Zhu, et al, ODS-RP-AMI-02:2; Zhao, M.C., ODS/TJ-15.

This finding together with the 1st claim and 2nd claim in Section 4.2.2 provide part of the answer to:

Research question (1.2) what are the status and role of Signed Languages?

Research question (2.3) what are the characteristics of the models?

5.2.2 *The 2nd feature: Chinese SBE organizers use Natural Sign language, Manual code Chinese, inter-language, written and oral form of Hanyu simultaneously in a classroom. Variation of different combinations of languages is tolerated due to the experimental nature of the projects.*

Four forms of languages were distinguished in the SBE experimental classrooms (i.e. Informant L, a deaf teacher, Field note B:10 and 29; ODS-RP-AMI-02:7)

A. Oral form of Han Yu

B. Manual code Chinese

C. Inter-language: varied gradually from Manual code Chinese to Natural Sign Language

D. Natural Sign Language

As mentioned in section 3.4.1, one way of analysing data is to group concepts to form categories. Grouping concepts of different combinations of language used

in SBE classes from the data, the second feature of SBE experiments emerges explicitly.

One distinct point is some SBE insiders do not reject the use of oral form Hanyu. This assertion has been read in a personal note,

> During the implementation of SBE experiments, our models should be flexible. The principles should be upheld in high (conceptual) level but in the operating level, some concrete methods should emerge during the process of practice. At this low (operating) level, nothing can not be changed…we do not repel and deny oral training…but we will not emphasize we have to use oral anymore…
>
> (Zhang Ningsheng's quotation in Informant Zy's notes, FD/ NS G:25)

Informant Zy's notes have been verified by other data collected from different sources. As an illustration, a report written by Yang, who was a deputy headteacher of Yunnan Provincial deaf rehabilitation school, saying that,

> We realize the limitation of using oral methods but we did not deny oral methods may be good for some deaf students to some extent…we used signed language and also used oral Hanyu as medium of instruction…we will examine different methods through practice…we will test the result by empirical study…
>
> (FD/NS G:39)

Throughout the process of data analysis, this theme emerges again and again (For examples, Lee,C.H, PRCD-02, 2004:62). Also, variation can be observed. For example, other data show Languages use in SBE classrooms are not signed language and written form Hanyu only (FD/NS G:30). On the contrary, Yang Jiaye, an insider proposes that signed language and oral form of Hanyu (not written form) should be used in SBE classroom (FD/NS G:124). They did this in their own ways and they acted according to their eclectic perspective.

This finding on the modes of language use and the 8th claim in Section 4.2.2 provide part of the answer to:

Research question (2.3.2) what are the role and status of languages, language use and language allocation of the SBE classes?

5.2.3 The 3rd feature: The majority of Chinese SBE organizers adopt to use Natural Sign language even though they know the issue of standardization.

At the beginning of their SBE project, Amity Foundation decided to use manual code Chinese. After the advice given by a Chinese consultant and British experts and after the visits to Norway and United States of America, Natural Sign

language has become the medium of instruction gradually (ODS-RP-AMI-02:13).

Today, the majority of Chinese SBE organizers accept all forms of Signed language but the predominant one is the natural sign language, that is used by the deaf community, in the pre-school stage. (ODS/TJ:16; Liu Ming, PRCD/01:32; Liao Yanping, ODS/YN-RP-02-YDPF:55; Zhou, S.F. PRCD/02, 2004:26). (Liu, Liao and Zhou are the deaf teachers in Hefei, Kunming and Dali). In the following, I adduce some examples. In her diary dated September 8, 2000, Liao, who is a deaf female, wrote,

> I am employed to teach signed language for the SBE class in the kindergarten… How to teach the very young deaf students? Using picture and photographs and explaining by natural sign language, I show them the concepts of "sit" and "stand", in this week, I have taught them the signed language words – SIT and STAND.
>
> (ODS/YN-RP-02-YDPF:56)

In September 29, 2000, Liao wrote in her diary,

> My students have special interest in animals. I put the pictures about animals such as dog, cat, rabbit, pig, horse, fox, elephant, and monkey on the blackboard…the students left their seats and stood in front of the blackboard. They moved their hands to express eagerly (Their signed language words about those animals may not be standardized and even

wrong). I showed them how to sign and then they copied my signed language words. Now they could sign while watching the pictures of animals…this week the students watched attentively the story signed by me.   (Ibid:56)

In March 16, 2001, Liao recorded in her diary,

My students did not understand the concepts of "morning", "noon" and "night". I showed them three signed language words- MORNING, NOON and NIGHT. I showed them specially designed pictures (One full-page colored paper with four smaller pictures on it that form a meaningful story). I signed to them, in the morning, the sun rises and students wake up and go to school; when the sun rises to the middle of the sky (I pointed to a clock and adjusted the hands of clock to 12:00), I signed this is our time to have lunch and this is the concept of noon and I taught the signed language word "NOON"; I explained, at night, the sky is dark and students went home… At the moment of noon, I grasped the chance and stopped other activity and signed NOON and pointed to the clock which indicated 12:00…I used natural sign language to explain the concepts and taught them signed words patiently. I let them have one whole day to comprehend the concepts- MORNING, NOON and NIGHT gradually…

(Ibid:60)

In November 13, 2001, Liao wrote her diary that how the students learned the concepts of "on" and "under", the signed words of ON and UNDER and the short sentence pattern. Liao used "cat" as the subject. The pattern is shown below- The cat is on the table. The cat is under the chair. The cat is on the drum. (Ibid:68).

Zhou, who is a deaf female, presented an article in a seminar in March 2004, in which she wrote that she used a lot of natural sign language to explain in the SBE class. For example, she used one natural sign language word to express "*dexiatongdao*". This *dexiatongdao* means "underground channel" in English. If she used "sign supported Hanyu" to sign, she will use four signs (de, xia, tong, and dao) to express the meaning   (FD/NS G:101). Zhou considered using natural sign language can "activate SBE classroom climate and to strengthen the absorption of knowledge" (Ibid.)

Throughout the process of data analysis, this theme (Natural Sign language is adopted by the majority of SBE organizers most of the time) emerges again and again. This and the 7th claims in Section 4.2.2 provide part of the answer to:

Research question (1.2.1)   What is the status and role of natural Chinese Sign Language (N-CSL) used by deaf community in deaf education?

Research question (2.3)   What are the characteristics of the models?

The majority of Chinese SBE organizers know Natural Signed Language is not standardized. Still, SBE organizers in China respect and celebrate the use of SL. The opinions about the standardization of Natural Sign Language are varied (PRCD-02, 2004:61-12). It is difficult to standardize CSL in the whole country at this moment but some of them suggest the standardization of Signed language in a school for the deaf, if possible, in a city (Zhang Ying, FD/NS G:3; FD/NS G:23).

5.2.4 *The 4th feature: These SBE projects in China organized by NGOs are Developmental Maintenance Bilingual Education- the linguistic goal is deaf students become balanced bilinguals.*

As mentioned In Chapter two, there is a transitional bilingual education which is a weak form of education for bilingualism; there is a developmental maintenance bilingual education which is a strong form of education for bilingualism (Baker, 1996:175). For the strong form of bilingual education, the societal and educational aims are maintenance, pluralism and enrichment, for the weak form, assimilation. For the strong form, the language of the classroom is bilingual with emphasis on L1, for the weak form, the language of the classroom moves from L1 to L2 (Ibid.)

The data collected in all the six SBE sites show the SBE deaf students always use signed language in the SBE classes as their first language and as a medium of instruction. This is supported by the views of Amity as is evident here:

As sign language is the natural language of deaf people. It can be easily learned by deaf children at the earliest stages of development. Therefore, supporters of the bilingual approach to deaf education advocate deaf children learning the natural sign language as their first language. Since language is a tool people use to think and to learn, only when a complete first language can they acquire knowledge and begin to understand the world, thus reaching the same levels of development as their hearing peers. Similarly, for deaf children learning the language of their country (in its spoken and written forms) as a second language, they must first be fluent in a first language, which they then use as a tool to learn and understand the second language. (ODS/LF-AMI-003)

The data collected show all language of the SBE classrooms is bilingual with emphasis on signed language (L1). There is no evidence to show language of the SBE classrooms moves from signed language (L1) to Hanyu (L2) as a transitional bilingual education does.

On top of the linguistic aims, the societal and educational aims of NGOs' SBE classes are not assimilation. Line-by-line analysis as described in section 3.4.1

shows there is no such concept. On the contrary, there is frequent reference to multiple cultures and pluralism. The brochure of bilingual deaf education project in 2006 explains:

> Our aims: Acceptance, Respect, Equality and Empowerment…
>
> The concept of bilingual and bicultural approaches in deaf education are …Recognize multiple languages and multiple cultures in a society, which supports building a society in which multiple cultures exist in harmony… (ODS/LF-AMI-003)

In March, 2004, Yang Haiyu, who is the manager of Kunming office of SCUK said,

> There are many cultures in the world. We ought to respect different cultures. It is inappropriate to classify cultures to high level or low level, high class or low class, advanced or primitive…we ought to value pluralism and equality… (PRCD/02:58)

The language of the SBE classrooms is bilingual with emphasis on natural signed language and the presence of the concepts of multiculturalism and pluralism makes NGOs' SBE projects look very like Developmental Maintenance Bilingual Education or Heritage Language Bilingual Education program as described by

Baker (1996, 175-185), and Chinese Sign Bilingual Experimental Projects are a strong form of bilingual education.

This finding and the 7th claim, 8th claim and the 9th claim in the previous chapter provide answers partially to:

Research question (2)   What kind of SBE is in PRC?

Research question (2.2)   Which SBE models are adopted?

Research question (2.1)   How many types of SBE are there in PRC?

The answer is explicit. It is a Developmental Maintenance Bilingual Education.

5.2.5   The 5th feature: These SBE projects are Rights oriented Bilingual Education- the societal goal is the equity of deaf students.

Many of the SBE projects in the thinking of those in charge have an implicit assumption: the civil rights of students, human rights of deaf students (FD/NS F:6; Shi Li, 2003:7; Yang Junhui, 2002b).   The concepts of "right", "equality", and "equity" emerge strongly from the data, and Shen Yulin's presentation is an instance. Shen was invited as an expert to attend the second bilingual education for the deaf in Dali in 2004. Shen states,

> Every child with hearing disability, no matter what differences exist in them, should enjoy fair treatment in deaf education… we should

construct a justice, democratic and scientific deaf education… Fairness is to provide education which fits to every individual deaf student… Curriculum should not fit some type of students only and resources should not allocated unreasonably… we should protect all the children have the right of education…   (PRCD/02:31-32)

SCUK and UNICEF advocate equity enthusiastically, and as we saw a lot about "rights" in a previous section (section 4.3.4 Rights perspective and Individual Difference perspective) which will not be repeated here.

This finding provides part of answer to:

Research question (2)   What kind of SBE is in PRC?

Research question (2.1)   How many types of SBE are there in PRC?

My suggested answer is they are Rights-oriented Bilingual Education.

5.2.6   The 6th feature: These SBE projects cater for the early childhood deaf students and/or profoundly deaf students. SBE projects have a societal goal- profoundly deaf students should become balanced bilingual.

The SBE experiments are designed to cater for the early childhood deaf students and/or profoundly deaf students and to elaborate, most of the SBE projects

enrolled pre-schoolers (age less than 6 and hearing loss larger than 90 dB) except

Dali (Dali SBE projects enroll Primary-One students). (Dali is an autonomous

region of Bai minority without pre-school education). In addition, one salient

feature is every SBE project caters for profoundly deaf students, as is detailed in

Appendix E introducing the profile of SBE students.

    This finding provides part of answer to:

Research question (2)   What kind of SBE is in PRC?

Research question (2.1)   How many types of SBE are there in PRC?

Suggested answer: They are early childhood Sign Bilingual Education projects

                  for the profoundly deaf students.

5.2.7   *The 7th feature: Almost all the SBE projects have a distinct feature-dual teachers in the same classroom at the same time*
        (The exception is Dali site).

Most of the SBE projects have an arrangement which is **two teachers**

teaching in the same classroom in the same period except Dali. (Dali is a minority

autonomous region. Most people with Bai nationality live in Dali city). Yang Lin,

the head teacher of Dali said that they did not arrange two teachers in a classroom

(PRCD-02:63).   (Dali also has two teachers- one hearing, one deaf for SBE class.

However, Dali's teachers do not teach in a same classroom at the same time). Team teaching is adopted in all the SBE projects. For example, the team teaching members of YRSDC are teacher Fang and teacher Liao; TJ-1-SD are teacher Li and teacher Huang; NJSD, teacher Shen and teacher Zhang; ADPFRC, teacher Chen and teacher Liu; HSD, teacher Meng and teacher Duan; DPSES, teacher Yang and teacher Zhu. (see FD/NS B:17 and 20; FD/NS Ts:12 and 22; FD/NS F1:22-24; FD/NS G:23; PRCD-02:61).

The rationale for this is explained in the following paragraph:

SBE organizers realize in China, most hearing teachers (HT) are trained and qualified but hearing teachers are not good at natural sign language in China. Most of them know Manual code Chinese (Sign with Han Yu word-order) to some extent; almost all the deaf teachers (DT) in China are not trained and not qualified but good at sign language. If HT and DT can work together, SBE students might be taught by well trained and qualified teacher (HT) and might be instructed simultaneously by natural sign language signer (DT). SBE organizers believe "dual teachers" arrangement is a suitable method to provide both good linguistic environment and teaching/ learning environment to SBE students (PRCD/02:61-65). In practice, HT was dominant. Usually HT was the "director" and DT was an "actor/ actress" in a class period

(FD/NS B:46; FD/NS K:31).

This finding and the 14th claim in Section 4.2.2 provide part of answer to:

Research question (2)   What kind of SBE is in PRC?

Research question (2.1)   How many types of SBE are there in PRC?

Research question (2.3)   What are the characteristics of the models?

My suggested answer is they are "Dual teachers Bilingual Education" with

variation in Dali.

5.2.8   The 8th feature: Almost all the SBE projects have a distinct feature- the language allocation in the dual-teachers teaching classrooms is both concurrent and separated.

According to my classroom observation of different SBE classes in Hefei

School for the Deaf (HSD), Anhui Rehabilitation Centre (ADPFRC) and Tianjin

School for the deaf, the language allocation is both concurrent and separated

(FD/NS B:26-27; FD/NS B:14-16; FD/NS F1:22). The description of Teacher

Fan's diary revealed the language allocation in SBE class of Yunnan Rehabilitation

School for Deaf Children (YRSDC) was same as HSD, ADPFRC and Tianjin

School for the deaf. (Teacher's diary from ODS/YN-RP-02-YDPF:53).

Synthesizing the collected data, a pattern of the teaching procedure for SBE students and a pattern of language allocation emerged:

> DT used natural signed language to introduce new concepts and to explain a theme of a picture or story to the students first. Students comprehend and learn the concepts, the written form Chinese characters and the sign vocabulary by imitation. Then, HT uses Sign Support Chinese (a form of Hanyu, using sign vocabulary with word order of Hanyu) and Hanyu (lip reading oral form) to teach the new Chinese characters (both written and oral forms). After learning the concepts and Chinese characters, HT uses Sign Support Chinese (SSC) again to demonstrate a Hanyu sentence pattern to the students. In the final stage of a lesson, students may be assessed by asking them to match the picture, Chinese characters and sign vocabulary or students may be required to use both natural signed language and SSC to explain what they have learnt. Usually, the students use natural signed language to answer questions and write the answers on a piece of paper or on a blackboard (using Chinese characters). Finally, DT summarized what they have learned by using natural signed language.
>
> (Synthesizing data from FD/NS F:22-23; FD/NS F:24-25; FD/NS B:13-16; FD/NS B:17; FD/NS B:27-28,).

The language allocation of NGOs' SBE classes (with the exception of Dali city) is distinctive. Most of the SBE projects have two teachers in the

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same classroom and at the same time. Languages allocation (natural signed language, SSC and written form Hanyu) is separated by teachers, by time and by the contents but in some aspects it is not separated. The language allocation to some extent is concurrent (such as pre-view-review sub-type, flip-flopping sub-type) (Jacobson, 1990). The languages allocation in the SBE classrooms is thus both concurrent and separated because of the "dual-teachers arrangement" in a classroom This SBE language allocation (natural signed language and SSC) is novel. On one hand, languages are separated, on the other hand, code-switching is taking place concurrently and continuously in a lesson due to dual-teachers model.

This finding provides part of answer to:

Research question (2.3)   What are the characteristics of the models?

Research question (2.2)   Which SBE models are adopted?

Research question (2.1)   How many types of SBE are there in PRC?

Research question (1.2.3)   How are the languages allocated?

Answer: It is a "cocktail" Bilingual Education. The language allocation of SBE

varies. It is both separated and concurrent. It is flexible.

The variation and flexibility are due to: a) teacher- deaf teacher uses more natural signed language, hearing teacher uses more SSC; b) year - in the first year of kindergarten teachers use more natural signed language than the second year; second year, more than the third year; c) stage: teachers use more natural signed language in preview stage and review stage than teaching stage; d) functions: teachers use natural signed language mainly for explanation, they use SSC mainly for presentation in reciting stage and writing stage of Hanyu teaching (FD/NS-Interview-Zh-23).

5.2.9 The 9th feature: Almost all the SBE adopts a "story telling and re-telling" method

The first concept of teaching method is story telling. The Deaf Teacher tells a story by using natural signed language. Then, the Hearing Teacher tells the same story by using Manual coded Chinese. Deaf students are required to imitate the telling of the story by using natural signed language. The data supporting these observations in detail are as follows: Field note F1:22 is a record of Classroom observation in TJ-1-SD in Tianjin city. Field note Ts:12 is an semi-structure interview with a key informant in 2005, the informant requested I maintained his/her anonymity to all people except the researcher. Field note G:25 is a personal

notes from a key informant from SCUK. Field note B:21 is a record of classroom observation in Hefei city. Field note B:41 is my participant observation notes in a SBE seminar in 2003.

The story telling method is developed further as the following example shows. Teacher Fang and teacher Liao (a deaf female) made up a story "Elephant's Banquet" for their deaf students. The story provides a context for the deaf students to learn (see Appendix 10: "Elephant's Banquet"). From the story, the deaf students can learn a series of connected concepts (in the form of written form of Hanyu and Sign language words) through the learning of foods and kitchen-ware and the learning of foods and animals (such as cat eats fishes, goat eats grasses, rabbit eats carrot). (Diary written by teacher Liao in March 2001, ODS/YN- RP-02- YDPF: 60-62)

This finding provides part of answer to:

Research question (2.3.5)   What are the pedagogy and teaching materials?

Answer: Story telling and re-telling are one of the main approaches in the

pedagogy adopted.

5.2.10 The 10th feature: Almost all the SBE adopts theme-based teaching / unit teaching methods

Many SBE classrooms adopted theme-based teaching / unit teaching. One example comes from Save the Children UK syllabus, "Autumn": once autumn is selected as the unit/ theme, then students will be taught many things and concepts related to autumn, like falling leaves, harvest, mid-autumn festival, lantern of mid-autumn festival, "moon-cake" of the festival, etc (ODS/YN-RP-02-YDPF:57).

Further, there is an evident in an Amity plan of work, taken from an official report:

> We have arranged nine themes to teach in this year. They are: "Kindergarten", "Myself", "My body and limbs", "my family", "Our foods"…"Zoo", "Winter". According to each theme, we set up unit teaching plan…according to the plan, we design the teaching activities in every week… (ODS-RP-AMI-02:11)

Usually the DT explains the meaning of a picture, a drawing, animated drawing, picture-story book, a real object, a Chinese character, a sentence, a paragraph, a construct in the theme and unit to the students by means of natural sign language (FD/NS B:21; FD/NS F1:23). Then the HT, using Manual coded Chinese (MCC) helps students to write, to present the same thing in written form of

Han Yu (Informant S1, FD/NS Ts:12; FD/NS F1:23). In other words, the task of

DT is explanation and planning (Shen Yulin, FD/NS G:32); the task of HT is

presentation and implementation (Jiang Yun, FD/NS G:33) (See sub-section 5.2.8).

MCC is not rejected in many of the SBE projects. MCC and the above-mentioned

"inter-language" are the "bridge" to help students learning the theme and unit.

(Again, I do not go deep here).

This finding provides part of answer to:

Research question (2.3.5)　　What are the pedagogy and teaching materials?

Answer:　　Theme-based teaching and unit teaching are the methods adopted for

　　　　　　Chinese SBE classes.

5.2.11　The 11th feature: Almost all the SBE adopts "team teaching" method

As just mentioned in 5.2.7 and 5.2.10, in the SBE classrooms, usually Deaf

Teacher and Hearing Teacher work together at the same time. During the process

of practicing SBE experimental program, NGOs tolerate new method of teaching.

Data show "team teaching" (an emic term), is the new teaching method which

appears (except Dali city). The following paragraph is the "meaning" about the

"team teaching" described by Shen Yulin on 26th March, 2004 in Dali city:

We have been exploring the way of the team teaching. Some team teaching is good; some, dissatisfied…Deaf Teacher (DT) and Hearing Teacher (HT) are complement. They should cooperate; division of labor is expected. How to practise "team teaching"? I suggest following the steps described below:

a)   working together to prepare lesson plan; HT mainly arranges the goals, the contents and the specific tasks of a lesson;

b)   DT using story telling method to introduce the meaning of a lesson and let the deaf students to understand; then HT teaches the meaning, pictures, photographs and the corresponding Chinese characters by matching them together;

c)   working together to assess signed language learning and Hanyu learning (written form mainly);

d)   Deaf Teacher and Hearing Teacher going to a SBE classroom together at the same time;

e)   DT takes the responsibility of explaining mainly…

(PRCD/02:65)

Based on the minutes of a meeting on the 24th March ,2004 held by SCUK in Dali city, the majority of the attendee supported the team teaching method (Ibid:64).

In addition, almost all SBE programs have the "team teaching" arrangement. For example, the "team teaching" members of YRSDC are teacher Fang and teacher Liao; TJ-1-SD are teacher Li and teacher Huang; NJSD, teacher Shen and teacher Zhang; ADPFRC, teacher Chen and teacher Liu; HSD, teacher Meng and teacher Duan (FD/NS G:41; FD/NS F:22; FD/NS B:74; FD/NS B:17; FD/NS B:26). However, a few attendee such as Yang Lin (the head teacher of Dali Special School), Fang Hong (the special guest for the 2nd SBE meeting held in Dali city) and Zhao SongYun (the guest for the 2nd SBE meeting) pointed out that "team teaching" is not practicable in China (PRCD/02:61-66).

This finding also provides part of answer to:

Research question (2.3.5)   What are the pedagogy and teaching materials?

Answer: Team teaching is the pedagogy adopted for almost all Chinese SBE

classes.

5.2.12   The 12th feature: Multi-media technology is used.

Classrooms observation from 2003-2005, and personal documents, show that the teaching materials for many SBE projects include: drawings for the main theme, picture-story books, photographs, flash cards with Chinese characters on them, flash cards with hand shape of sign language (FD/NS F:22; FD/NS B:15; Ibid.:27-28; ODS/YN-RP- 02-YDPF:56). In addition, Yunnan Rehabilitation School for Deaf Children (YRSDC) arranged video taping and played the theme on computer (Informant S1, ODS/ YN -RP-02- YDPF: 40 and 63). Occasionally, YRSDC arranged animated drawing by using software (ODS/YN- RP-02- YDPF: 40 ; 72).

Informant Hy, an education administrator said in interview that the NGO not only provides training but also provides a set of multi-media computer for her school to make the visualized teaching materials (ODS/ K1:61).

Most of not all of the SBE experiments have installed the multi-media equipment in order to make visualized teaching materials for the deaf students.

This finding provides part of answer to:

Research question (2.3.5)   What are the pedagogy and teaching materials?

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This finding provides part of answer to:

Research question (2.3.5)   What are the pedagogy and teaching materials?

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Answer: Using multi-media technology and equipments to make visualized

teaching materials is identified as a feature.

5.2.13   The 13th feature: Almost all the SBE adopts country-wide general education curriculum

SBE Schools and SBE Centres have the responsibility to teach the children

according to the expectations of parents and educational administration while

conducting the SBE experiments. Therefore, they have to develop or follow some

curriculum they think appropriate. Many of them use the reformed country-wide

general education curriculum except Dali (Informant ZL, FD/NS B:69; FD/NS

B:27; FD/NS F1:24; Informant S1, FD/NS Ts:15 and 21; FD/NS G:41). This was

explained by informant Wx in interview:

> The contents of "General Education Curriculum" are more challenging
>
> than the "Curriculum for deaf people".   In the past, the "Curriculum
>
> for deaf people" was too simple and too easy. The aims of SBE are to
>
> actuate the linguistic, cognitive and social development of the deaf
>
> students. Using general education curriculum may attain the total
>
> developments.   (Wx, FD/NS F1:37)

A curriculum which is not fit may lower the expectation of both teachers and parents. Studying an easy and simple curriculum can arrest total development especially the cognitive development. Throughout the process of data analysis, this theme emerges again and again (for example Informant Zhu, Informant Zhang and Wu told me that view. FD/NS B:75; FD/NS A:53; FD/NS F:9).

In Dali city, the deaf students come from the Bai minority. Corresponding to Baker's classification (1996:247), the Dali deaf form a minority of a minority and the students are possibly doubly underprivileged and doubly despised (Ibid.). In this context, the Dali school for the deaf adopts the "National Experimental Curriculum for the deaf education" which is also more challenging than the original deaf curriculum (FD/NS G:87).

Using the country-wide curriculum (a more challenging curriculum) is a way to raise both the teacher's expectation and parental expectation, and these expectations may help the development of SBE students.

This finding provides part of answer to:

Research question (2.3.4)   What is the curriculum for the SBE classes?

5.2.14 The 14th feature: There is few serious and rigorous assessment of SBE and there are common claims of successful outcomes

In the field, I worked hard to collect data related to outcome and assessment. Few data about the assessment were collected.

One reason for that may cause by the sensitivity of the data. That is to say, some NGOs might have the assessment but they kept them as secret. For example in Tianjin, I read the teaching outlines of the SBE program (FD/NS F:43). I was allowed to read an "Assessment Tool for the individual development of SBE deaf students " designed by Luo Z., a PhD candidate of Beijing Normal University in 2002. This "Assessment Tool" has 63 pages (FD/NS F:27). However, I did not read any report about assessment by using this assessment tool. It is possible that Tianjin SBE has the assessment but they do not like to announce and publish the result.

A SBE organizer thought the assessment of SBE might trigger more debate which they did not like to happen (FD/NS F:8; FD/NS T:21) . An informant I interviewed, told me "assessment" could become "cannon ball" to be used to attack SBE program (FD/NS E:12). Therefore, no assessment report are permitted to read even the NGO might have the assessment report.

As mentioned above, few data about the assessment were collected. The other reason for that may be caused by the difficulties of making them. Examining the collected data, I see no explicit and clear criteria for a SBE experimental program. I rarely see the tool to measure the outcomes based on the criteria with one exception of the above mentioned "Assessment Tool". One more reason for that may be caused by the timing.   Informant Sw said,

> It is not the right time to make the assessment of SBE. The perceived outcomes are not proven… I do not want to build up conclusion on insufficient evidence... I do not jump to a conclusion…It is immature to make the assessment   (FD/NS T:27)

I find nothing about serious and rigorous assessment, however, I see a few reports related to linguistic aspects of assessment and the perceived successful outcomes of SBE.

Yunnan provincial deaf rehabilitation school (YPDRS) attempted to compare SBE class with oral classes in a five-pages formative assessment report in 2004 (ODS/YN/ASMT-01:2). YPDRS claimed their SBE students had significant progress in the development of written form of Hanyu

In 2003, Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) made an assessment of her SBE students in linguistic aspect. In the two-pages report, ADPFRC said the signed language development was good but the oral form development of Hanyu was unsatisfactory (FD/NS B:17). In 2004, Tianjin Number One School for the Deaf (TJ-1-SD) also made an evaluation on the SBE program in the linguistic aspect. Using a control group (6 hearing students from the 10th Kindergarten of Tianjin), YJ-1-SD attempted to compare the language ability of the SBE class students with the SBE students (they perceived the language ability include number of vocabulary recognized, understanding of sentence patterns, expression ability) (ODS/TJ/ASMT-01:2-3).

The collected data do reveal the perceived successful outcomes which will be the criteria of assessment of YPDRS.

For example, the Yunnam formative assessment report said:

> we should abide the SBE principle to assess the cognitive development, social development, personal development and physical development of our SBE students. (ODS/YN/ASMT-01:1)

To the other NGOs, it is immature to make an assessment officially but to Amity, the timing is right to build up conclusion on available evidence. After

seven years practice, Amity Foundations completed a stage report on SBE in 2003. This formal report (ODS/RP-AMI-03) is descriptive in nature. This report provides valuable information to understand the perceived successful outcomes. It described the progress of six deaf students after three months learning in the first phase SBE class was incredible (Ibid.:8). It provided quotations of parents about their perceived outcomes. For examples, the parent of Zhuang (a SBE deaf student in Nanjing project) said,

> My son learns sign language and written form Hanyu. He knows the languages and learns the world knowledge through the use of sign language. His progress is fast. Now he recognizes 1500 Chinese characters. SBE helps the development of thinking…
>
> (Ibid:21)

Parent Dong introduced the big progress of her daughter, she said,

> My daughter has learnt a lot of knowledge after studying in SBE class. Her comprehending ability improves. She is much wiser than before. Now, she can understand and can memorize words and stories quickly. When she was in the oral class, I took a long long time to teach her…
>
> (Ibid:22)

The parent of Chen (also a SBE deaf student in Nanjing project) told SBE helps the emotional development of her daughter. Before the commencement of SBE, she was puzzled,

Chen's personality was lonely. She was irritable. I could not understand what she   wanted. I could not give her what she needed. I could not help her. We spent a lot time to try to guess her meaning. We are exhausted.

<div align="right">(Ibid:21)</div>

Li is a student in Tianjin SBE program. His teacher Fu described the emotional development of Li and his change (the perceived outcomes),

Li dropped his vegetable to the bowls of his classmates. He always grabbed the toys from other students and lost his temper… He was easily angered. He raised up a chair and threw it on the floor … Today, he holds his temper. He is a "big brother". He always help other students…   (KN-08-TJ:3)

Other data also show the perceived outcomes. Informant Fa said,

My student Lei is a deaf student with deaf parents. He has four brothers and sisters. Their life is hard. Last year, his father was dead. This year, his family needs food and fertilizer. His mother is illiterate and can not communicate with hearing people. Lei found a pen and wrote: 'no maize and no fertilizer'. People from local government saw what they need and gave them…   (ODS/YN/ASMT-01:5)

I can not imagine the life (even daily life) without methods of communication.

Jiang' mother expressed the need of communication between mother and son. Before studying in the SBE class, she was in trouble. She said,

> just one day before my son attended the SBE class, my son asked me to buy a book to read. I did not understand what he wanted. He cried a whole day. I felt sad all day. (Ibid)

The father of Xiao Bo told me (in a group interview) what had happened before.

> Xiao Bo opened the drawer of a hotel cashier, picked up a bundle of bank notes and ran. I went into the hotel immediately and gave money to the hotel manager. I told the manger that Xiao Bo did not know what was right or wrong… Xiao Bo got a toy helicopter in a shop and ran. This time, no one was aware. At night, I saw my son playing with the toy on a street. I asked him. He dropped the toy on the ground and ran…I went to a toy shop to pay the bill... (FD/NS G:103)

After studying in SBE class in Dali, Xiao Bo knew the "law". This interview discloses SBE helps the social development of deaf students.

Actually, many perceived successful outcomes can be identified from the collected data (ODS/ TJ- 2003: 18; Informant Fa, PRCD -01, 2003 :18; Shi Li, PRCD- 02:10; Zhu, etal, ODS/ RP- AMI-03 :21). To sum up, according to the data, the common claims of the outcomes of the profoundly deaf students participating in the SBE projects by parents, teachers and SBE organizers are:

1. The improvement of communication ability in term of communication by Signed language (ODS/TJ- 2003:20; FD/NS F1:26; FD/NS B:28; Yang Lin, FD/NS G:26; art-sigmayn01:5);

2. The better development of linguistic, social, cognitive, emotional aspects (ODS/TJ -2003:20; ODS/YN-RP -02-YDPF:11; ODS/RP- AMI-03:23; Informant Wa, FD/NS B:58; Informant Wx, FD/NS F1:26);

3. Better academic achievement in terms of comprehending and written form expression (ODS/RP-AMI-01:23; ODS/YN-RP-02-YDPF:46);

4. The improvement of memory and learning. Parents claimed they feel the good memory and faster, more and better learning of their children. (FD/NS B:80-81); teachers had the same feeling. For example, Informant F told me in the past, she spent a semester to teach and to consolidate a lesson, still deaf students did not remember; today she

spent only a week and her SBE students could memorize it. She had a strong feeling about this "memory event" though she did not know the reasons (Field note B:7; Field note G:41; Field note G:96; Teacher Fan's diary, July,2001, ODS/YN -RP-02-YDPF:52-53); Informant W told me the learning content of SBE class was much more than oral approach classes-**one day was equal to one week** (my emphasis)(Field note F1:26). The claim made by Amity Foundation is noticeable. "During the past few years of practicing SBE, deaf students have learnt **more, better and faster** (my emphasis). Almost all teachers working for Amity felt they could teach them effectively and efficiently. This feeling we did not have in the past teaching experience (more than ten years)." (ODS/RP-AMI-03:21). This claim is buttressed by the experience of a hearing teacher working in a special school. Gu attended a classroom observation. She described that a teacher took 40 minutes (a whole lesson) for primary two deaf students in a School for the deaf to learn the pronunciation of four Chinese characters- wa, wa, wa, wa (the meanings are baby, tile, sock, a (it is a modal particle which expresses a leisurely tone)) (Gu, 2005:21).

5. Encouraging result of Chinese character recognition; for instance, the number of Chinese characters recognized by deaf people students increases from 84 to 160 for the book one in Dali; (FD/NS G:97; FD/NS F1:29; FD/NS F1:30); one more example, in Nanjing, SBE students could recognize 10 to 15 characters daily; after the consolidation in one to two days, SBE could really learn them (ODS/RP-AMI-03:17)

6. The non-cognitive aspect- students learn actively. They are motivated to learn, to express, to communicate, to go to school

   (Li Zhihong, PRCD-01,2003:21 ;leaf-amit-002; Zhu, et al, DS/RP-AMI -02:22; FD/NS B:28; FD/NS   B:79; FD/NS B:82-83; FD/NS F1:23; FD/NS F1:30; FD/NS G:97; FD/NS   G:104; FD/NS G:106; Photos- FD/NS G:88).

Are these claims credible? When many informants told me an object from different angles; when data generated by different methods indicated something like putting different small piece together into a jigsaw puzzle, it is possible gradually to understand more about what has been happening in the SBE classes. But, the way I dealt with these by collecting data from different sources to check the credibility is not a panacea. However, I can know the perceived point of view

of the majority (Though, it does not imply that is truth). I am aware even the view held by majority may not be credible. (As an illustration, the majority of philosophers and astronomers subscribed to the geocentric view in early 1600, still, the truth is the sun is the centre not the earth).

The last but important point I have to put forward is that I find an exception of the "perceived successful outcome". When I visited Dali in June 2004, the mathematics SBE teacher told me the SBE class learnt mathematics slower than other class in June 24,2004 (FD/NS G:98). This message was confirmed by three parents when I had an informal group interview with them in June 25, 2004 (FD/NS G:104). The mathematics SBE teacher suggested the reasons might be the age range and the hearing status (Their age ranges from 6 to 8 and all of the students had severe hearing loss (above 90dB) (PRCD-02, 2004:24). This exception (negative case) is worth for future research.

To sum up, this section can provide suggested answers to the perceived successful outcomes of SBE projects in mainland China. The finding is not the answer for research question (3) "What are the outcomes of the SBE models?"

5.3   Conclusion

In this chapter, several concepts (the features and the perceived outcomes of SBE) have been identified through the compare and contrast process between different type of data and between data and models of bilingual education in the literature. Other research questions have been answered in this process but I have to be satisfied that not all research questions can be answered in the thesis and that the research questions have above all been a useful set of guidelines for fieldwork, rather than a conventional set of questions which a thesis has to answer.

To summarize the findings of this chapter the tables below show the common claims of the outcomes and the characteristics of Chinese SBE projects:

Table 5.1:   The Common Claims of the Outcomes of
the Chinese SBE projects

1	The improvement of communication ability in term of communication by signed language
2	The better development of linguistic, social, cognitive, emotional aspects
3	Better academic achievement in terms of comprehending and written form expression
4	The improvement of memory and learning
5	Encouraging result of Chinese character recognition
6	The non-cognitive aspect- students learn actively

Table 5.2:　The Characteristics of Chinese SBE projects in urban areas

Number	Statements
The 1st feature	Chinese SBE organizers advocate the recognition of Signed Language
The 2nd feature	Chinese SBE organizers adopt to use Natural Signed language, Manual code Chinese, inter-language, written and oral form of Hanyu simultaneously in a classroom.
The 3rd feature	The majority of Chinese SBE organizers adopt Natural Signed language even they know the issue of standardization
The 4th feature	These SBE projects in China organized by NGOs are Developmental Maintenance Bilingual Education.
The 5th feature	These SBE projects are Rights oriented Bilingual Education- the societal goal is the equity of deaf students.
The 6th feature	These SBE projects cater for the early childhood deaf students and/or profoundly deaf students. SBE projects have a societal goal- profoundly deaf students should become balanced bilinguals.
The 7th feature	Almost all the SBE projects have distinct characteristic **-dual teachers** in the same classroom at the same time
The 8th feature	Almost all the SBE projects have a very distinct characteristic - the language allocation in the classroom is **both concurrent and separated.**
The 9th feature	Almost all the SBE adopts a "story telling and re-telling" method.
The 10th feature	Almost all the SBE selects theme- based teaching / unit teaching methods
The 11th feature	Almost all the SBE adopts "team teaching method"
The 12th feature	All SBE opts for the use of Multi-media technology
The 13th feature	All the SBE adopts more challenging curriculum

The highlights of the characteristics are the dual teacher arrangement and the concurrent and separated use of languages for the SBE projects in urban areas.

It sounds paradoxical but it does happen.

Chapter Six   Discussion and Conclusions

6.1   Introduction

As explained in Chapter One, this study seeks to explore and understand the

happenings after the bilingual experimental classes for deaf people were set up in

PRC from 1996, up to 2004, and in particular the debate which arose and the ways

in which people responsible for the projects and involved the debate conceptualized

the aims and methods of the projects. In this chapter I summarize the major

findings and draw conclusions and suggest some implications and recommendation.

This chapter consists of six main sections.

The 1st section gives an overview of this study. The 2nd section summarizes

major findings including perspectives, key claims, features and taxonomy. The 3rd

section is the section to discuss the similarities between Chinese SBE and western

European models.   The 4th section is a section to explain the different types of

SBE and the criteria that have been used to distinguish them. I suggest there are

two types of Chinese SBE. In the 5th section, I consider the implication of this

thesis. I grapple with the findings and draw inferences. Moving a small step from

particular to general, I speculate the findings of Chinese SBE can be applied to

some developing countries with caution. In this section, the implications of this thesis for future research are also discussed. The 6th section is a personal conclusion section. I make some wishes to deaf educators, educators in ethnic minorities regions and education policy makers. We, working together, can make a difference to the students.

6.2   Summary of Major Findings

The data of this thesis reveal three non governmental organizations (NGOs) have been conducting six Signed Bilingual Education (SBE) experimental projects for five pre-school stage educational settings and one Primary One level setting since 1996 and that the impact of the SBE projects is significant. A nation-wide debate about deaf education has arisen from the projects and this thesis has analyzed the themes in the debate and the perspectives taken by different people. The major findings are summarized in the following paragraphs. At the end of this section, the findings are then presented in a taxonomy format.

Perspectives

SBE projects are seen from a Linguistic Cultural Minority perspective, a Rights perspective and a Development perspective. Medical and deficit perspectives are rejected.

<u>Key claims</u>

The following claims are significant in the ways in which SBE is presented:

- ✧ Signed language is a language and a first language. Natural signed language (NL-SL) should be seen as the first language of deaf children. Mainly Natural signed language (NL-SL) together with mainly written form of Hanyu will be a good combination for SBE students.

- ✧ Deaf teachers provide role models and a good signed language environment for both deaf students and hearing teachers. Dual teacher arrangement may be appropriate for the SBE in PRC.

- ✧ The concept of deaf culture is essential to SBE projects. (Refer back to the 9th claim in Section 4.2.2- "Key points in the debate").

<u>Features</u>

The analysis showed that the ways in which those involved in the practice think about SBE can be presented as 13 characteristics and 6 kinds of common claims of successful outcome.

These SBE concepts and statements can be presented in a special "format" (Turner, 1991: 4-10): a taxonomy, combining the analysis using a grounded theory

approach, i.e. looking into the way the SBE organisers think, with a taxonomical

approach. Nachmias & Nachmias (1981:41) state a "taxonomy consists of a system

of categories…taxonomy describes empirical phenomena by fitting them into a set

of categories." During the process of data analysis, I constructed such a taxonomy

on the basis of what the SBE organisers thought as follows:

Table 6.1 the Taxonomy of Aspects of Chinese SBE

First Level: Philosophy					
	Perspectives				
	Beliefs & values	the belief that deaf can reach standards similar to those of their hearing counterparts			
		Critical language learning period & Early intervention			
		Special education need & individual needs			
		Signed language is a language or at least it is a good tool for deaf pre-schoolers			
	Aims	Rights-oriented			
		For early childhood deaf students			
		For profoundly deaf students			
Second Level: Principles	Signed Language (should be recognized)	Natural Signed Language			
		Natural Signed Language		Finger-spelling & Grammatical Signed Language (with Hanyu word order)	Hybrid Language
	Hanyu	Chinese phonetic alphabet (Romanize Pinyin)	Manual Alphabets System		
		Written form			
		Oral form			
	Bilingual Education	Strong form BE Developmental Maintenance BE			
	Total Development	Communication ability,			
		Learning ability,			
		Language development,			
		Cognitive development			
		Social development,			
		Emotional development			
	Community	Community	Neighbourhood of the SBE experimental sites		
		Deaf Community	Schools for the deaf; Deaf Clubs		
	Deaf Teachers	Natural Signed Language native signer	Role model of deaf students		
			Model of Natural Signed Language for parents and Hearing teachers working in the schools for the deaf		
	Deaf Culture	Advocacy	Enhancement of self esteem of deaf students		
	Parents	Signed language courses for parents			
		Seminars about Principles of SBE for parents			
Third Level: Operating arrangement	Language use in the SBE classrooms	Natural Signed Language, Finger-spelling, Written form Hanyu, Grammatical Signed Language, Hybrid Language			
	Language of Instruction	Natural Signed Language , Written form Hanyu,			
	Language Allocation	Concurrent & separated			
	Dual teachers arrangement	Both deaf and hearing teachers in the same classroom at the same lecture (with the exception of Dali city)			
	Curriculum	The contents of learning are more, faster, better, more efficient; school-based curriculum.			
	Pedagogy	Story telling and retelling			
		Unit-based and theme-based			
		Multi media technology			
	Perceived successful outcomes	See section 5.6.14			

This can be read as a representation of the ways in which the views of the group of informants are related. For example with the concept of 'community' a distinction has to be made between the community in the neighborhood of the SBE project and the Deaf Community; or with respect to language use in operating arrangements, it is necessary to distinguish languages present in the classroom from those which are used for instruction from the allocation of languages in the curriculum. The table this attempts to summarise the complex concepts and relations among them.

6.3 The similarity between Chinese SBE and Western European models

During the process of data analysis, "in vivo codes" were used that are the words and phrases of informants themselves, avoiding borrowed terms from the existing literature, as suggested by qualitative researchers (Strauss & Corbin, 1990: 65-69). For instance, I recorded an " in vivo code" –"Grammatical sign language" from my informants rather than using a borrowed term "Sign Supported Chinese" (SSC) from the literature. Nevertheless, many words and phrases used by the SBE insiders are similar to the terms adopted in the literature, no doubt because

some of those responsible for the SBE projects are familiar with and have been influenced by the literature on Bilingual Education in general. It is important therefore to compare the SBE projects with types of Bilingual Education.

Comparing the typology of strong and weak forms of bilingual education presented in Section 2.1 and the Baker's SBE model (in Appendix G) with SBE in PRC and its characteristics and structure (see principles level in Table 6.1 above), they are in substantial agreement. Only two terms mentioned in the discussion of that typology and the model cannot be found in Chinese SBE. One is the term "curriculum subjects". In point 2, Baker (2006:376) states, "sign language should be used to teach **curriculum subjects**." The other one is the term "transfer". In point 5 (ii), Baker (2006:377) claims, "Concepts and knowledge developed in the first language (L1) **transfer** easily to the second language (L2)". These concepts are absent from the discourse I analysed no doubt because the Chinese SBE model in the pre-school stage does not however have 'curriculum subjects' and it does not make sense to apply Baker's suggestion that "sign language should be used to teach **curriculum subjects**" (Baker,2006:376). On the other hand it would apply more readily to the situation in the Dali school with its primary section and yet is not present in the discourse analysed.

With respect to the question of transfer, the data show that SBE children learn Hanyu (L2) through the use of signed language. The SBE has a "dual-teachers arrangement" in a classroom and the languages are separated by teachers and used concurrently in the same lesson. The absence of the concept of 'transfer' in the discourse suggests that those involved in the Chinese SBE do not think children develop concepts and knowledge in sign language (L1) first and then transfer them to the second language (L2); they develop both simultaneously.

In short, it is very likely that there is no substantial difference between the Chinese SBE models and the Western European models. There are reasons for this, since I noted that a small group from Amity, arranged by Bristol University, visited UK in 1995 (FD/NS H:2). In 1996, Callaway, a British doctor visited Amity Nanjing headquarter. She introduced the SBE concepts to China. In 1997, a Chinese delegation of education visited Canada to observe the deaf education. In 1999 Jiangsu Province delegation paid a visit to the Centre for Deaf Study (CDS) in Bristol University and met J. Kyle, the director of CDS and British SBE experts such as S. Gregory (FD/NS B:57). Also in November 2000, Mackey, the headteacher and two Caucasians, from the 'Frank Barnes School for Deaf Children', London, United Kingdom – one of the few schools with sign

bilingual-bicultural philosophy in England – were invited to Kunming and Hefei to train the teachers and parents of the Chinese SBE experimental projects in these two cities. In 2004, a small team from Tianjin SBE visited Denmark for ten days to observe their deaf education (FD/NS F:12-13). In May, 2004 a team from China "Save the Children UK" paid a visit to "Thomas Pattison School" which is a part of "Royal Institute for Deaf and Blind Children" in Australia. "Thomas Pattison School" caters for the academic, social and cultural needs of children who are deaf and who use Auslan as their first or preferred language (FD/NS G:116). Frequent contact is a strong indication of influence and the similarities between Chinese SBE and western models is not surprising.

6.4   Types of Chinese SBE

Within this general similarity with western approaches to SBE, it is possible to show some variation in SBE in China with respect to a number of characteristics identified earlier and summarized here for convenience:

✧   developmental maintenance sign bilingual education

✧   rights-oriented sign bilingual education

✧   early childhood sign bilingual education

- ✧ for profoundly deaf children

- ✧ dual teachers arrangement

These characteristics vary in strength in practice in different cases. For instance, there is a continuum with rights-oriented projects at one end and non rights-oriented at the other end. There is a dichotomy of teacher arrangement with dual teacher arrangement on one side and single teacher arrangement on the other, and different SBE classes can be characterised on these dimensions. For instance, Amity's SBE in Nanjing in early stage was not rights-oriented; Save the Children UK in Dali city is single teacher SBE model with only one teacher in a classroom at one moment.

The questions arise whether these are in effect different types of SBE and what criteria can be used to distinguish types.

Comparing the SBE data in PRC with Garcia and Baker's types of bilingual education programs (refer to Table 2.1), and taking into account the literature discussed in Chapter 2.3, (the notions of Wang Xihong, Teng Xing, Dai Qingxia, Dong Yan about the different kinds of bilingual education), working back and forth between the data and the conception of classification, the SBE program in PRC can be classified based on medium of instruction at different school levels, based on

geographic regions, based on majority/ minority dominant language used, based on

goals, based on simultaneous/ sequential type of learning two languages, etc.

The experimental program of Dali SBE, has 8 different points to the others:

1. Dali is a middle childhood SBE model (The rest are an early childhood

   SBE model).

2. Dali is a single teacher arrangement in a classroom (The rest are

   dual-teachers arrangement in a classroom at the same session).

3. The language allocation in the Dali SBE classroom is separated by

   teachers and by subjects. The other SBE programs adopt concurrent and

   separated pattern of language allocation. These are found also in Sun's

   thesis (2004:37).

4. Dali is a SBE in rural area (the rest are SBE programs in urban areas).

5. The profoundly deaf students in Dali SBE class are ethnic minorities

   (Most of the deaf students of the rest SBE programs are Han majority).

6. Dali adopts a model which is teaching natural language alone as the

   visual input, eliminating oral form of Hanyu but reserving Hanyu for

   reading and writing. (There are four basic language abilities: listening,

   speaking, reading and writing. These four abilities can fit into two

dimensions: receptive and productive skills; oracy and literacy) (see Baker, 2006:7). Actually, what Dali adopts is the third point of Baker's twelve suggestions (refer to Appendix G- (3) Baker suggests, "sign language can be used to teach a majority language as second language. Usually this will be to teach reading and writing skills rather than oracy".) The other SBE programs adopt a model which is utilizing natural sign language as a bridge to both written and oral forms of Hanyu (both literacy and oracy, i.e. all the basic language abilities of Hanyu).

7. The significant difference is that the Dali SBE program is not only an educational program but also a social work program. Wedgwood is the China Programme Director of 'Save the Children UK' (SCUK). Her words below illustrated Dali SBE program are quite special. Wedgwood (1999: preface) said,

> Our limited funding is better employed to raise awareness of the needs of children and how these needs can be met using local resources of the countries where we work…resources doesn't just mean money; it means the skills, understanding and care of the local community…

Informant Li told me DPSES had joined the SBE program and also social work program in Dali organized by SCUK. The social work program includes "community development" such as 'deaf parent group', 'deaf alumni group', 'deaf club' (FD/NS G: 91-93). For example in the monthly activity organized jointly by DPSES and SCUK for the Dali deaf community, the deaf students from SBE program had the chance to communicate with deaf alumni/ deaf adults (FD/NS G: 108-110).

8. Relatively speaking, Dali SBE program values 'deaf culture' more than the other SBE programs, I suggest. Dali SBE program is a "bilingual and bicultural" program; the rest SBE are "bilingual education" program.

Although it is necessary to allow for variation within a type, the wide (8 different points) and distinct variation (i.e. the learning of 'literacy only') suggests Dali SBE model and the other SBE models are different types.

The Dali model might be called a "**two plus two SBE model**": one natural sign language (with one receptive and one productive skill) and two forms of hearing language (receptive skill: reading; and productive skill: writing). The second model can be called a "**two plus four SBE model**": with one natural sign

language (with a productive and a receptive skill) and four forms of hearing language (two productive skills: writing and speaking; and two receptive skills: listening and listening).

On practical grounds it may be argued that the "two plus two SBE model" may be good for profoundly deaf children (whose hearing loss is greater than 100dB) or hard of hearing children living in rural areas or hard of hearing children with parents who are unable to afford expensive hearing aids, provided that the perceived successful outcomes discussed in Section 5.2.14 can be observed.

The "two plus four SBE model" may be good on practical grounds for deaf children with some residual hearing ability (whose hearing loss is smaller than 80 dB) or deaf children living in urban areas or hard of hearing children with parents who are able to afford to pay for the high quality hearing aids or hard of hearing children with parents who can devote themselves to the development of their children. Again, provided that the perceived successful outcomes can be observed.

These are however points which are not made in the data, and are not necessarily the views of those involved in the projects. They are points for further discussion later.

6.5 Implications of the thesis

It is now time to consider the significance of the research and its findings. In Chapter 1, the Aims of the Study were presented as: to produce a description and analysis of Signed Bilingual Education (SBE) and its evolution in the PRC from 1996 to 2004 as understood by those responsible for the projects and those involved in the debates about them. However as mentioned in Delimitation and Limitation Section, this descriptive and qualitative case study is not intended to cover every aspect of SBE in China. To illustrate this point, I have tried to collect data about the outcomes of SBE experimental classes but the data are not available in Tianjin class and Dali class. Thus, I do not have answers to the question about the actual outcomes of the SBE models. I have only found the perceived (successful) outcome. As a result, the research questions I adopted as guidelines for the study are not all answered equally and comprehensively.

Due to the heterogeneous grade level of the deaf students, the heterogeneous types of this study and the heterogeneous methods of data collection, it is important to understand the context of this case study and to evaluate the degree of transferability of the findings from this research study carefully.

What this study has done in the first instance is to provide an understanding of the ways in which those involved in SBE conceptualized the projects which were developed in the period under study. In this sense the study has documented a phase in the development and provided an analysis by a taxonomy of the characteristics of the projects as they see them. This could be the starting point for further research into the development in China, including research which analyses cause and effect relationships among these characteristics.

The study has also located the Chinese SBE projects in the broader context of debate about education for deaf children in China, which is crucial to understanding the specific details of the projects. It has contextualized the findings by comparisons with other empirical research in China – which is in fact very limited – and with theoretical writing about models of bilingual education and SBE in particular in the literature, which is dominated by writing in western countries.

In short, this account has been a study of a particular development but one which, as pointed out at the beginning of the thesis, is interesting because of the rapidity of change and the fact that the changes have come mainly in a bottom-up fashion. This is all the more significant because as we have seen there is little

empirical research in China on this topic and the developments are influenced by western ideas for developed societies.

Because of this situation, I think it is important as a final stage to consider possible implications for other developing countries even though with the kind of research done here the issue of transferability – as often discussed in writing on research using qualitative data – has to be treated with caution.

Implications for developing countries

Due to the complexity and the dearth of research studies about signed bilingual education programs in the third world, it is clear that one should not try to transplant Chinese SBE to developing countries without adjustment. Nevertheless, when a developing country plans to start its deaf education or a country does not feel satisfaction about its deaf education and considers making a change, and when the geographical, economic and cultural conditions between a developing country and some regions in China are similar to a certain extent (for example, rural area of Laos and Burma and Daizu living in south-west part of Yunnan province; rural area of North Korea and Chaoxianzu living in south-east part of Jilin province), the

insights gained from this account of Chinese SBE may suggest the following points:

1. Profoundly deaf children or deaf children living in rural areas or deaf children with low socio-economic status or deaf children from ethnic minorities or deaf little girls are the types of deaf children which may be benefited by the "two plus two" SBE model.

2. Comprehensive, developmental, rights-oriented, strong form SBE will achieve maintenance and pluralism as societal aims and bilingualism and literacy as linguistic aims. If a developing country pursues these aims for its deaf education, Chinese "two plus four" SBE model might be a choice.

3. Programs can be started in early childhood (age less than 4 to 5 years old). If there is no pre-school education in some developing counties, the starting age of SBE could be in the first year of elementary education.

4. Natural signed language (L1 for deaf people), signed support language and the written form of majority language (L2 for deaf people) might be the languages of instruction in the classroom. This sounds to some

linguists like a violation of the languages separation principle between two languages but if the separation principle does not fit in some developing countries, or if a developing country has more than one natural signed language, the SBE program of this country may use all of them. Chinese SBE organizers have invented a hybrid approach. The languages allocation pattern of Chinese Two-plus-Four model is distinctive. On the one hand, languages are separated, on the other hand, code switching and code mixing take place concurrently and continuously in a lesson due to a dual-teachers model.

5. Team teaching is accepted by Chinese SBE. In the early stages of SBE, it may be difficult for many developing countries to find both qualified deaf teachers and hearing teachers with proficiency in natural signed language. The dual teachers arrangement adopted by Chinese SBE may be a solution to provide appropriate preparation and instruction to SBE students of some developing countries. However, individuals in a team may pool their talents and expertise together on the one hand and team members may have different needs, roles and

personalities on the other hand. Interpersonal skills, communication skills, conflict management skills are needed to enhance collaboration.

Implications for Future Research

In the future, other researchers may start from the findings of this study to investigate some relevant situations. One may design quantitative research by testing hypotheses based on my findings. One may conduct critical case study research, unique case study research, multi-site studies as described by Yin, Bogdan and Biklen (Yin, 2003:40; Bogdan & Biklen, 1982) or one may start an ethnographic study looking for in depth understanding and thick description as described by Goetz & LeCompte and Fetterman (Goetz & LeCompte, 1984; Fetterman,1989). Longitudinal study of a NGOs' SBE class can also be designed as one important aspect of SBE research. One may focus on the views of pupils and teachers to a much greater extent, provided there is mastery of signed language as well as Hanyu.

Understanding the structure of Chinese SBE and the common propositions, the characteristics, and the types of Chinese SBE from this study, future researchers may have the following areas for research. The first area is the

"language uses" and "language allocation patterns" of other SBE classes. For instance, researchers may explore the language allocation patterns of SBE in primary level and junior secondary level. The second area is the "team teaching" - the dual teacher arrangement for SBE classes. For example, researchers may study the conflict and collaboration of the team.

6.6   Personal conclusion

During the past five years, I have made every effort to understand the complex phenomenon of the Signed Bilingual Education experimental projects in China. I have drawn conclusions based on the findings which emerged during the prolonged process of data analysis. I felt a great responsibility to complete this study and a great respect for the SBE organizers and teachers that have devoted their life for the cause of deaf education. Clearing and making the roads in a new found land, I hope I have drawn a map for other researchers for their future studies.

The major countries of the world are developing countries. I have a hunch that Chinese SBE models may be alternative models for the developing countries to choose. It is possible that some developing countries have contexts closer to China than to western developed countries. I know that it is necessary to move from the

particular (findings from China) to the general (developing countries) in small steps.

I wish some deaf educators in developing countries may find some aspect of Chinese SBE is useful for them.

I also hope educators in ethnic minorities region may find some aspect of Chinese SBE is useful for them. I expect a series of policy changes for the deaf children will be accomplished and I wish the new deaf education will care for, respect, and develop deaf children as Cheng Yi-ji, an official from Education Committee of Jiangsu Province, the leader of China National Deaf Curriculum Reform Team suggested (Zhan, 2003:17).

I hope the new deaf education policy might promote "Harmony of Society" which has been proposed by Chinese leaders in autumn, 2006 (Li Jing, 2006).

I believe the special educators will promote "social equity" and "educational equity" in response to the calling of Xie Jingren, the director of Special Education Section of Basic Education Department of China Ministry of Education and the calling of Tang Shunfen, the Deputy Director General of China Disabled Person's Federation (Xie, 2007:1; Tang, 2006:36).

NGOs may stop the experiments in the future because their main task is not running a SBE program forever. It is appropriate to start Government-run SBE experiments as soon as possible. It is right not to deny everything about the existing deaf education. It is right to wait and see the outcomes of SBE. However, it is not wrong for the Chinese Education Ministry to allocate a small portion of deaf education funding (maybe 5%-10%) to SBE projects managed by the Education Ministry itself.

Postscript

In 2000 when I started the Ed D program designed by Durham University, my goals were to understand more about education policies and education issues especially special education. Nevertheless, the Ed D program guides me to build up a health body first (the core course of the Ed D program) and then leads me to tour some wonderlands such as bilingual education study, deaf education study, sign bilingualism, qualitative research methodology and informal logic. I am really impressed by some models and hypothesis such as Lambert's model about additive and subtractive bilingualism, Cummins' Common Underlying Proficiency Model, Cummins' Developmental Interdependence hypothesis, Baker's model of Sign Bilingual Education, Toulmin model on argument analysis, different scholars on ethnographic methods, various scholars on qualitative data analysis (Goetz, LeCompte, Strauss and Corbin) etc. Knowledge really opens my mind.

Thesis writing is a knowledge learning process indeed.

After the submitting of the thesis, I will take a break for a while. However, the end of this thesis writing is not the end of the learning. I have been told that in western culture, a wise man (Voltaire) says, "The more I read, the more I meditate; the more I acquire, the more I am enabled to affirm that I know nothing." In the

East, there is also a Chinese saying, "After learning, you will know your inadequacy of knowledge."

I am aware that the completion of Ed D program has made me know my inadequacy. I realize that it is not the end of my journey of learning, but rather a beginning of a new voyage.

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Ref: Field Note A-Aug-28-2003-interview-p.17

Place: office of Informant G in Beijing city

Informant G is a scholar working in Department of Special Education in a Beijing University. He is one of the editors of a book "Chinese Sign Language" which is widely used in China.

Interview Transcript (Extract)	Coding (open)
Interviewer: What are the placements of Deaf Education?	
Informant G: There are two forms: School for the Deaf and Mainstreaming. In China, only a few using oral approach; only a few using manual approach, many Schools for the Deaf using Total Communication approach. Most of them are using "Grammatical Sign Language". It is possible that there exist a few "oralist approach" classes in low form somewhere. A few special classes for the deaf in normal school may exist- in rural area.	Placement; Approaches Sign Language *in vivo code* Placement
Interviewer: You are an expert of special education. What is your opinion about sign language?	

Informant G: There are different concepts about language. Up to now, no linguists in China perceives sign language (SL) as language. They believe language have some key elements, phonology, syntax, morphology… There are three views about SL. First, SL is not a language; second, some Deaf people and also some deaf educators argue SL is a language; third, SL is not a language but SL is a form of expression, SL is a way to express… I agree this view. Every approach can have some successful cases. What are the conditions of the cases, e.g., What is the IQ of the students selected to be the experimental subjects? Sign Bilingual Education experiments (SBE) are the same. If someone claims the success of SBE, what are the	Recognition of sign language; Concepts of language and sign language; Views on SL; A way of expression IQ of subjects

contexts of the experiments? It is possible the success caused by other factors…Don't consider one single factor. For instance, IQ of the selected subjects in the experiments is a factor…	SBE Success of SBE Complexity of SBE experiments
Informant G: China have SBE experiments in Nanjing city. We also have SBE in Tianjin city. It is a preschool level SBE. Educators of Jiangsu province visited Canada three weeks about 2 to 3 years age to study SBE concepts. In China, some people adopt the views of SBE.	Where? Place of experiments; Level of SBE; Visit; Influence; Who? Proponents of SBE in PRC
Interviewer: Are there any other type of experiments of Deaf Education?	
Informant G: Yes, Hong Kong Fishermen Association" conducts experiments for the deaf in Beijing, Nanjing, Shanghai, Wuhan… They adopt oral approach…	Rival experiments

Interviewer: What are your views about SBE?	
Informant G: I aware and concern the SBE in China since 1999. Curriculum should be reformed in China. Experimental Curriculum for the deaf has been reformed in Jiangsu. It is true that the major educational goals of some deaf students are not oral/ speech. SL can be used to learn the written form of Chinese language. The contents of study (deaf education) will change; the methods of study will change also. Don't use one knife to cut all sorts of stuff. (It is a Chinese idiom: "*yi dao qie*"; It means use only one knife to spread the butter, to cut the frozen meats, to chop the steak, to peel the fruits… Is it suitable or wise to do in this way? why not use different knife for different tasks?)	SBE ; Curriculum reform; Goals of deaf education; SL: a tool for learning Chinese Way of thinking; Chinese way of problem solving

Appendix B:

Second Example of Open Coding
An Interview Transcript about Sign Language,
Sign Bilingual Education and Deaf Education

Ref: Field Note A-Aug-29-2003-interview-p.25
Place: home of Informant P in Beijing city
Informant P was working in a school for the deaf for twenty years. He studied in
USSR for five years. He was a lecturer of a Normal University in China.

Interview Transcript (Extract)	Coding (open)
Interviewer: How to distinguish schools using oral approach and school using total communication?	Approaches
Informant P: Difficult to distinguish for an outsider. Unless you stay in the school in a long period.	
Interviewer: To what extent a deaf student can be developed?	
Informant P: Their potential for development is great. It is the hearing people do not provide opportunity for the deaf to develop fully. The conditions of development are environmental factors and teaching. Language is one factor of environmental factors. The academic achievement of most of the deaf is primary school level. Some of them can study in senior secondary level. Few deaf students can study in University level. Only a few deaf students are pursuing their Doctor degree in Australian University. One is studying in Gallaudet University. On the whole, the achievement of deaf education is not satisfactory.	Academic achievement; Development Environmental factors; Primary Level Unsatisfied outcome
Interviewer: What are the major approaches of deaf education in China?	Approaches
Informant P: Look like total communication (T/C) but not exactly the T/C.	Approaches with Chinese context
Interviewer: How about Sign Bilingual Education approach? Are there in China?	SBE

Informant P: I am invited by UNICEF to Tianjin very soon. There is a SBE experiment there. About 5 to 6 years ago, there was a SBE in Nanjing supported by Amity Foundation. Save the Children (UK) have SBE experiments in Hefei city of Anhui province and Kunming city and Daili of Yunnan province. Professor Z is a proponent of SBE.	SBE Where? Place of experiments; Proponents of SBE in PRC

Interviewer: What is your view on Sign Language?	
Informant P: We should recognize SL. I hold this view since 1980s. SL need not strive in competition with oral language. I stress on unification, not rivalry… During the Proletarian Cultural Revolution period, someone claimed SL was the shackle put on the deaf by the anti-revolutionist and revisionist… We should not prohibit the use of SL. You never succeed if someone tries to stop the use of SL. We have to respect the deaf students. They have individual needs. Which is better for their development (SL or oral language)? However, SL has limitation. Should we treat the deaf as part of our society or treat them as different group? To some extent, people will be assimilated. Don't over-emphasize the distinct of deaf people.	Recognition of sign language; Concepts of language and sign language; Views on SL; View on SL; Individual difference and needs View on SL; Social sub-group Assimilation; Deaf community;

Appendix C: Checking out Hunches

Example of synthesizing data

This appendix demonstrates my process of synthesizing data. The *italics words* below show the major steps of data analysis, which are:

✧ Comparing and contrasting three official documents

✧ Identifying the major perspectives and key characteristics

✧ Triangulating the provisional findings with data from interviews and artifacts

✧ Merging the common points

✧ Theorizing by moving from the particular to the general in small steps

✧ Sifting out the less important points

✧ Aggregating common concepts

✧ Triangulating the aggregated concepts

✧ Speculating the key concepts of the Chinese SBE models

✧ Weeding out the less essential elements of Chinese SBE

It is very difficult to show how findings emerge from data. In my study, findings did not magically emerge and did not emerge by luck. During the process of questioning and comparing between the data, a hunch of Chinese SBE emerged. Since I had collected data from all of the NGOs (population) (N=3), I could compare and contrast data from these three NGOs prudently. I checked out the hunches about frequencies by the following described analyzing and synthesizing steps:

I studied the perspectives of the three NGOs first. Early perspectives of Amity were compiled by different sources of primary data. Then, three publications

from each of the NGOs were selected carefully to represent their key advocated points. Three things I always bear in mind are:

1) the possibility of rhetoric- if some points that one of the NGO claims is a lip service, I will show them. I check the points by the comparison of them with primary data continuously and constantly;

2) the possibility of missing points- if some points are not proposed in the publications based on technical reasons, such as the space of the leaflet or picture book, I will add them in based on my "rule of thumb"- points appeared in multiple sources, multiple methods repeatedly (at least three sources- field notes, interviews, artifacts and three times);

3) using *emic* terms and *invivo* codes- whenever it is possible, I adopt the words and phrases used by the informants themselves.

Leaders of the NGOs claim the points in written form explicitly weigh heavier with me. I may exercise my judgment according to what they claim (write), the way they act and the artifacts they are created. Let us see Amity Foundation first.

Amity Foundation

It is difficult to find early perspectives of Amity Foundation in black-and-white in 1996. By using indirect ways as mentioned in the chapter of methodology, I have figured their perspectives out as follows:

1. "The belief that signed language **is a language**" (Report-amity-annual-02:26, my emphasis).

2. Signed language is the **first language** of deaf people (Bg-info-C:2-3,my emphasis).

3. Signed language **is a tool** for learning and communication (Bg-info-C:2-3, my emphasis).

4. Signed language **is the mother tongue** of deaf people. **Early acquisition** of signed language benefits the emotional, cognitive, social development (Report- NJ-amity-01:2, my emphasis).

5. The **method of learning second language** should be adopted to learn Han-Yu (Bg-info-C:2-3, my emphasis).

6. The belief that the deaf are a **linguistic minority.** The Deaf have distinct culture (Report-NJ-amity-01:2, my emphasis).

7. A teacher, who is deaf person, is a good preacher of **deaf culture** (Report-NJ-amity-01:2; my emphasis).

8. Deaf people should know both signed language and Han-Yu (written form and oral form) and they should become **bilinguals** (Report-NJ-amity-01:2, my emphasis).

After several years of conducting SBE experiments, Amity, for the purpose of adcocacy, produced leaflet and calendar which showed their clear concept of bilingual and bicultural approaches in deaf education (Leaf-amity-003; Sig-am-02, my emphasis). They hold the views that:

1. *Fully recognize signed language and deaf culture.*

2. *Advocate signed language as the first language and the **written form of Mandarin (Han-Yu) as their second language***

3. *Take a positive attitude towards deaf people, Deafness is **not a disease***

4. *Support the equal participation of deaf people in the field of deaf education. **Deaf teachers** provide role models and good signed language environment to deaf students and hearing teachers*

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5. *Recognize **multiple languages** and **multiple cultures** in a society*

6. *The goal of the bilingual approach is:*
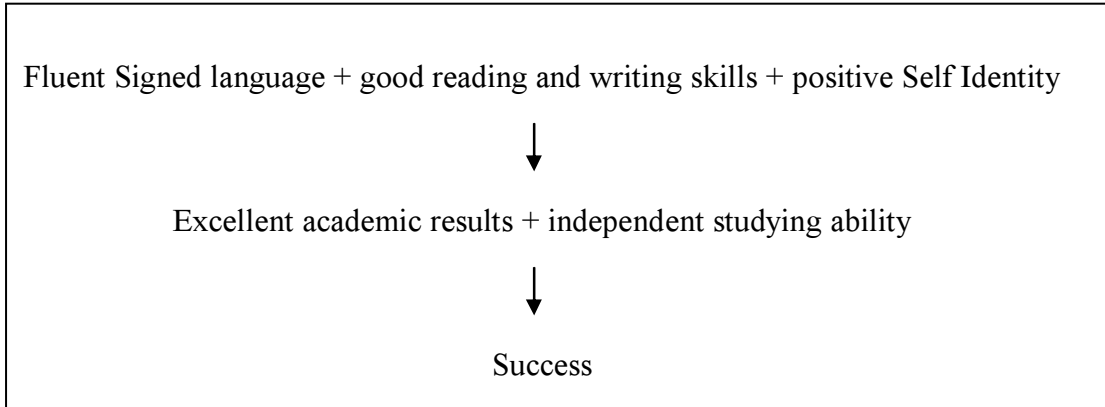
Figure C-1 Goal of the bilingual approach- Amity's perspective

Amity claims that, achieving the success, the deaf students will have wings to fly freely in both the societies of the deaf and hearing.

In recent year, Qiu Zhong-hui, the secretary of Amity asserted that "*sign language is the language of deaf ...deaf children have **the rights** to learn and use sign language...*" (sig-ma-04:4, my emphasis). Amity started promoting the right of deaf children explicitly.

SCUK

SCUK has a publication, "Watching" Deaf Children's Views- resource pack of their Signed- Bilingual Project in July, 2002. Yang Hai Yu, the chief editor of the publication claims that:

1. *Deaf is difference. Deaf is **not disabled***

2. *Deaf people have their values, identity and common language- signed language. Deaf people have their **deaf culture***

3. *Signed bilingual teaching is a method using signed language and the language of majority in a society and also Han-Yu to teach.*

4. *Signed Language is the **first language** for the deaf. After the signed language of a deaf child is actively developed, signed language will be adopted to support the learning of **Han-Yu**, including **written form and oral form**. Han-Yu learning is not only oral learning but also writing and reading*

5. *It is essential to learn and use signed language in the **critical period** of language development stage*

6. *Having their own signed language, deaf can strengthen their **self confidence and self esteem**.*

7. *The development of deaf children should be **comprehensive**. It includes language development, cognitive development, physical development and social development.*

(Pub-YN-YDPF:10-11, *my emphasis*)

SCUK did not stress on the role of deaf teacher in this "resource pack". But in practice, data show deaf teachers are employed in the each SBE site of SCUK in Anhui province and Yunnan province ((Field-note B (21 Sept., 2003 : 39) Interview with deaf teacher LM in Hefei; PRCD/01:91; PRCD/01:34; Field-note G (25 June, 2004 : 101) Interview with deaf teacher ZSF in Dali)). I count "deaf teacher" as an advocated point.

Besides of this "resource pack", I also count "the right for children" as an advocated point. I do this based on the following data. In September, 2003, the "First Bilingual Education Research Meeting" was held by SCUK in Hefei, Anhui province. The subject title on the cover of the proceedings is "Advocating Rights for the children with hearing impairments".

"Working together for the right of children" is printed on the canvas bag they gifted to the attendants. It was the evidences showing *"Rights for the children"* is a key concept of SCUK."

<div align="right">(PRCD/04: cover; photo003-138jpg)</div>

UNICEF

Agent of UNICEF had published a picture book, "Deaf Children Bi-lingual Bi-cultural" in November, 2003. In this book, UNICEF advocates that:

1. *Signed Language is the **first language** and **mother tongue** for the deaf. It is the basis of learning majority language comprehensively.*

2. *Deaf people should participate in deaf education. **Deaf teachers** are indispensable. Deaf teachers can communicate with deaf students completely. Deaf teachers are models of deaf students. The co-operation between deaf teachers and hearing teachers is the condition of success of SBE.*

3. ***Parental participation** and support is a necessary condition. Parent should learn signed language then, deaf students can have a signed language communication environment at home.*

4. *Learning Han-Yu means learning written form and oral form, but it does not emphasize on oral form and vice versa, **emphasize on written form.***

5. *No language has **priority** over the others in the language use and language learning.*

6. ***Deaf culture** such as deaf history, deaf art and literature, deaf value, is indispensable. Learning deaf culture will benefit the development and formation of **self-concept** positively. Deaf culture should be valued.*

7. Deafness and using sign language is a kind of cultural phenomenon. Medical

approach of deafness should be discarded.

<div align="right">(TJ-bibi-UNICEF-kor:15-16, my emphasis)</div>

In this picture book, agent of UNICEF states deaf students need comprehensive cognitive, social, emotional development within a critical period (Ibid: 9). Also referring to my primary data, agent of UNICEF follows a document - "Aims and Contents of pre-school Deaf Students" (Curr-TJ- aim&contents:3-8;) and a manual- "Manual for the Assessment of Deaf Student" (Man-tj-dev-assess) to design lesson plans and assess the learning results.

I read the two documents which contain five domains- health, language, social development, science and arts. The data reveal SBE project of UNICEF abides by the concept of comprehensive development. I count this as a key point of advocacy.

Also in this picture book, agent of UNICEF quoted Article 23 from "The Convention on the Rights of the Children" (CRC) (TJ-bibi-UNICEF-kor:29) to connect the SBE experimental project with the right of children.

*States parties recognize **the rights of the disabled child** to special care and shall encourage and ensure the extension, subject to available resources…*

<div align="right">*(CRC: Article 23,my emphasis)*</div>

The posters posted on the wall of the office of "Tianjin Rehabilitation Cente for the deaf" (TJRDC) reveal the main theme of their mission- the protection of the right of children. In addition, Zhao ming Zhi, the director of TJRDC wrote a report "On policy of teaching methods for the special education in China" in 2002. In that report, he expressed very clear his notion of the right of deaf people (TJ-deafc-rehab -01:1). Based on these evidences, I count "the right for children" is a point of advocacy of UNICEF as well.

<u>Synthesizing and theorizing</u>

In these paragraphs, I *merge* the key points from three NGOs together to find out which points are adopted by all the NGOs. I try to *move from the particular to the general in a small step:* what are the characteristics of the Chinese SBE models? (This is Research Question 2.3). I will *sift out* the less important points later (such as point number three and point number five).

The perspectives among Amity, UNICEF and SCUK are quite similar. The views of the three NGOs have some small variation. For examples, UNICEF believes sign language is mother tongue for the deaf, Amity and SCUK do not mention this point. Also, UNICEF advocates parents of the deaf students should learn sign language. Amity and SCUK do not mention that.

However, in the field, parents told me Amity had sign language training for the parents on every Tuesday and Thursday in (Field-note B (23 Sept., 2003 : 79 , 82) Group Interview with parents in Nanjing). Also, Anhui Rehabilitation Centre for Deaf Children and Hefei school for the deaf organized sign language courses for parents in Jan.14-16, 2003 , March 22, 2003 , March 29,2003 and Oct 17,2003 (PRCD/01:25, 80; PRCD/02:8).

Amity and SCUK did not express this point explicitly. It may be due to technical reasons (limited space in the leaflet and calendar) or due to the degree of emphasis. It dose not implied Amity and SCUK do not advocate parents to learn sign language.

Furthermore, SCUK does not state the point of deaf teacher explicitly. Actually, as mentioned above, SCUK's four SBE experiments in Anhui and Yunnam- all employ deaf teachers.

The following Table C-1 shows the concepts made **explicitly** from the above paragraphs.

To sum up, the *"aggregate"* concepts of SBE before the comparison and contrast in a nutshell are:

Table C-1: The Aggregate Concepts of the Chinese SBE

Concepts	Amity	SCUK	UNICEF
1.*Sign language is a language*	*Yes*	*Yes*	*Yes*
2.*Sign language is first language (L1)*	*Yes*	*Yes*	*Yes*
3.Emphasis on "sign language is mother tongue"	No	No	Yes
4.*Han-Yu is L2*	*Yes*	*Yes*	*Yes*
5.Emphasis on "written form of Han-Yu is L2"	Yes	No	No
6.Emphasis on "written form of Han-Yu"	No	No	Yes
7. *After the L1 of a deaf child is actively developed, L1 will be adopted to support the learning of L2 (an enrichment model of bilingual education for the deaf)*	*Yes*	*Yes*	*Yes*
8.*Deafness is a cultural difference, not disease*	*Yes*	*Yes*	*Yes*
9.Deaf people should participate in deaf education	Yes	No	No
10.*Deaf teacher is important to deaf students*	*Yes*	*yes*	*Yes*
11.*Deaf culture should be valued*	*Yes*	*Yes*	*Yes*
12.*Deaf students should develop comprehensively*	*Yes*	*Yes*	*Yes*
13.Parents should participate in deaf education; to learn sign language	No	No	Yes
14.*The goal of deaf education should help the formation of self identity and strengthen self concept, self esteem and self confidence*	*Yes*	*Yes*	*Yes*
15. *The rights of deaf children*	*Yes*	*Yes*	*Yes*

Point 1-2, point 4, point 7-8, point 10-12 and point 14-15 are advocated by all the three NGOs. These points are *triangulated* by data such as photos posted on wall of entrance, photos on wall of corridor, calendar (sig-ma-02), gifts item for those persons attending SBE meetings, leaflet (leaf-amit-03), newsletters (Sig-am-04), posters on wall, interviews (Field-note G held on 21 June, 2004: 28).

Notes from key informant-ZY; Field-note G (20 June, 2004: 2). Interview ZY in Kunming; Field- note G (29 June, 2004: 118). Interview key informant YHY in Kunming; Field- note B (20 Sept., 2003: 6). Interview ZY in HeFei; Field- note F (24 May, 2004: 6). Interview key informant ZMC in Tianjin).

I propose that the key elements of the Chinese SBE models run by the NGOs are point 1-2, point 4, point 7-8, point 10-12 and point 14-15 in Table C-1.

After the sifting process, I *speculate* the key concepts of the Chinese SBE models are:

Table C-2: The Key Concepts of the Chinese SBE

Key Concepts	Amity	SCUK	UNICEF
1. *Sign language is a language*	*Yes*	*Yes*	*Yes*
2. *Sign language is first language (L1)*	*Yes*	*Yes*	*Yes*
3. *Han-Yu is L2*	*Yes*	*Yes*	*Yes*
4. *After the L1 of a deaf child is actively developed, L1 will be adopted to support the learning of L2 (an enrichment model of bilingual education for the deaf)*	*Yes*	*Yes*	*Yes*
5. *Deafness is a cultural difference, not disease*	*Yes*	*Yes*	*Yes*
6. *Deaf teacher is important to deaf students*	*Yes*	*yes*	*Yes*
7. *Deaf culture should be valued*	*Yes*	*Yes*	*Yes*
8. *Deaf students should develop comprehensively*	*Yes*	*Yes*	*Yes*
9. *The goal of deaf education should help the formation of self identity and strengthen self concept, self esteem and self confidence*	*Yes*	*Yes*	*Yes*
10. *The rights of deaf children*	*Yes*	*Yes*	*Yes*

In short, this Appendix C demonstrates the way of data analysis. First Table C-1 shows the names of concepts of Chinese SBE are similar to the concepts of European SBE models. Second, as mentioned in the first paragraph, three publications from each of the NGOs were selected carefully to represent their advocated points. Using checking out hunches about frequencies method as described by Murphy (Murphy, 1980:133-136), I *weed out* the less essential

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elements of Chinese SBE. Ten key concepts which are adopted by all three NGOs are identified. After the sifting process, a new table (Table C-2) is constructed. This table is a *speculation* and no verification will be done due to the tight time schedule described in section 4.7 Summary of Chapter Four. This table is not a final product (finding). It is an "intermediate product". However, the key concepts of this table contribute to my findings of the common propositions section (see section 5.2).

Appendix D – Profiles of NGOs and schools

Profile of the Non-governmental Organizations

In this appendix, a summary profile of each of the three active Non-Governmental Organizations (NGOs) in China will be constructed. The NGOs have vision, mission and plan. They always organize and sponsor activities for the poor, female, old-aged, disabled, orphanage in many places, etc. They are the engine of the six SBE experimental projects. They are the regular army of the SBE battle. Amity is the first NGO and is a Chinese local one and is less well known comparatively. It is necessary to describe it a little bit more detail than the second and third one - the Save the Children UK and the International Children Fund.

The Amity Foundation (AF)

Amity Foundation is a non-governmental organization in Nanjing city. It was organized by Chinese Christians in 1985, and has partners at home and abroad. The overseas funds are mainly from West Europe, North America and North Europe (Report-15-anniv-amity, 2000:29).

Bishop Ting K.H., the president of AF, advocates that people with different beliefs can work together for some causes (Ting, K.H., 2002). AF claims that its cause is a cause of love. The mission of AF is to promote health, education, social services and rural area development from China's coastal provinces in the east to the minority areas of the west in PRC (Report-amity-annual-02, 2002). Inside the cover of the annual report in 2000, we can see AF proclaim that Amity's goal is "to cultivate a land of hope." (Report-15-anniv-amity, 2000).

AF's culture is the Three Cs: *compassion, commitment and competence* (see "Organization- the Six Cs" from web site of Amity Foundation (2007a; 2007b; 2008). (AF adds another three "C"- Communication, Cooperation, and Creativity as her organizational culture). AF stresses the training of its staff in order that they are competent and capable to absorb and adapt new concepts and ideas, that AF has introduced new concepts to Chinese society, for instance, the Sign Bilingual Education model and started the experimental project in 1990s. AF also adopted the notion of empowerment and AF views that its development works are different from traditional charity work. Han Wenzao, the general secretary of AF states "we hold the fundamental principle that development work should be a process of empowering the weak and dispossessed" (Report-15-anniv-amity, 2000:4).

According to this principle, AF has focused on education and training in order to empower people. Therefore, AF's training has included members of target communities as well as local leaders, because AF believes educated local leaders may be important agents of change (Ibid.:4).

AF builds its network with other Chinese and overseas NGOs, churches, universities consistently and diligently and AF has a lot of networking and capacity building activities. For example in 2002, AF paid exposure visits to Assumption University in Thailand, to Mountain View Lutheran Church and the Good Samaritan Children's Therapy Unit in Washington, to Presbyterian Church (USA) headquarters in Kentucky; AF attended International Conference for the Deaf in USA, attended an HIV/AIDS prevention conference in Indonesia, attended a seminar on partners in education in Gallaudet University, USA; studied work with deaf people; studied sign language teaching and sign language materials production in Norway (report-amity-annual-02, 2002:31).

The results of networking and capacity building activities cause AF staff to serve Chinese society with vision and innovation (Report-15-anniv-amity, 2000:34) and AF claims to follow the following guidelines: AF's projects should raise the awareness of self-reliance and development of the targeted groups; AF's projects should not give rise to the dependence of the targeted groups; and AF's projects should produce multiple effects and be of creative and demonstrative nature (Ibid. :35-36).

According to these guidelines, AF attempts to initiate new projects to meet the different needs of society at different times and AF is privileged to join the society in addressing the hot issues that are concerned with the well-being of the people (Ibid. :35).

Knowing these guidelines, we will not feel strange why the first Sign Bilingual Education experimental Project in China, was initiated by AF in 1996 in Nanjing.

Save the Children UK (SCUK)

Save the Children UK was founded in 1919 by Eglantyne Jebb. It was created to raise money to send emergency aid to children as the consequences of the shortage of food at the period of First World War. Since 1919, separate national Save the Children organizations have been set up in more than 28 countries. In 1977, International Save the Children Alliance was founded in Geneva. Later, in 1997, the headquarters of the Alliance moved to London. Today,

the Alliance is a global network of nonprofit organizations working in over 120 countries. (See "History" from web site of Wikipedia (2007)).

SCUK positions itself as "leader in transforming attitudes toward children and on some issues she has completely changed what is accepted as the norm for children in the world today." (See "What we do" from web site of Save the Children UK (2007)). In other words, SCUK intends to influence many national governments' policy on children's rights. SCUK always advocates all children have the right to survival, development, protection and participation (Flood, 2003:4; Yang Haiyu, Field note G:118). SCUK claims that it has expertise in themes that affect the quality of life for children worldwide. One of the themes is children's rights.

Operationally, SCUK focuses its work on four key issues: education (which is the focus here), health, tackling hunger and child protection (see "Issues we focus on" from web site of Save the Children UK (2007)).

In China, SCUK first contributed flood relief efforts during the 1930s. During the 1970s and 1980s, SCUK worked with Vietnamese refugees in Hong Kong, and in 1988 it resumed its work in mainland China. SCUK established a Beijing Representative Office in the capital of PRC in1999. The focus of the China Programme Yunnan office of SCUK is quite similar to that of the headquarters. Yunnan office states that SCUK's mandate is the fulfillment of children's rights (Lin Hui,2003; Jou-uksc-xx,2003). SCUK has developed education programs "to ensure that children not benefiting from China's economic growth get access to education, especially children from minority ethnic groups and disabled children" (my emphasis). For instance, first, SCUK is concerned with the rights of deaf children; second, more than 1300 students joined vocational training projects in Yunnan province in 2005 (they were trained to farm pigs, mushrooms, to hotel service); third, SCUK strives to make education more accessible to students with disabilities by support inclusive schooling in Anhui province.

Yunnan Office of SCUK believes that deaf children have the right to be taught by using their own language - signed language (Zhang Ying, 2004). Funded by LLOYD'S, SCUK introduced "bilingual teaching methodologies for the preschool education for deaf children" in 1999 (PRCD/04). Pilot classes were established in Yunnan and Anhui rehabilitation centers in September of 1999. The pilot classes were duplicated in two schools for deaf children in 2002. SCUK believes that "Children with profound hearing loss learn natural sign language from deaf teachers, alongside the current curriculum based on written Chinese

characters" (See "China country brief 2006" from web site of Save the Children UK (2007).

United Nations Children's Fund (UNICEF) and UNICEF China

United Nations Children's Fund was founded in 1946. It was created to provide emergency food and healthcare for children during the period after World War II. In 1953, this organization changed its original name - "United Nations International Children's Emergency Fund" to "United Nations Children's Fund" (UNICEF). (See "United Nations Children's Fund" from web site of Wikipedia (2007).

UNICEF is a permanent part of United Nations and the Headquarter of UNICEF is located in New York City. UNICEF's mission is to advocate for the protection of children's rights (See "convention for the rights of child" from web site of UNICEF (2007). Resources including money are from governments and private donors. In 2006, over one-third of its US$1.7 billion income was from the private sector.

UNICEF has been entitled to help the implementation of the "Convention on the Rights of the Child" (CRC) (UN, 1989: Article 45a). In 1989, "Convention on the Rights of the Child" was adopted and opened for ratification and accession by respective countries in United Nations. China has ratified this treaty. There are 54 articles in CRC, which make the construct of rights more tangible. To implement CRC, UNICEF advocates some 'focus areas' to work on, such as "Child survival and development", "Basic education", "Child protection" and "Policy advocacy and partnerships". (See "Focus areas" from web site of UNICEF (2007).

UNICEF has been in China for over 25 years and UNICEF China has been working with agencies and partners to implement projects in PRC. On the web, UNICEF China announces that:

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. (UNICEF, 2007)

UNICEF China advocates deaf children have the same basic rights as hearing children, and argues that there is urgent need to rethink deaf education - to abandon the medical deficit model of deaf and to adopt the Sign Bilingual Bicultural approach (Biggs, 2004:4-5).

In the 2001-2005 cooperative cycle, UNICEF China appointed Tianjin Hearing Rehabilitation Centre (THRC) as an agent to coordinate and administer the "Sign Bilingual Bicultural Education" pilot project. UNICEF China chose

Tianjin Number One School for the Deaf to implement the project and invited Tianjin Deaf People's Association to support the development of curriculum for the project. It also invited Beijing Normal University as a research partner to assist the development of the curriculum, and Liaoning Normal University as research partner to conduct research of China's deaf culture, and research of sign language and research of sign language interpretation services. The pilot project started in October 2001. The aim of this project was to develop a model of deaf education using sign language to realize the rights of deaf children to linguistic, academic, intellectual and social development (Ibid:13).

Profile of the Sign Bilingual Education Experiments Bases - the Special schools for deaf children and the Rehabilitation Centers

The NGOs mentioned in section 4.2, chose local partners to start their sign bilingual experiments in PRC. This section gives a brief description of these partners, including their affiliation and their facilities and structure. The data are from three sources: the literature, the field (based on my fieldnotes) and the internet.

To find a partner to conduct a SBE experiments, the NGOs had contacted two kinds of organization systems: from the education system and second, from the Disabled Person's Federation (DPF) system. In this study, the NGOs found six partners. Four of them – the Nanjing school for the deaf, the Tianjin school for the deaf, the Hefei school for the deaf and the Dali school for the deaf – are affiliated with the Bureau of Education (municipal level) or Committee of Education (Provincial level) and Ministry of Education (national level). Two others – Yunnan Rehabilitation School for Deaf Children (YRSDC) and Anhui Rehabilitation School for Deaf Children (ARSDC) – are subordinate organizations of Disabled People's Federation (DPF). In order to understand the context of Chinese SBE better, DPF and the dual management system are described briefly in the following two paragraphs.

DPF is a hybrid: China National DPF is an organization, which represents Chinese government on disabled persons' affairs in some aspect and advocates the right of disabled persons in PRC. DPF is, to some extent, also a Ministry-like division of PRC State Council, which plays the management role such as the role played by Ministry of Education on Education. Local DPF branches also have three functions: representing, serving and managing local disabled Chinese people (TJ-deafC-rehab-01:2)

The dual management system for the six partners involves the following. In PRC, every school for the deaf reports to the Bureau of Education of a city and Committee of Education of a provincial government. For example, Hefei School for the Deaf is under the leadership of Bureau of Education of Hefei city and Committee of Education of Anhui provincial government. Usually, provincial governments have the responsibility to support schools for the deaf with financial resources and human resources with a few exceptions - private special schools. (Most of the special schools are public in PRC). Also, Hefei School for the Deaf must report to and follow the national policies of the Ministry of Education of Central Government. The first relationship is administrative leadership in nature and the second relationship is what they call "technical leadership". For instance, the Hefei School for the Deaf has to follow the Chinese style "Total Communication" approach, to adopt the curriculum approved by the Ministry of Education.   In a similar way, the Rehabilitation Centre for the Deaf is under the leadership of provincial and municipal "Disabled Person's Federation". Every centre also reports and follows the policies of China National Disabled Person's Federation.

To conduct any educational experiments, NGOs must gain the permission and rapport from local governments and the Ministry of Education. In the following paragraphs, the SBE experimental bases are described accordingly.

1. <u>Nanjing School for the deaf</u> (NJSD)

The Amity Foundation (AF), supported by the Centre for Deaf Studies at Bristol University in the United Kingdom, set up a Sign Bilingual experimental activity in Amity Pre-school Rehabilitation Centre, which is attached to Nanjing School for the Deaf (NJSD) in Nanjing city, Jiangsu province in 1996 (Callaway, 1999:35; Callaway, 2000:258; Wu, 2005:10; field- note-B:74; report-15-anniv -amty:17; report-NJ-amity-01,2003:8). A formal report (report- amity-02 ,2003:11) says the commencing date of the first SBE experimental class in NJSD was February of 1998.

There were about 120 teachers and about 800 students in NJSD in 2003. It is a boarding school and it consists of primary and secondary sections (field-note-B:78). Nanjing School for the Deaf is the first special school established by Chinese Government in 1927. It is a "model school" in Nanjing city. NJSD is one of the "modernized-special-school" models in Jiangsu province. It is also a national audiological experimental school for the deaf and the first senior secondary school for the deaf in the whole country (Sun Ji-hong:14). Today,

Nanjing School for the Deaf has three divisions: a preschool division, a compulsory education division (Grade one to Grade nine), and a senior secondary education division. From the school web site, Nanjing School for the Deaf, it is claimed, stresses quality education:

> 96% of the senior secondary school graduates have been enrolled into Universities since 1992. All the graduates are praised by the employers. Many employers are willingly to recruit the graduates from NJSD.

In year 2004, NJSD joined a new SBE project, which was organized by AF and a Norwegian Foundation: the Foundation Signo.

2. Yunnan Rehabilitation School for Deaf Children (YRSDC)

Save the Children UK (SCUK) had five offices in China including one in Yunnan province, and in collaboration with the Yunnan Disabled People's Federation and its subordinate Yunnan Rehabilitation School for Deaf Children(YRSDC), SCUK China Programme Child Welfare Project team started a Sign Bilingual experimental class in YRSDC in Kunming city in 2000 (PUB-YN-NGO, 2003:10; PRCD/02, 2004:22).

YRSDC was established in June, 1986. The building area of YRSDC is about 570 square meters and in 2004, there were five organizations in the same building: Yunnan Rehabilitation School for the Deaf Children, Yunnan New-Star Kindergarten, Rainbow Counselling Service, China-Australia Cochlear Implant Rehabilitation Centre and Yunnan Research Centre of Rehabilitation for Deaf Children. These five organizations not only shared the same space but also shared the same human resources. For example, one of my informants is a deputy director of Yunnan Rehabilitation School for the Deaf Children and a director of Yunnan New Star Kindergarten (FD/NS G:16). YRSDC has an audiological division, a speech therapeutic division, a parent school, a rehabilitation centre for mentally disabled children (FD/NS G:13) and can provide an audio-training service after cochlear implant. It can accommodate about 40 deaf children for boarding (FD/NS G:13). It has about 90 students and a staff of about 20.

3. Dali Prefecture Special Education School (DPSES)

Two years after the first SBE in Kunming, SCUK Kunming office and Dali Prefecture Special Education School (DPSES) signed an agreement to start a Sign Bilingual Education experimental class for primary one students in Dali – an ethnic minority autonomous prefecture in Yunnan province – for the period of

October, 2002 to December, 2004 (PRCD/01:15). Due to the education system in Dali Prefecture, the cohort of deaf children enrolled by DPSES every year is in the age of 8 to 9. It was difficult if not impossible to start a SBE for pre-schoolers in Dali.

DPSES was established in 1982. The building area is about 5960 square meters. There was only one special school for deaf students, blind students and mentally retarded students in Dali. This is DPSES. DPSES provides nine year compulsory education services for the students. It has a staff of 52 of which 36 are teachers. It provides vocational training for its students such as office automation, massage, sewing, internal decoration, bicycle repairing, weaving, hair-cutting, etc. DPSES has auditory room, speech training room, multi-media room, computer room, library, Local Area Network and a satellite receiving station for distance learning. There are 13 classes for the deaf students in the primary level and 4 classes for the junior secondary level and one class for the blind students in 2004 (PRCD/02 ,2004 :69). There were 245 students at the time I visited Dali.

This school is a boarding school and also enrolls students outside Dali Prefecture region. School fees are free. Many students' homes are far away from DPSES. Some students, accompanied by their parents to DPSES spend two days getting to the school (one day from their villages to their counties and one day from the counties to Dali county and then to DPSES) (FD/NS G:88-89). Since 1996, DPSES enrolled 30 to 40 deaf children every year. Half of the students (those students with low hearing loss and with hearing aids) were placed in Rehabilitation class to have auditory and speech training. About twenty percent of the students in the Rehabilitation class were rehabilitated each year. However, DPSES is concerned with the remaining 80% (FD/NS G:90). and has become one of the SBE experimental classes.

4. <u>Anhui Disabled People's Federation Rehabilitation Centre</u> (ADPFRC)

SCUK found a partner in Anhui province. Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC), an affiliated organization of DPF, was established in 1987 (PRCD/01,2003:81). It has many years of experience serving disabled children and their parents. The services are auditory testing and training, speech training, hearing aids selecting, ear-mold making, assessment, intelligence testing, parent school and parent club (PRCD/01,2003:22). ADPFRC had conducted auditory testing and hearing aids selecting for about ten thousand deaf people. It had provided auditory training for seven thousand deaf students. It had also provided auditory training for about 400 preschoolers. In brief, ADPFRC

knows deaf education for the preschoolers well. Thirty five percent of them were rehabilitated and were mainstreamed into normal kindergartens and primary schools (PRCD/01,2003: 81). Informant Gao admitted that based on their 15 years experience, she observed that those deaf students who had not severe loss of hearing and were not severe mentally retarded benefit from auditory and speech training. For the severely deaf students, she said, the trainings were ineffective and they can only utter some words without comprehension of a story and even a sentence. They cannot express coherently (PRCD/01,2003:22). ADPFRC therefore looked for a new way and began the bilingual experiment for deaf children on October 2000.

5. Hefei School for the Deaf (HSD)

In September 2002, SCUK Hefei office and Hefei School for the Deaf (HSD) - an affiliated organization of the Bureau of Education of Hefei city, the capital of Anhui province - commenced a Sign Bilingual experimental class in HSD's subordinate Hefei Special Education Centre (PRCD/01:34; leaf-uksc-002).

HSD was established in 1963. In 1970, it was changed and was run by Hefei city government. The building area of HSD is about ten thousand square meters, and like YRSDC, three organizations share the same resources: Hefei special education centre, Hefei school for the deaf and Hefei vocational school for the deaf and blind. In 2001, HSD established a "Anhui Special Education web site". It is a special education research centre and special education resources centre for Anhui province. It also provides special education teacher training tasks for the province. Today, HSD thus provides pre-school education, nine-year compulsory education, vocational education and senior secondary education for the deaf and blind students in Anhui province.   It has a staff of about 60, 14 teachers for the senior secondary division, 30 for the primary school division (PRCD/01,2003: 79; FD/NS B:26) . It had 200 students in 2000 (PUB-YN-YDPF:22) and 295 students in September, 2003, at the time I visited the school, with 21 classes.

6. Tianjin Number One School for the Deaf   (TJ-1-SD)

There were three "Schools for deaf children" in Tianjin previously. Tianjin Number One School for the Deaf (TJ-1-SD) is one of them. The other two are "Tianjin Number Two School for the Deaf" and "Tianjin Number Three School for the Deaf". In September 2006, after my fieldwork, these three schools were merged to a new "Tianjin School for the Deaf" (TJSD) with a staff of about 200. It had about 600 students in September, 2006. The new campus size is over 20000

square meters and the building area is 15000 square meters. It has main teaching building, rehabilitation building, dormitory, canteen, sports ground, gymnasium (Gao, 2007: 508)

TJ-1-SD belonged to the Committee of Education of Tianjin city. Tianjin municipal government has the same rank as provincial government. It is directly under Central government; usually those organizations report directly to Central Government and the Committee of Education, not the Bureau of Education.

TJ-1-SD has three divisions, the secondary division, primary and junior secondary division and pre-school Rehabilitation division (field-note-F1:8). Ione informant told me that before 2001, according to the education system, seven-year-old deaf children were enrolled to study in primary one. Six-year-old deaf children were placed in the pre-school rehabilitation division to have a one-year hearing and speech training and four-year-olds to have three-year training. The training was effective for some deaf children. Owing to the advancement of hearing aids technology and teaching methods, TJ-1-SD achieved the national rehabilitation standard – the rate of deaf students going to mainstreaming (17% in 2002) after training (TJ-bibi-ppt-3) and TJ-1-SD's rate was 26%, much higher than the standard rate. However, TJ-1-SD was aware that 80% of the mainstreamed students had come back to the school for the deaf. Like the above mentioned five organizations, TJ-1-SD had 15 years teaching experience adopting the oral approach and they knew the limitation of the oral approach. In a SBE seminar, the ex-headteacher of TJ-1-SD heard a new approach for deaf people and he made the decision to join the SBE experimental project (field-note-F1:9-10).

As a consequence, Tianjin Hearing and Speech Rehabilitation Training Centre (TJHSRTC), an agent of UNICEF started a Sign Bilingual Bicultural Education pilot project in TJ-1-SD in October 2001. In September, 2001, parents had the choice to join SBE class or not. At the time I visited TJ-1-SD in 2004, there were two SBE classes in the pre-school rehabilitation division and one primary one SBE class. (One class commenced in 2001; one: 2002; and one: 2003.)

TJ-1-SD maintained two oral approach classes as a "control group" for comparison purpose and also as the option for parents. TJ-1-SD (TJ-keynote-01: 2-4) spent a whole year to develop a set of teaching material and used the material for teaching and learning (see photograph 5.3-01). In June, 2004, TJ-1-SD carried on an assessment of signed language and Han-yu for the SBE experimental project (TJ-keynote-05:1). TJ-1-SD set up a "Parent School" to teach signed language and

psychology of early childhood (TJ-keynote-09:1-2; field-note-F1:5) in order to improve the bilingual linguistic environment in their families.

Summary

In brief, all these six organizations are reputable in their provinces or region. Some even are famous in the field of deaf education nationwide. They have developed rapport with local deaf communities and parents. They have experience of hearing and speech training and teaching deaf students by T/C approach and they are willing to explore and to find an alternative model of teaching their students. Both the Ministry of Education and national DPF have acquiesced in the SBE experiments. In the next section, I will describe the profile of deaf children-their age, their degree of loss of hearing, their gender, their parents, their readiness, their development when their parents made the choice of studying in the SBE classes.

The following Table summarizes the SBE experiments bases at a glance.

Table D-1 The schools and centers of the SBE experiments bases (1998-2003)

Name	Province	Level of SBE class	Commencing date Of the SBE class
Nanjing School for the deaf	Jiangsu	Pre-school	Feb. 1998 (1st)
Nanjing School for the deaf	Jiangsu	Pre-school	2001 (2nd)
Nanjing School for the deaf	Jiangsu	Pre-school	2003 (3rd)
Hefei Special Education Centre of Hefei School	Anhui	Pre-school	Sept2002 (1st)
Anhui Disabled People's Fed Rehabilitation Centre	Anhui	Pre-school	Oct2000 (1st)
Tianjin Number One School	Tianjin	Pre-school	Oct2001 (1st)
Tianjin Number One School	Tianjin	Pre-school	Oct2002 (2nd)
Tianjin Number One School	Tianjin	Pre-school	Oct2003 (3rd)
Yunnan Rehabilitation School for Deaf Ch	Yunnan	Pre-school	2000 (1st)
Dali Prefecture Special Education School	Yunnan	Primary one	2002 (1st)

(Compiled from different sources including primary data and literature); Callaway .(2000); Field note B:73; TJ-deafC- rehab-06:10-12; Field note F:9; report-NJ-amity-01:8 and 11 and 16.

(The NGOs will not confine their SBE experiments in these six sites and they established more SBE experiments in Suzhou, Changzhou, Yangzhou, and Zhenjiang city in Summer 2004. In 2006, four SBE experiments were established in Sichuan and Guizhou provinces. These sites are for other researchers to study in the future.)

Appendix E: Profiles of the deaf students

It is difficult to collect data about the children of SBE experimental classes. The data are sensitive. The level of confidentiality of different NGOs' administrators and educators varied. In some sites, I could get the information in details; in some, I could not. For me, I tried to get primary data possible in the field. To what extent the data about the deaf children of these six experiments could be obtained are influenced by many factors such as the mood, the personality of the leaders, their trust level to me, my reference given by my friends in PRC and the *guanxi* (friendships) between the friends and the leaders of the SBE experimental classes. Though I could have some children's name in some sites, for the purpose of protection of the children, the names of the children enrolled in the SBE classes are changed by me in this study. All the names are pseudo names.

A face-to-face debate happened at "the third SBE seminar" held in Dalian city in September, 2003. Some experts criticized the SBE experiments in the seminar after they obtained the information about the SBE. The administrators of a SBE experimental class perceived that primary data about SBE might be used as cannon balls. Some of them were unwillingly to disclose part of their information. I would not have been permitted to visit some sites if I had not been recommended by good and strong reference. I am lucky to have chances to visit all the sites but profiles of deaf students are not available in some sites.

In 2003, Amity had run the SBE classes in Nanjing School for the deaf (NJSD) for 7 years. The first class was promoted to primary school level. The second class had just completed their pre-school level studying. There are 14 students in two cohorts. Seven teachers participated into these SBE classes (4 are hearing, 3 are deaf). The basic information about the students is shown in Table E-1.

Table E-1: General information of SBE students in Nanjing

Pseudo name	Year of birth	Gender	Date of enrolled into SBE class	Parents' hearing status	Loss of hearing of this child
Zhang	1991	M	1997-9	H	80/90 dB
Zhu	1994	M	1997-9	D	Severely HH
Lan	1994	M	1997-9	D	Severely HH
Kao	1993	M	1997-9	H	Severely HH
Xie	1993	F	1997-9	H	90 dB
Gao	1992	M	1997-9	D	105/110 dB

Zhuang	1996	M	1999-9	D	105/110 dB
Zhao	1996	M	2001-9	D	98/98 dB
Jiang	1998	F	2001-3	H	130/130 dB
Tung	1996	F	2002-9	H	130/130 dB
Zhou	1997	M	2002-9	H	105/103 dB
Chen	1998	F	2002-10	H	n.a.
Yuen	1996	F	2001-9	H	103/103 dB
Yang	1997	F	2002-3	H	n.a.

Source: report-amity-02:3-4

(This information is in the form of a report that I have collected. I can see the full name of students.)

In September of 2000, Yunnan Rehabilitation School for Deaf Children (YRSDC) enrolled 8 deaf students. Their ages were 3.5 to 7. All of them were severely hard of hearing with 90dB hearing loss (PUB-YN-YDPF:10-11). Five of them had studied in oral training classes previously. Three of them were newcomers. In 2002, there were about nine deaf students.

Table E-2: General information of SBE students in Yunnan Rehabilitation School for Deaf Children

pseudo names	gender	Year of birth	pseudo names	gender	Year of birth
Xiao	M	1995	Lu	F	1997
Lin	M	1995	Wang	M	1997
Li	M	1996	Lin	F	n.a.
Yang	F	1997	He	M	n.a.
Zhuo	M	1997			

Source: PUB-YN-YDPF:10-11

At the moment I visited YRSDC in June of 2004, there was another SBE class which was run. The students were in the age of 5 to 8. Two teachers (one hearing, one deaf) participated into this SBE class (Fielf-note-G:43). The commencing date for this second SBE class was not available. I estimate the date might be possibly in early summer of 2003. In the field, I read the assessment records of this class dated September 2003 (log-testB&C:4-15). See below:

Table E-3: General information of second SBE class students in Yunnan Rehabilitation School for Deaf Children

pseudo names	gender	Year of birth	pseudo names	gender	Year of birth
Chen	F	1998	Sun	M	1999
Zeng	M	1999	Yang	F	1998.
Lui	M	1996	Jiang	M	1999
Yang	F	1999	Shi	F	n.a.
Zhang	M	1997			

Compiled from different sources: log-test-A, log-test-B&C, field notes G:79, irp-yunan

In Tianjin, there were three SBE experimental classes- two in the pre-school stage, one in primary one level (Shaungyu-net-16) in 200x. There were 23 students altogether. Sixteen of them were students of primary one SBE classes (TJ-key note-03:3). There were eight children studying in the pre-school SBE class. Five of them were boys. This cohort was 5-7 years old. Seven of them were deaf with 110 dB hearing loss. Two were deaf students with deaf parents. Others were deaf students with hearing parents (TJ-bibi-Unicef:34; TJ-deafc-rehab-06:10-12).

In October, 2000, Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) admitted 6 deaf children with hearing loss higher than 90dB to set up a SBE experimental class. One hearing teacher and one deaf teacher were arranged to teach them. Five out of the six students are male. All of them were 7 to 9 years of age. All wore hearing aids. Five of the students were "normal" intellectually. Four of the students did not have "fundamental capability of language". Two had some capability. Almost all of the parents of the six deaf students are hearing except one student has a deaf father (Shaungyu-net-13).

In September 2003, ADPFRC recruited nine deaf students from rural area of Anhui province. Three of them were from the first SBE class. Six of them are newcomers. All of them had profound loss of hearing (100dB). Their ages ranged from 5 to 10 (intell-C). The basic information are as follows:

Table E-4: General information of SBE students in

Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) in 2003

Pseudo names	gender	Year of birth	Loss of hearing of this child	Date to SBE class	Parents' hearing Status	Parents' Education Level
Tong	M	1995	105/105	Sep2001	H	Junior secondary
Wang	F	1993	110/110	Feb2001	H	Junior secondary
Zhu	F	1995	100/100	Feb 2003	H	Junior secondary
Chang	F	1995	110/110	Sept 2003	H	Junior secondary
Gu	M	1997	95/95	Sept 2003	H	Primary
Chun	M	1998	90/105	Sep2001	H	Junior secondary
Wu-I	M	1998	100/100	Sept 2003	H	Senior secondary
Wu-II	M	1996	90/100	Sept 2003	H	Junior secondary
Yin	M	1997	90/90	Sept 2003	H	Junior secondary

Source: intell-C

ADPFRC was the only organization that disclosed the intelligence rating of the SBE students in details. At October 19, 2003, ADPFRC provided the following tables in The first Bilingual Research Meeting in Hefei.

Table E-5: Intelligence Quotient of Sept2002-to-Jan2003 cohort of SBE students in

Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) in 2003

Pseudo names	Age	IQ	Gender	Intelligence
Tong	7	130	M	Upper middle
Wang	9	94	F	Middle
Mui	8	100	M	Middle
Pang	7	112	M	Middle
Yi	8	88	M	Middle
Zhang	7	84	M	Middle

Source: PRCD/01,2003:24

(Standard: Gifted-148 or above; High-132-148; upper middle- 116-132; middle-84-116; lower middle-68-84)

The inventory adopted to assess the intelligence is Hiskey-Nebrask Test of Learning Aptitude (H-NTLA). H-NTLA was developed by Professor Hiskey in 1950s' in Nebrasks State of USA. This test is widely used in China.

Table E-6: The Intelligence Quotient of Feb 2003-to-April 2003 cohort of SBE deaf students In Anhui Disabled People's Federation Rehabilitation Centre (ADPFRC) in 2003

Pseudo name	Gender	Age	Hearing loss	IQ	Learning time (months)
Zhu	F	7	100	148	19
Cheng	M	6	103	133	11
Wei	F	5	110	120	7
Zhou	M	5	90	121	7
Zheng	F	4	100	136	7

Source: PRCD/01,2003:26

(Standard: Gifted-148 or above; High-132-148; upper middle- 116-132; middle-84-116; lower middle-68-84)

In June 2004, I visited Dali Prefecture Special Education School (DPSES) Dali city in Yunnan province. There were three primary two classes in DPSES (29th, 30th and 31st classes). The SBE class was the 30th class. I "talked" (communicated by pen) about the 30th class by writing on sheets of paper with a deaf teacher (DT-dali-02) in teachers' office. I was told there were 19 students in this class. Many of them were ethnic minorities. I had two observations in the 30th classroom. I met the students. They were Li, Xiong, Zhao, Yang, Che, Cui, Wu, Kang, Cun…etc. They were boarding. Some of them were multiple disabled (deaf, mentally retarded, hyperactive students). The smallest one was 6 at the time of being admitted by DPSES. Their ages ranges from 6 to 8. All of the students had severe hearing loss (above 90dB) (PRCD/02,2004:24)

I paid a visit to Hefei School for the Deaf (HSD) at September 2003. I had two observations in the SBE classroom. I met 13 SBE deaf students in the first session and 15 students in the second session. Their basic information was not available. What I was told was that the headteacher of HSD committed to accept fifteen 5-to-8 years old deaf children since 2002.   HSD arranged two deaf teachers and one hearing teacher for the SBE class (PRCD/01,2003:29-30).

To sum up, most of the SBE deaf children were boys. Most of them were deaf children with hearing parents. Most of them had severe loss of hearing (90dB

or above). Most of them were Han majority with the exception in Dali city. The intelligence of most of them was not known. In Dali city, the IQ of some of SBE children was low but in Hefei city the IQ of most of the SBE deaf children studying in Anhui Disabled People's Federation Rehabilitation Centre was above average.

Appendix F: Informants and key informants

	Staff & Managers	Consultants & Scholars	Headteachers, directors and teachers	Others
NGOs SCUK, AF, UNICEF	Informant Zh-Y Informant Wu, Informant Sh-2 (D) Informant Wa-l Informant Zh-O Informant Ya-H-1	Informant Zh-S Informant Jia (D) Informant Sh-1 Informant M (D)		
SBE Schools for the deaf and Rehab. Centres			Informant Xu , Informant W, Informant Ga,, Informant Li Informant Fl, Informant Sh-2, Informant Liu (D) Informant Zhu, Informant Hu Informant Do, Informant Su Informant Yu-W, Informant Zh-F (D) Informant Ya-Y, Informant Zh-W Informant Ya-G Informant Ya-H-2 Informant Don	
Others such as universities	Informant G-D, Informant P, Informant XJ,	Informant H-J, Informant Qu Informant Ye	Informant Y, Informant Wa-N Informant Ya-Y Informant He-1(D) Informant He-2 Informant Yo Informant Gu-S Informant Ta (D) Informant Fo	Informant X

Legend: (D) Deaf people;   Bold letter: key informants; AF: The Amity Foundation; SCUK: Save the Children UK; THRC: Tianjin Hearing Rehabilitation Centre "Agency of UNICEF China"

Appendix G: Baker's suggestions related to SBE model

Baker (2006:376-378) put forward 12 suggestions about bilingualism for deaf children which are mirrored in spoken bilingual education as follows:

1. That sign language should be the first language of all Deaf children and be regarded as their primary language.

2. That sign language should be used to teach curriculum subjects such as science, humanities, social studies and mathematics.

3. Sign language can be used to teach English or another majority language as a second language. Usually this will be to teach reading and writing skills in English rather than English oracy.

4. The culture and language of the deaf community are recognized and validated, with children learning that they belong to the culture of the Deaf. This approach tends to be favored by most but not all of the Deaf community, but has not been favored by many politicians and education professionals who formulate policy and provision.

5. Such bilingual education for Deaf students is partly based on the research and arguments for an enrichment form of spoken bilingual education for hearing children:
   ✧ Bilingual education builds on a child's existing linguistic and intellectual resources;
   ✧ Concepts and knowledge developed in the first language (L1) transfer easily to the second language (L2);
   ✧ Use of a children's heritage language gives pride and confidence in their culture and community;
   ✧ A child's self-esteem and self-identity are boosted and not threatened by use of their first language;
   ✧ School performance and curriculum attainment is raised when L1 is celebrated rather than devalued;

◆ The lower achievement of minority language students and Deaf students needs to be addressed by enrichment forms(or 'strong forms') of bilingual education.

6. Deaf children cannot acquire a spoken language easily or quickly because they have limited hearing ability. If the curriculum is transmitted in the spoken language, they are expected to learn the content of the curriculum using a level of language not yet acquired. This is analogous to minority language children being expected to operate in submersion education in the language of the majority they have yet to master.

7. English or another majority language is developed through sign language. Often native sign language teachers will be employed in schools, where possible, to teach and to act as role models.

8. The acquisition of a sign language should begin as early as possible, ideally soon after birth. Since about nine out of every ten Deaf children are born to hearing parents, this is often difficult, but with such parents being increasingly willing to learn signing, the first language of such Deaf children can be sign language. Current thinking among the Deaf tends to suggest that early signing is preferable in most cases. Parents of Deaf children need to be aware of Deaf communities, of bilingual education for Deaf children to enhance their child's curriculum achievement, and to expect signing as the medium of curriculum delivery plus literacy in the majority language.

9. It is important to avoid language-delay in Deaf children, as has been found to occur when using auditory approaches and sometimes the Total Communication approach. Curriculum achievement will suffer if there is language delay.

10. The supply of trained personnel in Deaf bilingual education, staff pre-service education programs, in-service education and certification and funding are often current challenges that are being faced by Deaf educators. These are practical problems to be overcome rather than problems of principles that are insurmountable.

11. The parents of Deaf children need considerable social and emotional support, information and guidance to help their children become bilingual…While there is a considerable debate about the integration of Deaf children into a hearing society, hearing parents of Deaf children need considerable support and sensitivity.

12. A bilingual Deaf education system may involve team teaching. The Deaf teacher may be a natural model for the acquisition of sign language with a hearing teacher acting as a model for the acquisition of proficiency in a majority language such as English or Spanish. Ideally, both teachers should be bilingual models, being able to communicate in both sign language and the 'hearing' language. Also, both teachers in the team should have a knowledge of Deaf culture, Deaf differences.